# APPENDIX D California Department of Public Health Safe Drinking Water State Revolving Fund 2013 July Updated Final DWSRF Project Priority List

PPL #	System	Project Number	Borrower/System Name	Project Name	Project Description	Project	Bonus Points	System Type	Problem	Project Costs	Connections Popu	lation District	County	Region Li	st Year
1	3600391	3600391-001	Hill Crest Mobile Est Inc	Water Storage Tank Replacement and Distribution	Hill crest Mobile Home Estates is a Mobile Home Park in E Yucaipa California. There are approximately 196 spaces in the park. The Park is a 55 and older park and the residents are almost all retirees living on fixed incomes. The owner provides water to the residents from an on- site well. The water is stored in a 20,000 gallon tank. On August 10, 2010 the Department of Public Health, County of San Bernardino issued a statement identifying violations of CDPH 64583 and 64585. The lab results had identified coliform bacteria in the water. Furthermore, the tank was said to be in a state of disrepair. The water had been provided to the residents for little or no charge for the past 30 years. The recommendation provides that Hillcrest should contract with the local water company. The park is heavily rent-controlled, and the cost to Hillcrest to replace the Storage and Distribution system represents a hardship.Hillcrest and its residents are in need of assistance to have proper drinking water provided to them. If the costs can be assisted/subsidized from the CDPH program, the residents and Hillcrest would be able to continue to afford the water provided.	3	15	c	The owner provides water to the mobile home community from a well located on the property that is held in a 20,000 gallon tank. The mobile home park is a 55 and older park and there are approximately 196 spaces. Recently, the Department of Public Health, County of San Bernardino, issued a statement identifying violations of CDPH 64583 and 64585 due to colliform bacteria. This statement was issued August 10, 2010 and 45 days were provided from its receipt to obtain a new storage tank and assure that the water is potable.	80,000	180	900 13	San Bernardino	V	2011
2	2210921	2210921-003	Whispering Pines Apartments	Water source expansion/ Deepen existing well or drill new well	Do a small study to determine the best location to drill a E new well, complete the necessary environmental review. Do the preliminary work to prepare and access the site. Drill the well. Test the water and hook the well into the system.Also, determine if deepening existing wells 1 and 2 is feasible or perhaps the most feasible course of action to increase the supply of water. Well 2, has had the water quality issue. Perhaps it will be possible to redrill and reseal this water source.	3	0	с	The water system has an inadequate water supply. The most productive well has had a water quality problem. An attempt was made to reseal the well. It failed. Two new wells have been drilled in an attempt to replace the well with the quality issue. The new production has been inadequate to provide sufficient water to the complex. We need more water.	98,000	16	28 11	Mariposa	Ш	2009
3	2700509	2700509-001	OAK MANOR WS	Oak Manor Water Application	We need to hire professional consultants to find an appropriate location for a new well, and we will need to cap off the old one. We currently have two holding tanks, which will need to be inspected, and have the water lines re-routed to these tanks from the new well.	3	0	с	Current well is approximately 40 years old, and was originally an agricultural well with a single casing. Last year, we had high levels of coliform when our water was tested, during the rainy season. Our County Health Department seems to think that the casing is the problem, and that we will need a new well that complies with residential standards with a sanitary seal on the casing to prevent the contamination from the rain run-off. According to our water management company, this cannot be corrected in our old well, only if we drill a new well. We do not have the funds to drill	40,728	33	71 05	Monterey	II	2007

a new well.

4 2900502	2900502-002P	FLORISTON WATER SYSTEM	Floriston Spring Filtration Project	To facilitate the completion of the plant, the Board has B contracted with an appropriately CDPH licensed operator/consultant to assist the current operator and Board in bringing the plant to completion, and satisfying all requirements of its regulating agency. Additionally, a civil engineer experienced with surface water treatment, and an Electrical Engineer for SCADA have also been contracted.Here is a list of tasks identified to complete the plant and enable it to produce water that meets the CDPH surface water standards.* Document the existing installation* Review the water quality of the spring and prepare a pilot study of proposed remedies.* From the pilot results, recommend a pre-filter system to remove seasonal particulate produced by the spring.* Evaluate, design, and install process controls and alarm monitoring for tank level, plant flow, outgoing chlorine and turbidity levels.* Solve backwash water discharge disposal from filter systems.* Prepare as-built documentation of the plant design, including an operation & maintenance manual.	0	C	The community of Floriston is under a boil notice, and has been for close to 2 decades. Since the town's inception in the late 1800's they have relied on a spring water source above the community. The community sits on the side of a rocky canyon above the Truckee River. Past studies have concluded that drilling a well would not yield sufficient water to meet the Town's needs. Additionally, a drilling rig would have great difficulty getting to the community as the only access is through 2 small tunnels under the Union Pacific railroad tracks. The spring collection system was last updated in the 1960's. The spring output varies seasonally, and usually yields sufficient amounts to cover demands, however, it is under the influence of surface water and routine raw water sampling show total and fecal coliforms at various times of the year. The spring also discharges fine particulates that must be filtered.A filtration system was engineered and approved by CDPH for bag filtration about 10 years ago, and placed on-line in the last few year. This system is in place, however, the gravel pre-filter, capable of backwashing, was never purchased or installed, hence, the expensive bags are being clogged at an unacceptable rate. The plant location was changed after design, due to land easemant issues, and has some hydraulic issues to address, and other components designed for the operation have not roved workable. The plant does	0	40	100 21	Nevada	I	2012
5 1900903	1900903-001	SLEEPY VALLEY WATER CO., INC.	Sleepy Valley - Disinfectior and Reliability	PROVIDE CHLORINATION, NEW PIPELINES, AND 500,000 B GAL RESERVOIR	0	С	Shallow Groundwater Requires disinfection facilities; Bacteriological MCL failures, wells subject to flooding which results in water outages and distribution and storage coliform problem	500,000	62	100 16	Los Angeles	IV	1998
6 1910023	1910023-003	AVERYDALE MWC	Well #1 Replacement and Disinfection Treatment	replaceing well #1 and also installing disinfection B system.	0	С	We had a persistant problem with bacteriological contamination of this well that has caused Multiple TCR violations.	350,000	291	1,500 16	Los Angeles	IV	2007
7 5510013	5510013-005	TUD - Columbia Water System	Shaws Flat Pipeline Extension	CONSTRUCT A WATER MAIN EXTENSION FROM THE B COLUMBIA SYSTEM INTO THE SHAWS FLAT COMMUNITY.	0	С	THE SHAWS FLAT AREA HAS NUMEROUS FAILING SEPTIC TANK SYSTEMS THAT HAVE CAUSED MICROBIAL CONTAMINATION OF THE LOCAL WELLS.	574,000	1,548	3,646 11	Tuolumne	Ш	1998
8 1110001	1110001-003	City of Orland	City of Orland - New well construction	The Public Works Director, City Engineer and members B of the Public Works Commission have researched locations to construct a new well site. A site located on City owned property, east of Interstate 5 and at the end of Eva Drive has been determined to meet the City's water needs. The well will have a natural gas back-up generator. So the source is protected, it will be in an enclosed structure.	0	с	By letter of November 3, 2011, the City was ordered by Department of Public Health to discontinue the supply of water from Railroad Avenue Well 02. A regular raw water sample collected October 18, 2011 was enumerated at 30 MPN/100 ml for both total and fecal coliform. In July 2009 fecal coliform bacteria was also detected. The well was constructed in 1958 with steel casing and was not constructed with a sanitary seal.	600,000	2,615	6,525 21	Glenn	I	2012
9 1600013 10 1900679	1600013-001 1900679-001	LAKESIDE UNION SCHOOL RANCHO LOS AMIGOS MEDICAL CENTER	Drill a new well Consolidation with the City of Downey	Drill a new well B The project is a non-transient community water system B consisting of 1 connection and chlorinated ground water source. The system is in need of an additional water source, upgrades to their treatment equipment and their water storage tank, installation of backflow protection device for each medical building, certified operators for maintaining and operating the system and collection of mandatory samples (distribution and	0 0	P P	On-going bacteriological problems from the well. The water system is in need of an additional storage and source of supply, backflow protection device for each medical building, certified operator to maintain and operate the system and overall system improvements.	300,000 1,960,200	5	388 12 2,000 16	Kings Los Angeles	III IV	2007 2008

source).

## 11 0500029 0500029-001 TAMARACK SPRINGS

Tamarack Springs Water The Water Source Improvement Project planned В Source Improvement involves drilling a well on private property near to the current water storage tanks and establishing the necessary pumping, monitoring and storage capabilities to run the system most efficiently. We anticipate maintaining the current system to provide storage for fire suppression with the new source providing potable water supply. Other communities in the surrounding area found a suitable aguifer at a depth of 700-800 feet. The estimated cost of this project is \$90,000.(Water system details not populated in Section B)ID: 05-00-106Tamarack Springs Mutual Water Company, Inc.Calaveras CountyService Connections: 40 (15 currently active)Population served: 40Regulating Entity: Calaveras Environmental Management AgencyType of Public Water System: Transient, non-Community

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The Tamarack Springs Mutual Water System supplies water to a small community of 40 properties in Calaveras County. The water system currently relies on two springs that have been demonstrated to have seasonal water quality issues and limited production in dry months. Over the past 5 years, the water system has failed total coliform testing 28% of the time. In the last 12 months, total coliform failures resulted in a tier 2 notice to all property owners and an e. coli failure in April required a subsequent tier 1 notice. Historic records also show that the spring source for the water system diminishes to a negligible flow during dry years as measured by storage tank overflow. Residents have implemented standard conservation measures but in the absence of a reliable water source, priority usage is given to permanent residents. The 30,000 gallon storage meets the needs of permanent residents for an

15 35 10 Calaveras ш 2012

estimated 2 months. Depleting that reserve also depletes the fire suppression capability of the community. We anticipate that these shortages will increase in severity with climate change.

90.000

617,000

42

12 0900591 0900591-002 NORTH ECHO SUMMIT WATER ASSOCIATION North Echo Summit Water To ensure a sufficient and dependable supply of potable B Association Distribution water, the North Echo Summit Water Association

Project

and Storage Improvements (NESWA) intends to upgrade its 80-year-old deteriorating water system. In March 2008, NESWA hired an engineering consultant to evaluate and provide a conceptual design of an integrated water supply, distribution, and storage system. The consultant recently completed plans and specifications (90% completion level) for a new water distribution and storage system. The project will be "shovel ready" in the summer of 2009. This application is seeking funding for Phase 1 of upgrades to the NESWA system. Phase 1 includes four main components. These include: (1) system planning and design, (2) replacement of the majority of the distribution line, (3) installation of a 20,000 gallon storage tank, and (4) installation of two booster pumps. Phase 2, which is not part of the current project, will provide NESWA with an additional source of water which may include a surface water treatment system and/or a groundwater well. Implementation of Phases 1 and 2 would solve the problem of an insufficient and undependable water supply and the coliform contamination issue. Phase 1, alone, will significantly reduce water loss due to leaks and will prevent pathogen contamination of the water system through open pipes and tanks. Phase 1 will result in more dependable delivery of water that is of

The North Echo Summit Water Association's (NESWA) system, serving 42 U.S. Forest Service (USFS) cabins, was installed in the 1920's. NESWA recently incorporated as a Mutual Benefit Nonprofit Corporation with the State of California and became an IRS taxexempt corporation. Cabins are occupied early June through October, approximately five months each year. Traditionally, the water system's primary source was supplied in the late spring to mid-summer by Hawley Spring, a source of seasonal groundwater. When Hawley Spring dried up, usually in mid-summer, the system typically switched to a secondary, but dependable, surface water source. However, a crisis situation now faces NESWA: the system has insufficient water supply and pressure to meet the users' needs. This is the result of both: (a) a deteriorating water distribution and storage system and (b) NESWA discontinuing use of its dependable untreated surface water supply, as ordered by the El Dorado County Environmental Health Department (County Health Department). The County Health Department has cited NESWA with two on-going violations:(1) total coliforms exceed maximum contaminant level (Safe Drinking Water Act, Title 22, Section 64426.1(b) Total Coliform MCL Violation), and(2) insufficient system water supply (Waterworks Standards, Chapter 16, Section 64554 (a): At all times, a public water system's water source shall

84 09 El Dorado 2009

13 3600760	3600760-001P	Loch Leven Chstn Conf Ctr	Loch Leven Camp & Conference Center System	Loch Leven Camp and Conference Center is requesting funds from CDPH for Phase One of our water system	В	0	N	The target water system is a transient non-community water system that serves the Loch Leven Christian	0	1	100 13	San Bernardino	v	2012
			Rehabilitation Phase One	rehabilitation. This Phase One project includes the				Camp & Conference Center, a non-profit camp facility						
				replacement of the gravity storage tank, replacement of	of			open to all groups including faith-based groups,						
				the Spring Box, and installation of an ultra violet				community groups, clubs and special interest groups,						
				disinfection system to replace the current chlorination				and corporate groups. During the summer months, the						
				system. The project may include the replacement of				camp is used primarily by youth camps serving children						
				some directly associated water lines, when necessary.				ranging from 2nd grade to high school graduates. Loch						
				The applicant understands that the CDPH typically				Leven serves up to 135 people per week, including						
				prefers consolidation of the old and new system where				resident employees and their families. In addition to						
				possible. This first phase will be consolidated with the				our users, drinking fountains are accessible to the						
				current lines. However, the issues of the failing system	i i			general public using our site to access San Bernardino						
				have been approached with patches and temporary				National Forest hiking and biking trails. The system						
				fixes over the years and as a non-profit entity, the				consists of a spring source, concrete pump house						
				options for the most appropriate fixes have been cost				reservoir, and a gravity storage tank. The system has a						
				prohibitive. We believe full replacement of the				total of five service connections, the organized camp						
				equipment is in fact the most efficient way to address				with several buildings, and four residences. The spring						
				the problems with the system and assure compliance				gravity feeds the pump house reservoir; a submersible						
				with Health Department standards. In addition to				pump is then used to pump the water to the storage						
				saving time, money and water, full replacement will				tank uphill. The water is chlorinated at the discharge						
				benefit the surrounding environment. Mountain Home	2			line of the submersible pump. The storage tank gravity						
				Creek, a Class I waterway, flows through the camp and				feeds the distribution system. Any run-off water or						
				is impacted by the treated water leakages from the				leakage impacts Mountain Home Creek, a Class I stream						
				system. The current process for water treatment is to				(fish bearing). The primary issue is the age of the						
				chlorinate at both the spring house and the pump hous	e			system. The entire system is old, and over the years						
				to avoid further positive tests for bacteria. With a				pieces have been replaced and repaired to meet the						
				properly working system, less filtration will be				San Bernardino County of Public Health standards and						
14 0011123	0011123-001	T.U.D. Mountian Boy Ditch Conveyance	Mountain Boy Road	CONSTRUCT A WATER SYSTEM WITH A WATER	В	0	U	INDIVIDUAL DITCH CUSTOMERS USING UNTREATED	364,880	15	30 11	Tuolumne	III	1998
			Conveyance Project	TREATMENT PLANT, STORAGE, AND PIPELINES; OR				DITCH WATER SUPPLIED BY TUD.						
				EXTEND WATER LINES FROM THE BIG HILL WATER										
				SYSTEM TO SERVE THE DITCH CUSTOMERS.										
15 0011120	0011120-001	T.U.D. Ditch Conveyance Conversion	TUD-DITCH CONVEYANCE	INSTALL THREE WATERING STATIONS, TWO WATER	В	0	U	INDIVIDUAL DITCH CUSTOMERS USING UNTREATED	1,200,000	15	180 11	Tuolumne	III	1998
			CONVERSION	MAIN EXTENSIONS, SIX WATER SERVICE EXTENSIONS,				DITCH WATER SUPPLIED BY TUD.						
				AND UP TO 20 WELLS.										
16 0310003	0310003-010	AWA Sutter Creek	Canal Raw Water to	This project would interie the existing Amador Water	С	25	С	For many years, untreated surface water was conveyed	5,450,000	1,654	5,458 10	Amador	III	2009
			Treated Water Pipeline	System treated water facilities located near the				to the Tanner Water Treatment Plant for treatment via						
				intersection of Ridge Road and New Yark Ranch Road				an open canal. Although a pipeline has replaced the						
				and place a treated water pipe in the canal begininng a	t			canal as the primary conveyance source to the Tanner						
				New York Ranch Road to Lake Tabeaud (approximately				Water Treatment Plant, over 100 customers remain on						
				16.24 miles). Additional pump stations are necessary to	)			the canal. The Agency has a program in place to require						
				deliver water to cosumers along the canal and meet				documentation in the form of receipts from bottled						
				State Health requirements.				water suppliers to ensure these customers have treated						
								water for domestic purposes. However, the full-proof						
								method to ensure these customers utilize only treated						
								water for domestic purposes is to replace the canal with						
								a treated water pipeline, providing certainty that the						
								violations of Title 22 of State Code are impossible. The						
								constructive conveyance system is divided into two						
								sections. The residents in the Bosse-Previtali area are						

within the upper 16.5 mile section. This section of the conveyance system is composed of the greater number of customers utilizing unfiltered-raw water and remains the greatest concern. Customers, Residents, and visitors in the Bosse-Previtali area are exposed to health risks associated with the historic use of this unfiltered-raw water for domestic use in homes. These homes only water source is from the unfiltered-raw constructive conveyance system owned by the Amador Water Agency. Specifically, 75 of 107 unfiltered-raw water customers within this 16± mile area are out of compliance with the 1996 Amendments to the Safe

1/ 5504501	2204-002	Consolidation	Actes - Saiyer initial water company proposes to conduct a - freasibility study to resolve the problem of unfiltered surface water and lack of documented water rights. The project would involve 1) a feasibility study to identify options and select an alternative should groundwater supply not be viable; 2) design and specifications for the selected alternative; and 3) completion of environmental documentation. Short of groundwater supply, the only two other options are obtaining water from Willow Creek Community Services District (CSD) through wholesale purchase or consolidation; or documenting their prescriptive water rights with the State Water Resources Control Board, Division of Water Rights.	20		system Nutual water Company is a community water system that uses surfain gains is a community River for its domestic water supply. Water pumped from the intake is disinfected with chlorine and delivered to the distribution system. To date, we have not provided filtration treatment of the system's surface water source and as a result are in violation of the State's Surface Water Treatment Rule (SWTR). The SWTR required continuous reliable filtration and disinfection of all surface water sources used by domestic water supply systems. Currently, Salyer Mutual is under a standing boil water advisory from CDPH and provides quarterly notification to its customers. We are already evaluating the potential for a groundwater supply through a Proposition 84 grant. If we are unable to find groundwater of adequate quality and quantity, we will need to find an alternative to supply safe, reliable water to our customers. Note, the water system has not be able to provide documentation regarding their surface water rights. **Note: Salyer Mutual Water Company took over ownership and operation of the Riverview Acres Water Company as of Feb. 8, 2012. We currently have 56 active connections.	300,000	30	63 01			2012
18 5510013	5510013-009C	TUD - Columbia Water System San Diego Ditch Constructed Con	The proposed project consists of the design, C environmental review and construction of approximately 1400 lineal feet of six inch potable water main connected to the District's Columbia Water Treatment Plant and installation of service connections for each of the nine customers currently connected to the untreated ditch system.	20	c	The Tuolumne Utilities District provides untreated water service through an open, mostly unlined ditch system, to a number of its customers not currently located near a potable water main. This ditch water is the only source of water supply to approximately 9 customers on the San Diego Ditch located in the Columbia area of the District's system. Many of these ditch water customers use this untreated supply in their homes for drinking, cooking and bathing. This untreated ditch water delivered to customers contains high levels of total coliform, fecal coliform, organic	0	1,548	3,646 11	Tuolumne	111	2007

material, and widely fluctuating turbidity.

19 0310003	0310003-008	AWA Sutter Creek	lone Raw Water Conveyance Conversion Project	The Agency has completed a feasibility study and has determined that the best solution is to consolidate the lone and Tanner Water Treatment Plants (WTP) at the Tanner Site. This consolidation would be through the construction of a new Regional WTP facility. Amador Water Agency (AWA) already owns the site at Tanner with sufficient expansion area. Once the Regional Tanner WTP is constructed, these facilities could be consolidated and then supply treated water to these 11 customers through the "old" raw water transmission pipeline. The existing raw water transmission pipeline. The existing raw water transmission pipeline would require cleaning, testing and moderate improvements prior to the conversion to a treated water conveyance system. AWA further believes that a weighted review of the 2000 census area, qualifies the service area as a low income or "disadvantage area" for these 11 customers.	c	20	c	In the 1850's a ditch system was constructed to convey raw water to various areas of Amador County. These ditch systems for years conveyed the only source of water for residents, ranches and businesses in the Sutter Creek - Ione and other community areas. In the mid 1980s, the Amador Water Agency (AWA) piped a 7.5 mile stretch of this raw water conveyance system from the Sutter Creek - Tanner Facility to the City of Ione (Ione transmission pipeline). This transmission pipeline is the source water conveyance for the Ione Water Treatment Plant which serves the City of Ione. Currently, there still remain 50 raw water services on this raw water line. There are 11 customers' whose only source of water is this raw water has the potential for surface water contamination from either fecal or E.coli. Therefore these 11 customers are out of compliance with the 1996 Amendments to the Safe Drinking Water Act and the Health and Safety Code. Although, they are in compliance with the Agreement entered into between the AWA and the California Department of Health Services (DHS). AWA has a contract with these customers for a bottle water program / purveyor as part of this Agreement. Reminders to these customers	1,500,000	1,654	5,458 10	Amador	Π	2007
20 1310005	1310005-002	Holtville, City of	Holtville Annexation - north of 9th St - distribution system	Annexation of service area north of 9th Street.	с	20	С	198 homes north of 9th St. are on raw unfiltered canal water which does not meet coliform standards. description (attachment 1)	3,225,356	1,508	6,299 14	Imperial	v	1998
21 1000063	1000063-005P	NEW AUBERRY WATER ASSOCIATION	Groundwater under direct influence of surface water feasibility study	A feasibility study is necessary to determine the most feasible and appropriate alternative to resolving the system's ongoing issues and to bring the water system into compliance with waterworks standards. The project is anticipated to evaluate consolidation, (new) source improvements, water treatment, or any combination of the three. It is anticipated that the project will leave the water system in a position to seek funding for implementing the identified project.	с	10	c	New Auberry Water system is dependent upon two working wells and one inactive well, which all require a GWUDI evaluation. All wells are old and aging and we suspect that no well is equipped with an annular seal. No construction documentation is available for the wells. Without an appropriate annular seal, the wells are vulnerable to contamination in a number of ways: 1) Water from the flood plains pass by the wells; 2) water flows into the nearby creek can influence the wells; 3) one active well is located 50 to 100 ft next to waste water ponds; and 4) one well immediately adjacent to wastewater disposal ponds has been inactivated due to persistent bacteriological contamination believed to be from the wastewater ponds. A number of other issues inhibit optimal operation of the water system. A number of leaks in the aging water distribution lines could potentially be source of water loss. The lack of meters prevents the system from quantifying exact water losses. New mains, valves, and meters need to be installed. Ongoing electrical supply issues prevent the water system from efficiently operating their well pumps, theoretically shortening their useful life.	500,000	36	80 23	Fresno	II	2012
22 1900904	1900904-003	ACTON CONSERVATION CAMP # 11	Add an additional water well away from the river t support the current population and possible expa	Add a new well 200-300 feet away from the river and o the septic system.	с	10	Ρ	Camp 11 is a first responder fire suppression camp located in an isolated location. A second well is needed as a back up water source. The current well is located in close proximity to a creek and to the septic system. The new well would be installed away from the creek and out of the way of the septic system. The new well would be treated as the primary well, with the current well being a secondary water source.	200,000	1	90 16	Los Angeles	IV	2009

23 1900007	1900007-002	CALIFORNIA CONSERVATION CAMP # 14	Drill a new well away from the creek	Drill a new well 200 to 300 horizontal distance away from the creek. Secure the pump with a secured, concrete block structure.	С	10	Ρ	The current well is located at the southeast side of the property within 100 feet of the stream. The well is housed in a concrete block shed. There is a flow meter and pressure gauge in close proximity to the well head. Due to the proximity of the ground water well to the San Francisquito Creek the source is designated by Department of Public Health as Ground Water Under Direct Influence of Surface Water.	200,000	1	95 16	Los Angeles	IV	2009
24 1900901	1900901-004	FIRE SUPPRESSION CAMP 19	Add new well 200 - 300 feet away from river. Current well is in river.	The project is a small community system serving 130 year long residents with a groundwater well. The current well is in very close proximity to the river. Department of Public Health recommends protecting this well from the river and drilling a second well 200- 300 feet away from the river.	С	10	Ρ	The water system is in need of an additional water source to meet the demands of the community; ie; new ground well. All details can be provided by the Department of Public Health.	300,000	1	125 16	Los Angeles	IV	2009
25 1000405	1000405-002	DOYALS MOBILE HOME PARK	GWDUI Investigation and Resolution	The water system needs funding to study the three options presented by CDPH. Funding will also be needed to implement the appropriate solution presented by the study.	С	0	С	CDPH is concerned that the sole water source, Well 01, is under the direct influence of surface water (GWDUI). The Water System has three options: use an alternate GW Source, install full surface water treatment for Well 01, consolidate with another water system.	250,000	15	16 23	Fresno	Ш	2011
26 4900568 27 2701278	4900568-001P 2701278-002	Valley Ford Water Association RANCHO CHAPARRAL MWC	Wells 1, 2, and 3 Rancho Chapparal MWC SWTR Compliance	New source or treat existing sources Conduct study to determine best solution and implement chosen altenative, e.g. drill well, design/construct filtration treatment system.	C C	0 0	c c	E. coli and fecal coliform/high nitrate wells Groundwater under the influence of surface water [Source water well is shallow (30 ft. deep) and close to Big Sur River, thus the Monterey County Health Dept. considers it to be under the influence of surface water.]	256,000 240,170	16 17	40 18 48 05	Sonoma Monterey	II II	2007 2006
28 2600622 29 4400528	2600622-001P 4400528-002	SIERRA EAST HOME. ASSOC.	GWUDI Laurel Community League Drinking Water Catch Basin	Drill new deep vertical well Our concept is to erect a sealed pumping chamber consisting of two 4-ft reinforced concrete walls, and a removable top, tied to and sealed to the sides of an existing abandoned railroad tunnel portal. This will provide us with 64 cubic feet of raw water capacity, an will effectively elevate the chamber significantly above the stream bed, increasing the systems' capacity, and absolutely preventing the entrance of contaminants.	C C d	0	c	System using well under direct influence of surface water The Laurel Community Water League currently has a catch basin into which well water is gathered, and then pumped to service the users. Currently, an inspection report indicates that the catch basin is in violation of CA Title 22, Article 6 Distribution Reservoirs, 64585 Design and Construction, also CA Title 22, Chapter 16 CA Water Works Stds, Article 2 General Requirements, Sec. 64560 Basic Design, because of its proximity to a seasonal flowing stream, and the potential for contaminants enter the drinking water source. We propose to construct a new catch basin in a sheltered location, sealed, that will comply with the above-mentioned regulations, provinding a contaminant-free pumping chamber.	0 50,000	29 24	50 13 55 05	Mono Santa Cruz	V II	1998 2009
30 2701263	2701263-003	PARTINGTON RIDGE MWC	Water Treatment Facility	Finalize design and permit for filtration and treatment of water for distribution and use.Installation of slow sand filters to process up to 40gpm of water.Installation of upgraded UV system for primary water treatment.Installation of chlorine injector system to function as topping off treatment of UV treated water. Installation of all required monitoring and measuring devices and systems.	C m	0	с	This is a Catagory B Project; Water system repeatedly violated the total coliform MCL (TCR) due to active sources contaninated with coliform bacterial.PMWC system is classified as GWUI. Ground water under the influence of surface water. Violation: CA Health & Saftey code Sec. 116555 Violation: CA Health & Saftey Code Div.5 Part 1 Chpt.7 Violation: CCR Title 22 Sec. 64650(b); Treatment Standards Violation: CCR Title 22 Sec. 116555(a)(3)HSC Failure: CCR Title 22 Sec. 64650(b)Currently required public notification: (Boil Water Order)Simply put, our existing treatment facility [ultra violet only] does NOT meet current Federal, State or County water standards.	331,724	25	75 05	Monterey	II	2009

31 5400506	5400506-004	NO KAWEAH MUTUAL WATER CO	Slow Sand Fitration, Reservoir, and Pump Plant	Within an existing easement construct three new river wells, a new approx 90 gpm Slow Sand Filtration Unit with a 125,000 gal Steel Reservoir, a 3 Stage Vertical Turbine Pump Plant with Hydropnuematic Tank, a system intertie where existing mainlines cross, miscellaneous piping and conduit, electrical and controls, a stand by generator, control building, securif fencing, engineering design, environmental, and surve	т С ty y	0	С	Both North Kaweah Mutual Water Company and Tract 403 Water Company currently operate separate community water systems and both are out of compliance for the treatment of water under the influence of surface water. They both lack the filtration required to remove giardia and cryptospiridium and have marginal chlorine contact time. This project contemplates the construction of a new Slow Sand Filtration Unit, Reservoir, and Pump Plant to serve both companies and correct the deficiencies.	590,000	35	75 12	Tulare	Ш	2007
32 5304501	5304501-003C	Riverview Acres Water System (Salyer Mut	u: Riverview Acres WS (Salyer MWC) New Filter Plant	The proposed project includes acquisition of land and installation of a filtration treatment system (likely membranes) to treat water from the Trinity River, sludge basins, and a new storage tank to increase chlorination contact time and improve disinfection.	с	0	с	Riverview Acres WS (Salyer MWC) supplies its customers unfiltered surface water year-round from its sole source, the Trinity River. Additionally, although the water is continuously chlorinated, contact-time prior to the first customer is insufficient. For these reasons, Riverview Acres Water System does not comply with the California Surface Water Treatment Regulations and has been under a continuous Boil Water Order.	1,489,440	50	85 01	Trinity	I	2008
33 2300663	2300663-003	Harwood Water System	Harwood Water System - New Surface Water Treatment Plant	The surface water system would encompase a roughin filter, tri-media filtration, chlorination, one 5,000 gallo clearwell, two 5,000 gallon storage tanks, coagulants, flow meters, pressure sensors, chemical feed pumps, raw and treated water continuous turbidity monitoring chlorine monitoring, pH monitoring, SCADA system, satellight disc, alarms, level monitoring in chemical crocks and storage tanks, valves, piping, booster pump and pressure tank. The plant would have two trains each with a capacity of 15 gpm.The plant is to provide 99.9% (3-log) Giardia cyst, 99% (2-log) Cryptosporidiun and 99.99% (4-log) viruses removal and inactivation.	ıg C n ış, ıs	0	C	Harwood Water System (Harwood) is located within the community of Branscomb, Mendocino County. Branscomb is located off Branscomb Road approximately 13 miles west of Laytonville and Highway 101 and 12 miles east of Highway 1. Water is supplied to residents of a trailer park (18 connections); one house; k-2 School; and one small grocery store. The water system is classified as a community water system. The domestic water source used by Hardwood is one creek. The source has been designated by the Department of Health Services (hereinafter Department) as a surface water source and is subject to the filtration and disinfection requirements of Sections 64650 through 64662 of the California Code of Regulations (CCR), Chapter 17, Surface Water Treatment Regulations (SWTR). Creek Source & Treatment: The creek is located about ½ mile south of Branscomb Road into a wooded area. Raw water is collected in a 15 by 18-foot wooden box located in the center of the creek. The box is divided into three chambers. Water froms into the center chambers. Water from the outer chambers flow by gravity into a 4-inch line and to a 300-gallon tank and chlorination building located off Branscomb Road. A chlorine crock and chemical feed pump that pulses a 5.25% sodium hypochlorite solution into the raw water line at a preset	250,000	22	100 03	Mendocino	I	2008
34 2701898 35 2701279	2701898-002 2701279-001	CLEAK KIDGE WA COASTLANDS MWS (POST CREEK)	SWTR Compliance	Install surface water filtration system Install SWT system.	c	0	c	wen is under the influence of surface water Surface supply with no treatment provided.	150,000	41 43	123 05 129 05	Monterey		2002 1998

36 4300520	4300520-002P 4810025-005	Idylwiid Water System	Connection to a Reliable Source of Supply Project SID-Pleasant Hills Ranch Estates Drinking Water Treatment Plant	The Receiver is taking a two-pronged attack at the project: 1) Gathering information and data for installing a surface water treatment plant (SWTP) and associated supply line upgrades; and 2) entering into negotiations with SJWC, CDPH, and CPUC regarding connection costs to receive Montevina Treatment plant water as the source of supply. It is expected that the cost of a SWTP project will be slightly under the upper limit of what will be accepted as a connection cost from SJWC.Assuming a connection can be agreed to easily: An alternatives analysis of the possible projects will be completed, leading to a recommended project to connect to SJWC. It is expected some work will be required to improve Montevina Pipeline capacity and that a new delivery line and delivered water storage tank will be required in the ldylwild system. Design and construction of these is fairly straight forward engineering project, with easements and tank site land already in place. Assuming that SJWC requires exorbitant connection requirements: Follow through with initial SWTP project steps: Validate water rights from Sept 26, 1973 deed, complete detailed water quality testing, select appropriate pre-built SWTP to bre & jack crossing under Highway 17 from the diversion to a new large tank. Prepare an alternatives analysis of the options and if the SWTP is a clear choice, proceed with approvals. (So The project consists of construction and operation of a 175 gallon per minute membrane filtration water treatment plant with post chlorination and 40,000 gallons of storage. A transmission pipeline will run along Pleasants Hills Ranch Way from the treatment plant to the existing Pleasant Hills #2 Pumping Plant, a distance of approximately 2000 feet. From that point, existing distribution pipelines to homes will be sanitized and converted from non-potable to potable service. The facility will be owned and operated by the Solano Irrigation District. The project will satisfy a Compliance Order enacted by the California Department of Public Health a		0	c	The existing source of supply is a creek diversion in Moody Gulch, an open space preserve not controlled by the water company that is uphill and north of Highway 17. Raw water is transported by gravity through approximately 2000' of 2" plastic pipe strung along the ground and through a major culvert under the highway. There is no treatment other than chlorination. Winter conditions occasionally break the delivery line or worse yet crack it, making location and repair complicated and creating system outages (one recent one was approximately 5 days). On two occasions in the last 20 years a major storm has scoured the inside of the culvert such that about 500' of line was washed away. A new treatment facility is also required: The system is under CDPH Compliance Order 02-17-09C0-00, to comply with "Section 64652(a), Chapter 17, Title 22, of the California Code of Regulations (CCR), which requires water systems to provide multibarrier treatment to its surface water source to reliably ensure at least a total of 99.9 percent (3-log) reduction of giardia lamblila cysts and a total of 99.99 percent (4-log) reduction in viruses through filtration and disinfection." There are also two subsequent citations: Citation 02-17-10C-001, and Citation 02-17-10C-004 for failure to "Develop a corrective action plan that will specify the method(s) and timeline to bring Idylwild Water System into compliance With all elements of the Surface Water Community Water System No. 4810025 is under Compliance Order No. 02-04-03CO-001. In order to bring this existing public water system located in rural Vacaville into compliance with mandates of the Safe Drinking Water Act of 1974 as amended by the Long Term 1 Enhanced Surface Water Treatment Rule, it has been determined that a centralized drinking water treatment plant be built. Raw, untreated surface water is supplied from Lake Berryessa (Solano Project) and was originally intended by developers (late 1970s) to be treated via Point of Entry water treatment technology which were deemed to be i	2,000,000	39	135 17	Solano	1	2009
38 4300520 39 5410052	4300520-001 5410052-001	ldylwild Water System LSID - El Rancho	SWTR Compliance Interconnection Project	install filtration system Connection to City of Lindsay	C C	0 0	C C	Unfiltered surface water supply Unfiltered surface water provided to community of El	150,000 773,000	43 26	135 17 150 12	Santa Clara Tulare	 	1999 2001
40 2700992	2700992-001	MILLER'S LODGE WS	GWUDI	Install filtration and disinfection treatment. 7/04 Updated project: drill new well, install tank, install monitoring	с	0	С	kancno within the LSID service area. Unfiltered GWUDI wells	506,000	51	150 05	Monterey	II	2004
41 4400581	4400581-001C	OLYMPIA MUTUAL WATER COMPANY	San Lorenzo Valley WD/Olympia MWC	surface water treatment system, and redevelopment of springs to limit exposure to contamination and optimize supply	f C	0	С	ground/spring water exposed to microorganisms and surface contaminants from animals	1,120,000	51	155 05	Santa Cruz	II	2002
42 3110042	3110042-001	Tahoe Swiss Village Utility	SWTR Compliance	Build a filter plant.	с	0	С	No filters at intake from Lake Tahoe.	390,000	378	300 02	Placer	I	1998
43 3110042	3110042-002	Tahoe Swiss Village Utility	SWTR Compliance	Build a 300,000 to 500,000 gallon storage tank.	С	0	С	No filters at intake from Lake Tahoe.	300,000	378	300 02	Placer	I	1998

44 3110042	3110042-003	Tahoe Swiss Village Utility	Tahoe Swiss Village Utility TSVU Water Treatment Facilities	The entire community would benefit from this water C treatment facility to serve potable water. Additionally, fire protection would be enhanced by 320 GPM. The existing leaking 4" steel lake intake line as well an the very small water pumping plant would be replaced and land restored for the enyoyment of the community beach. The "state of the art" multibarrier water treatment facility with membrane filtration, disinfection with chlorine and contact time would complete the process. The plant would have an new 8" flanged epoxy lined ductile iron lake intake pipe. New submersible pumps attached to the pipe in the lake would supply the membrane filter. The effluent would then fill up a 15,000 gallon CT concrete basin. This filter plant would be intigrated into the entire water system with a new radio telemetry system. New booster pumps would supply the community with fully treated water. A new 480 volt electrical panel would more efficiently provide power to this station. There would be a natural gas generator to supply the station in an emergency event. The building would "blend" into the environment with detail given to the scenic impact of the water pumping plant.	0	c	This project has a Proposition 50 funding favorable standing. A complete Application was submitted to CDPH in November of 2007. In December 2008 we were informed that "letter of committments" were put on hold. TS submitted a complete application to the Tahoe Regional Planning Agency, for permitting. CDPH has a copy of that application and is under review. Tahoe Swiss (TS) serves water to a small community. TS, in its over twenty years of ownership combined three different water systems into one "larger" integrated company. Presently, TS has three sources of supply. Two are approved groundwater sources with one unapproved surface water source. The surface water source is in violation of the federal and state surface water filtration rule. During peak day demands if one approved source is out of service, the surface water source must be used to supply uninterrupted service to its customers. When the surface water ris used, TS must chlorinate at 3 ppm, issue boil water orders and take BAC samples. TS has had to utilize the surface source each of the past two (2007 & 2008) summers for at least one day.	1,567,780	378	300 02	Placer	I	2009
45 4400631	4400631-001	LAS CUMBRES MUTUAL WATER CO	SWTR Compliance	Design/construct appropriate SW treatment system C	0	с	System uses springs for over 50% of water supply. New EPA standards will require treatment of springwater. (Reranked from D to C 4/3/02)	750,000	122	337 05	Santa Cruz	II	2002
46 3110018	3110018-003	Tahoe Park Water Company	Tahoe Park Main Well No. 2	The project would provide for a second well of 850 gpm C as a secondary, redundant water source for the system. The new well would be constructed on the same parcel as the primary well, and fitted with a 75HP submersible pump and surface facilities. The existing lake source would be abandoned.	0	с	The secondary water source of the Tahoe Park Water Co. (TPWC) is unfiltered surface water from Lake Tahoe. The primary water source is a well. Water storage in the system is less than 30,000 gallons, situated at an elevation lower than the upper portions of the system. When the well pump fails there is no choice but to provide unfiltered lake water to maintain continuous supply. The nearby Tahoe City Public Utility District is unable and unwilling to provide a secondary connection.	200,000	436	750 02	Placer	I	2009

### 47 3110041 3110041-004 Midway Heights C. W. D.

Midway Heights-Applegate The project proposes the installation of approximately C Annexation Improvement 20,000 LF of 10-inch pipeline, 11,800 LF of 8-inch pipeline, 141 service connections, two (2) 250,000 gallon storage tanks and associated appurtenances. The newly constructed water distribution system will be tied into the existing Midway Heights County Water District's treated water distribution system and therefore will not require the installation of new treatment facilities.

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The MHAAA (Midway Heights Applegate Annexation Association) Improvement District is located within the Community of Applegate in the rural area northeast of the City of Auburn. Many homeowners are living on low yielding and/or failing wells. As many as 30 homeowners currently rely on bottled water for their drinking, cooking, and oral hygienic needs. A total of 141 out of approximately 210 potential property owners have expressed interest in the proposed improvement district. The U.S. Environmental Protection Agency (EPA) rules strictly prohibit the use of raw water for the purposes of drinking, cooking, or oral hygiene. PCWA monitors customers who receive year round canal water through the Constructed Conveyance Program. The Agency's year round canal customers who do not have an approved source of drinking water on-site are required to purchase bottled water through an approved distributor. The Agency has identified four such customers within the MHAAA service area Additionally, the report for the Placer LAFCO: Mid-County Water Service Review (April 2006) prepared by Dudek, indicates that this area is experiencing a significant reduction in groundwater availability and adequate water supply for drinking, irrigation and fire suppression. Approximately 30 people have been identified to be on bottled water due to the inability to drill wells due to septic loads and or proximity to the

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The Jackson Valley Irrigation District (JVID) a public entity, serves potable and irrigation water to customers in Amador County, specifically the Ione / Jackson Valley area. Potable water customers / connections include the Lake Amador Recreation Area (LARA) with 30 connections, the Oaks Mobile Home Community in the midst of 220 connections and roughly 150 rural connections, with total services to be approximately 400 connections or around 1,000 customers. JVID's source of supply is the 22,000 acre-foot capacities Lake Amador, which is fed by Jackson Creek and diversions from Pardee Reservoir, an excellent source for water quality with low organic levels and no wastewater discharges. The Jackson Creek a main tributary of Lake Amador receives storm water runoff and treated wastewater from the City of Jackson. During most of the year, the dilution ratio for the City of Jackson's treated wastewater into Lake Amador was determined to be less than 20:1. It is estimated that Lake Amador consists of more than 5 percent treated effluent during 30 percent of the year. The California Department of Public Health (CDPH) has indicated that this is not sufficient dilution ratio for a potable water supply for in home use. In the 2003 Annual Inspection Report, the CDPH stated that the customers receiving JVID water source for potable use are required to seek an alternative source of water because of the poor water

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48 0300037 0300037-003 LAKE AMADOR RECREATION AREA

## Dist. Pipeline, Water treatment and Storage Project.

Jackson Valley Irrigation

District

The Jackson Valley Irrigation Dist. Pipeline, Water С Treatment and Storage Project will be the construction of a newly installed dedicated potable water pipeline from Lake Pardee down into the Jackson Valley. The project includes the installation of a new updated water treatment and storage facility located at Lake Amador This primary treatment plant will have the capability to service all JVID customers with clean treated water thus eliminating the need of small home treatment plants. The pipeline itself will be a 16" Raw water pipeline that will travel from the north spillway of Lake Pardee to the new water treatment plant located at the JVID Lake Amador property. From the treatment facility a dedicated 8" potable water line will travel down into the valley to the Oaks Mobile Home Community and beyond with the ability to service customers along the way. This project will solve the water quality source problems that the Jackson Valley Irrigation Dist. Customers are facing and meet the CDPH requirements of finding an alternative source of water for potable use. The Econmic Recovery funds will be used for: completion of alternatives, development and evaluation; facilities planning and environmental documentation; design; and construction and startup.

49 0310002	0310002-001	AWA, City of Ione	Amador Raw Untreated Surface Water Constructive Conveyance- Treated Water Converison	Placement of a treated water main from Tanner Treate Water System to the lone area will provide treated potable water for raw water customers using raw wate in their homes. The distance of this pipeline is approximately 51,100 feet and will follow existing raw water line easements.	ed C	0	c	For many years, untreated surface water has been conveyed from the Tanner raw water reservoir to the lone WTP. Although a pipeline has replaced the canal as the primary conveyance in the mid 1980s, approximately 50 customers take raw untreated water from the pipeline and for many it is there only source for use in their homes outside of bottled water. The Agency has a program in place to require documentation in the form of receipts from bottled water suppliers to ensure these customers have treated water for domestic purposes. As required in the July 12, 2001 compliance agreement with the Depatment of Health Services (curently Department of Public Health), the Water Agency must investigate afforable potable options for these customers. The water Agency believes that the installation of public treated water main from the Tanner WTP to the lone area provides the best solution for these customers. The potential of grant funding for this small system may make this an affordable means for treated water. Continued use of raw water presents muliple potenial violations to Title 22 of State Code: Section 64421 (Article 3 of Chapter 15) stipulates primary standards for bacteriological quality. • Section 6452 (Article 2 of Chapter 17) stipulates treatment requirements for surface water. • Section reduice 2 of Chapter 17) outlines disinfection requirements for surface water	4,000,000	1,497	4,940 10	Amador		2009
50 4210013	4210013-001	SOLVANG WATER DEPARTMENT	SWTR Compliance	Install 1.85 MGD fitIration and disinfection TP to compl with the SWTR.	ly C	0	с	Sources are subject to SWTR compliance and are not filtered.	1,980,300	1,916	5,383 06	Santa Barbara	IV	1998
51 1310005	1310005-003	Holtville, City of	Holtville - south of city annexation	Annexation of service area south of city.	С	0	С	108 residences are served by raw unfiltered canal water which does not meet coliform standards. description (attachment 1)	2,806,759	1,508	6,299 14	Imperial	V	1998
52 0310012	0310012-005C	AWA Buckhorn Plant	Bosse-Previtali Untreated Raw Ditch Conveyance Treated Water Conversion Project	The project would provide treated water from the Agency's Central Amador Water Project (CAWP) to a 11 mile cluster residential area along the existing Amador Canal. The CAWP treated water system is located a distance of 1 to 6 miles from this canal area. This treated water service would convert 108 current unfiltered-raw water customers to treated water service of which 59 utilizes the Amador Canal as its onl source of water. The project would complete environmental requirements, right-of-way acquisition, construction plans and specifications together with construction. The Agency further believes that a weighted review of the 2000 census area, qualifies the service area as a low income or "disadvantage area".	c o ly	0	c	The Amador Canal conveyance system is a 23 mile open ditch system from Lake Tabeaud to the Tanner Water Treatment Plant (WTP) in Sutter Creek. The source is the Mokelumne River via Lake Tabeaud. The system was originally built in the 1850's to convey raw water to goldrush era miners in Amador County. Currently the Amador Canal serves a cluster of 108 customers within a 10 mile area of which 59 customers' only water source is the canal. This ditch system is monitored, controlled and maintained by Agency staff walking the ditch in all weather conditions with no connection to the Agency's telemetry systems. Maintaining the quality, reliability including sufficient pressure to provide service to these customers is a continual effort. The existing low flows and warm weather induce additional issues with debris, algae, color and odor. Additionally, there is continual opportunity for accidental or deliberate contamination as well as fecal or E.coli from individual septic systems, livestock or wildlife. Added to these issues are blow- outs, un-planned and planned outages. All of which create high maintenance and operation costs which burden is passed on to existing low income users. The canal system is exposed to health risks associated with the use of un-filtered-raw water in homes. These	2,200,000	2,558	8,508 10	Amador		2007

53 5410006	5410006-006P	Lindsay, City of	Well 15 Pipeline Segment and Sampling Stations Project	The proposed project is to install three (3) climate controlled, continuous recording chlorine analyzers at: 1) Well No. 15, 2) about 100 feet before the first service located on Avenue 242 and 3) about 100 feet before the first service to the five (5) homes located in the vicinity of Avenue 240 and Road 188 which are currently under a Boil Water Advisory (BWA) (Project). In order to assure 4-log virus inactivation, an eight (8) inch diameter, 1,000 foot pipeline will be installed before the five (5) homes subject to the BWA. In addition, alarms and shut down control will be provided at each sampling station should the chlorine residual fal below acceptable levels. The Project also incorporates the following:A. Preparation of CEQA documentation (the installation of a new pipeline and sampling stations may be exempt under CEQA Guidelines Section 15301, Class 1(d) and Section 15303 Class 3(d));B. Preparation of Project construction drawings; andC. Development and granting of pipeline and sampling station easements.Initiation of the plans, specifications, easement and environmental clearance can begin by December, 2011, provided the CIty of Lindsay can execute a funding agreement with the CDPH by November, 2011.	C I I	0	c	The City of Lindsay (City) owns and operates Well No. 15. The City regularly relies on this well to meet water demands. According to the City's Boil Water Advisory (BWA), "Since May 2009, the City of Lindsay Well No. 15 has shown positive bacteriological samples". A May 26, 2009, letter from the California Department of Public Health (CDPH) to the City directed the City to maintain a BWA for 34 homes near well 15. The CDPH letter also required the City to submit a plan for CDPH review and approval detailing how 4-log virus inactivation will be provided. The City submitted a memorandum from Keller/Wegley Engineering, dated June 25, 2009, which identified a possible solution to achieve 4-log virus removal and monitoring. A July 3, 2009, letter from CDPH to the City lifted the BWA for homes along Avenue 242, but continued the BWA for five (5) homes in the vicinity of Road 188 and Avenue 240. In addition, CDPH Isted a number of operation and monitoring practices for Well No 15. A July 17, 2010, letter from CDPH to the City communicated specific CDPH requirements with regard to the use of Well No. 15 until a long term solution is furnished addressing positive bacteriological samples from water produced by said well. One CDPH specific requirement is as follows: "the City should install equipment at Well No. 15 to facilitate continuous recording of chorine residual, alarms and shut down control "	315,000	2,335	11,450 12	Tulare	Π	2011
54 2910006	2910006-020	Nevada ID - Loma Rica	NID Rancheros Project: SWTR Compliance	Construct pipeline to provide treated water serviced	С	0	С	Residences using untreated irrigation water for drinking and cooking	920,000	4,783	11,814 21	Nevada	I	2006
55 2910006	2910006-015	Nevada ID - Loma Rica	NID Lodestar Project: SWTR Compliance	Construct pipeline and pressure reducing station to provide treated water service	С	0	С	Residences using untreated water for drinking and cooking	1,400,000	4,783	11,814 21	Nevada	I	2006
56 2910006	2910006-012	Nevada ID - Loma Rica	NID LOP/ Alta Sierra Pipeline extension: SWTR Compliance	Construct pipeline and hydropneumatic station to provide treated water service	С	0	С	Residences using untreated irrigation water for drinking and cooking	1,900,000	4,783	11,814 21	Nevada	I	2006
57 3500507	3500507-001P	Bitterwater-Tully School WS	Bitterwater-Tully School Water System Upgrade	The project is to upgrade the Bitterwater-Tully School's water system to provide reliable multi-barrier treatment of raw water supplied by the Hepsedam Water Company (HWC) pipeline. This project includes: 1. Collecting Raw Water Data2. Conducting a Watersheed Sanitary Survey3. A thorough investigation and evaluation of current water system components4. Design Development of Water System Upgrade through evaluation of items 1-35. Engineering of the Water System Upgrade 6. Producing Plans and Specifications for the Water System Upgrade 7. Review and documentation of Water Rights with HWC8. Constructing the upgrade to the Bitterwater-Tully School's Water System Operader Newerer-Tully School's Water System operator. An engineering firm has been retained and they have completed a preliminary review of the existing water system. A Watershed Sanitary Survey (WSS) of the Hepsedam Water Company (HWC) source springs on Hepsedam Peak, the spring boxes, and the entire pipeline will be conducted, dependent on access as some of the pipeline is on private property. The WSS will include a survey of all the connections to the pipeline, if possible.	c	0	Ρ	The Bitterwater-Tully School is located on Airline Highway (California State Route 25) about 40 miles south of Hollister and 15 miles northeast of King City in unincorporated San Benito County. The School has a non-transient, non-community water system supplying domestic water to a daily population of approximately 55 students, staff and visitors. The School's water system's only source of supply is untreated water through a connection to a pipeline of the Hepsedam Water Company (HWC). Bitterwater-Tully School provides disinfection of the water through chlorination, and has four storage tanks: a 3,000 gallon concrete tank for untreated water; and three polyethylene tanks with total capacity of 9,500 gallons for chlorinated water. The HWC was regulated by the California Department of Public Health (DPH) as a public water system at one time, but was inactivated in 1995. The source of water for the HWC pipeline is two springs located on the flank of Hepsedam Peak. The springs can only be accessed by 4-wheel drive vehicle over 15 miles of difficult terrain, and the last several miles must be traversed on foot or horseback. The spring and pipeline have not been inspected by the DH in at least 15 years.Bitterwater- Tully School conducted bacteriological monitoring of the raw water at the connection to the Hepsedam pipeline quarterly since the second quarter of 2009 through the third quarter of 2011 with results for total coliform	100,000	2	55 05	San Benito	Π	2012

58 4300779	4300779-001	Lakeside SD-Lakeside School	Well, storage and distribution replacement	The well to be replaced in accordance with current water standards to a depth of 150 feet hard rock depth. Extend or replace control and power circuits. Abandon old well in accordance with current regulations. The storage system to be relocated away from adjacent slope in accordance with geotechnical recommendations. The tanks to be replaced with a single 20,000 gallon tank on a approved foundation. The booster pump and control system replaced to maintain current standards of pressure and flow. Extend or replace control, power circuits and water distribution pipes. Destruction and removal of old storage system. Replace main 3 inch transite with 2 inch PVC. 200 feet through asphalt and concrete. 100 feet through service entrance. Abandon existing 3 inch transite in place underground. Relocate 1 inch 500 feet PVC away from adjacent slope, trench, make connections as necessary.All work is per public construction code and standards, state and local codes and prevailing wages.	0	Ρ	Well. According to the engineering report from The department of Health Services in the Matter of the Permit Application from Lakeside school, system No. 4300779 Section III. Appraisal of Sanitary Hazards and Safeguard, the well at lakeside draws water from 16 feet and the well was constructed with a sanitary seal to 14 feet. Therefore the well does not meet the sanitary seal requirements and is extremely susceptible to contaminant infiltration due to the perforations occurring at such a shallow depth. The California Well Standards specify the space between the casing and the wall of the of the drilled hole (the annular space) shall be sealed to a depth of 50 feet. In addition,the American Waterworks Association (AWWA) Well Standards specify that the diameter of the bore hole be at least 6 inches larger than the casing; the surface to a depth of 14 feet and 2 inches thick from 14 to 31 feet deep. The Lakeside well does not meet the requirement and further adds to the susceptibility of the well. Storage system. According to the Geologic and Seismic Hazards Assessment of Lakeside School Campus by Kleinfelder Inc. in 1998, the Lakeside campus is located within a State of California designated Earthquake Zone for the San Andreas fault. This study was was performed in accordance with CDMG Special Report 42-Fault Rupture Hazard Zones in California (Hart 1997) as	75,000	3	110 17	Santa Clara	IJ	2009
59 1900011	1900011-001	CAMPS SCOTT & SCUDDER	SWTR Compliance	CONNECT OLD SYSTEM TO ADJACENT MUNICIPAL C	0	Ρ	mandated by the Alquist-Priolo Act of 1972. The storage UNTREATED WELLS UNDER SURFACE WATER INFLUENCE, INTERMITTENT POSITIVE TOTAL COLIFORM RFSUITS.	210,000	2	275 16	Los Angeles	IV	1998
60 3100034	3100034-003P	BIG BEND WATER USERS ASSOCIATION	Big Bend Water	The project encompasses all phases of a water system; C source, treatment, distribution, and storage.Source: currently the system is delivering surface influenced, untreated water. The Mutual is on a boil order. A new well would help with water capacity issues. A vertical well(s) could provide much needed relief.Treatment: treatment is required through Placer County Health. Current engineers estimate is \$250,000. \$150,000 for treatment equipment in a prefab metal building. Approximately \$100,000 for site development, electrical service, access and contingencies.Distribution: the distribution system consists of 3,000 lf of 4 inch steel pipe which was installed in the 1940s. Replacement of all distribution lines with 4 inch C-900 PVC is needed. It estimated that the system loses more than 20% of water through leaks.Storage: current system storage capacity is 16,600 gallon concrete tank. Relief from the horizontal wells output of between 10gmn to 4gpm could be mitigated to some extent with additional storage. A 20,000 storage tank is advised.	0	Ν	System problems:1.) Surface influenced horizontal wells/springs- so treatment is mandated by Placer County Health.2.) Distribution lines need replacement- approximately 3,000 If of 4" pipe.3.) Storage capacity- additional storage capacity is needed. 20,000 gallons would suffice. Current storage capacity is 16,600 gallons.4.) Additional water source- the current horizontal wells produce between 10gpm and 5gpm depending on the season. More flow in the spring and less in the fall.Placer County Health has required a Boil Water Order for the past 3+ years. Placer County Health has issued a mandate order under California Safe Drinking Water Act beginning with Section 116270 and the California Cose of Regulations, Title 22.	10,000	20	25 02	Placer	I	2008

61 1900764	1900764-001	HENNINGER FLATS	Treatment Plant Expansion, Storage tank replacement and addition	Close down first water tank (East tank) and construct a C new tank for storage. Install new water lines and backflow valves where needed. Add additional water storage to serve the population. Repair valves. Ensure distinction between drinking water and irrigation water by designing maps defining water systems and providing proper signage to guide the public.	0	Ν	Henniger Flats is a public campground/historical site in Altadena. The campground is visited by an average of 300 campers per week. The water system is obtaining its water from a nearby spring. It then feeds into a tank that is in bad disrepair (cracking, leaking and exposed to the public). Water flows further into a chlorination system and three separate storage tanks. The campground is in need of new locked and secured storage. In addition, new water lines and backflow valves are needed to ensure there is no comingling of irrigation and drinking water. Because this system is used by the public, the system must be designed to ensure that there is no public access to the water source and that the tanks are locked and secured.	300,000	1	25 16	Los Angeles	IV	2009
62 1909644	1909644-001P	AZUSA SPRINGS WATER SYSTEM	Azusa Springs Water System	C under our May 2008 Simplified Capital Improvement Plan is estimated at approximately \$496,925. Our monthly cost for a certified/qualified water system operator for the well operation and filter maintenance was \$28,705 for the fiscal yeer 07/08. Our goal is to tie into the Azusa Light and Water main line for quality drinking water for our 5 tenants, and our 20 office personnel, as well as our 65 acre future Azusa River Wilderness Park which is the planning stage. We will then utilize our well water system for landscaping purposes only for our properties and Azusa River Wilderness Park.	0	Ν	The current water system, the Azusa Springs Water System (1909644), at 100 N Old San Gabriel Canyon Road, Azusa, CA is in need of major capital improvements. The Azusa Springs Water System is on an improved property that is being transformed into an open space park. The system is identified in your system as a Tranisent, Noncommunity Water System, however the Los Angeles County Public Health Department has identified our system as Small Community Water System.Our filtration system, storage tanks, all water lines, and our transmission pipes which currently runs under the San Gabriel River are all due for replacement. The system has one well site and a basic distribution system. The well and chlorinator are in a pump house that is located directly adjacent to the San Gabriel River. This system is considered under the influence of surface water due to the river's close proximity and the depth of the well at 55-70 feet. The groundwater is chlorinated at the wellhead by a Stenner sodium hypochlorite injection system. The groundwater then flows under pressure to the dual stage filtration system. The filtration system consists of two pressurized permanent media sand filters. The first filter removes suspended particles for the water and the second filter polishes the water, the water then flows uphill to two 10,000 galion storage tanks. The distribution system consists of 6" PVC, 2" steel, and 2" galvanized pipelines.	0	13	25 16	Los Angeles	IV	2008
63 2701310	2701310-001	GORDA WS	Gorda Water Filtration System	the project consists of bringing the water system up to C compliance with health codes and the Monterey County Department of Health and lift the Boil Water Order as soon as possible. This will involve the following:Selection of Surface Water Treatment System.Prepare engineering Letter Report and Specifications.Prepare Operations Plan.Coordinate and Conduct Final Inspection with MCDH (Monterrey County.Department of Health).Rebuild point of origin water collection box.install an engineered sand filtration	0	Ν	The water system is currently on a Boil Water Order and was put in effect as of May 20, 2010. Gorda Springs is a resort community with a restaurant and a grocery store. the community consists of approximately 16 employees who live and work here.	35,000	1	50 05	Monterey	II	2011

system and pump, per specs.Install Monitoring and

treatment equipment.

64 0900591	0900591-001	NORTH ECHO SUMMIT WATER ASSOCIAT	IOP North Echo Summit Water Association Surface Water Treatment Facility	To ensure a sufficient and dependable supply of pota water, the North Echo Summit Water Association (NESWA) intends to install a treatment system to trea its traditional source of surface water. The proposed treatment system would solve the problems of an insufficient and undependable water supply, and coliform contamination.NESWA will use its groundwa source from the late spring until the source runs dry i late summer or early fall, after which the treatment facility will be used to treat NESWA's dependable surface water source in the late summer through the fall.NESWA has hired an engineering firm to evaluate and provide a conceptual design of an integrated wat supply distribution, storage and treatment system. T firm is currently developing detailed plans for Phase d which includes replacement of the majority of the system's main pipelines (approximately 7,000 feet) an installation of a 20,000 gallon water storage tank. NESWA members are fully funding this Phase 1 work, for which construction is expected to begin in the summer of 2009. This grant application is seeking funding for Phase 2, which is the development of the system. However, it will most likely involve both filtration and chlorination processes and will have sufficient capacity to meet peak hour water demand	able C at i ater in ter fhe 1, nd ,	0	Ν	The North Echo Summit Water Association's (NESWA) system, serving 42 U.S. Forest Service (USFS) cabins, was installed in the 1920's. After operating for many years as an informal association, NESWA recently incorporated as a Mutual Benefit Nonprofit Corporation with the State of California and became an IRS taxexempt corporation. Cabins are occupied early June through October, approximately five months each year. Traditionally, the water system was supplied by groundwater in the late spring to early summer and by surface water in the late spring to early summer and by surface water supply to meet the users' needs. This is the result of NESWA discontinuing use of its dependable surface water supply, as ordered by the El Dorado County Environmental Health Department (County Health Department). The County Health Department has cited NESWA with two on-going violations:(1) total coliform seceed maximum contaminant level (Safe Drinking Water Act, Title 22, Section 64426.1(b) Total Coliform MCL Violation), and(2) insufficient system vater source shall have the capacity to meet the system's maximum daily demand (MDD))The first violation is recurring positive tests for total coliforms, as shown by routine bacteriological	375,000	42	84 09	El Dorado	I	2008
65 3500537	3500537-001P	St. Francis Retreat Center	St. Francis Retreat Water Treatment Upgrade	Fall Creek Engineering of Santa Cruz, CA has designed treatment system that would deal with our demand a the existing conditions. Elements of the plan include Ozone generator, injector and contact tank Strainrite filtration system (3 unit system with pressure differential controls) Chroline injection to maintain system residual automated pH and turbidity monitoring Treatment building to house the equipment	da C and	0	Ν	The primary well, and only well to remain in production through the year, was drilled in the 1960's and installed without an annular seal. Tests have revealed that the static water level in the well equates to the groundwater level of the adjacent pond. Elevated coliform bacteria counts in the raw water from this well confirmed that the well is indeed under the influence of surface water. We are under orders to post notification of "Failure to meet Surface Water Filtration and Disinfection Treatment Requiremjents," as required by Section 116450 of the California Health and Safety Code. Proof of Notification has been forwarded to the District Drinking Water Office in Monterey, CA. Notification is required until such time as we can either install an approved filtration and water treatment plant, or make arrangements to be serviced by the closest municipal water district, San Juan Bautista.	90,000	10	145 05	San Benito	Π	2007
66 1206008	1206008-001	Mattole Triple Junction High School	SWTR Compliance	Surface water treatment rule compliance.	D	25	Ρ	into the unpredictable future. Meanwhile, we are mandated to maintain a minimum 1.0ppm chlorine residual in the distribution system. This elevated residual is creating customer complaints Turbidity failures 8 months out of the year. This system	225,000	1	60 01	Humboldt	I	2002
			·					uses a surface water source. The Mattole river reaches turbidities of 800+ NTU. Lack of analyzers on site makes it difficult to design or plan a solution	·					

67 1700519	1700519-003	Crescent Bay Improvement Company	Crescent Bay Improvemen Company-SWTR Compliance	t For the well drilling portion of the project, a geological D study is necessary to determine the optimum well location and to advise on site acquisition for the well and treatment facilities. Further environmental studies (archeological, etc.) may be required under CEQA. Once the site is obtained and the well is drilled, additional treatment of the water may be necessary, based on the test results of other wells in the neighborhood. Determining the necessity of additional treatment and then installing the treatment facilities would then complete that project. We believe that an additional well will be required to meet capacity even if we were to acquire the adjacent water system.	20	С	Crescent Bay improvement Company has been on a Boil Water Order since 1999. It draws surface water from Clear Lake for a community of 23 hookups. It has been unable to meet compliance standards for turbidity and disinfectant byproducts under Surface Water Treatment Rule Sections 64664, 64652(a), 64655(b), 64657.40(c), 64646(a), 64659 and 64661. The company was established in 1935, and the distribution system dates back to the late 1930s. The California Department of Public Health regulator has advised us to seek ground water as a source for our system rather than surface water. drill a well and replace surface water source with ground water,	900,000	24	18 03	Lake	Ι	2012
68 4900543	4900543-003	Sonoma County CSA 41-Salmon Creek	Consolidation of Treatment Works Salmon Creek/Carmet and Sereno del Mar Water Systems	The project consists of the installation of 3 miles of dual D pipeline. A 2" raw water line to deliver Salmon Creek's water sources to the treatment plant at Sereno del Mar and an 8" line to deliver finish water from the 300,000 gallon gravity tanks at Sereno del Mar. This plan is similar to the project completed at Carmet-by-the-Sea in 2003 using USDA funds. This proposed project will complete the consolidation of the distribution systems and all water sources at Sereno del Mar, Carmet-by-the-Sea, and Salmon Creek. This proposed project is similar to 5DWSRF Project 0003046-01 submitted in June 1999, which involved the consolidation of all surface water treatment in the existing microfiltration plant at Sereno del Mar. The Sereno del Mar plant was constructed in 2001 using a State Revolving Fund Ioan.	20	C	The Salmon Creek Water System currently utilizes two separate sources. A shallow well adjacent to 3 residences provides brackish water with a specific conductivity exceeding 2,000 omhs/cm. This well may not have an adequate well seal. The second source consists of an underground spring which is collected in a 5' deep French drain, located adjacent to a public road. This source has a high turbidity during the winter rains so additional disinfection is applied to increase the CT. On numerous occasions, the brackish well water is used when the turbidity exceeds 1.0 to 3.0 NTU. Both sources may be under the influence of surface water and must be treated in compliance with the Surface Water Treatment Act. The Department of Health Services requires treatment. A small on-site treatment works will be costly and operation costs with continuous monitoring would be beyond the financial capacity of the 100-customer community. The community has sufficient surface water sources but this supply must be treated. This surface water may be treated at an adjacent water system's micro-filtration facility. Adequate storage for both domestic and fire use is also available at the adjacent water system. Salmon Creek customers pay the highest monthly charge for public water systems in Sonoma County,	500,000	99	220 18	Sonoma	Π	2007
69 1009281	1009281-003	HAMMONDS RANCH	Replace storage tanks	Replace two old 20,000 gallons storage tanks with four D new 20,000 gallonsbaffled tanks	15	С	Treated water from treated storage will not meet ctCitation 03-2309C-034Failure to achieve adequate contact time	160,000	17	50 23	Fresno	Ш	2009
70 4500022	4500022-002	HAT CREEK WATER COMPANY, LLC	Filtration System Replacement (Prop 50 Funded)	Construct a new 98,000 (+/-) gallon water storage D reservoir on Forest Service Property for a gravity feed pressure system, includes 1800 feet of 4 and 6 inch pipelines from water treatment plant to new tank and back. Install new 3-train American Water Technology, Inc. 87 gallon per minute surface water Treatment plant. And modification of existing building to accommodate the new treatment system.	10	С	Current surface water treatment process is an unapproved filtration technology and at times the system does not meet Federal Title 40, Part 141, of the Code of Federal Regulations. Chlorine water contact time is not met because of insufficient water storage capacity.	96,000	60	198 02	Shasta	I	2009

71 1910067	1910067-037	LOS ANGELES-CITY, DEPT. OF WATER & PO	W City T/L South Unit 6	Replaces 1914 Riveted Steel Pipe. Primary source to eastern portion of San Fernando Valley and to Franklin, Hollywood, and Silver Lake service areas. Increases reliability. Title of Regulation: Surface Water Treatmen Rule. City Trunk Line South (CTLS) Unit 6 is one of 6 units of the CTLS, which is needed to replace the existing CTLS. CTLS 6 is 1,630 feet of 60" diameter welded steel pipe. The project route is along Coldwater Canyone Blvd. between Avenida del Sol to the North Portal of the Franklin Tunnel. This project includes the installation of the following: 6 butterfly valves, 1 flowmeter, 1 vault, and 1 jacks/tunnels. The jacks/tunnels account for 1,450 feet of the total project length. This project includes two connections, one to the Coldwater Canyon Pump Station and another to the North Portal of the Franklin tunnel.	D t :	10	С	Replaces 1914 Riveted Steel Pipe. Primary sorce to eastern portion of San Fernando Valley and to Franklin, Hollywood, and Silver Lake service areas. Increases reliability. Title of Regulation: Surface Water Treatment Rule. This is necessary for reliability and operational flexibility.	18,900,000	686,422 4,	,071,873 15	Los Angeles	IV	2009
72 1009035	1009035-001	PILIBOS BROTHERS RANCH (SIMONIAN FAR	RN Complete replacement of existing filtration system	Install complete State of California approved water treatment system.	D	5	с	Current system will not meet State of California health standards.	275,000	16	25 23	Fresno	Ш	2009
73 1009039	1009039-004	PAPPAS & COMPANY (MENDOTA)	CT Planning Study	Funding is needed to initiate a Planning Study to identify appropriate alternatives to resolve the CT Citation.	D	0	с	The Water System has received Citation No. 03-23-10C- 050, issued July 12, 2010 for noncompliance the Surface Water Treatment Rule. The System failed to maintain a daily CT ratio of 1.0 or greater for six (6) days in May 2010	250,000	11	25 23	Fresno	Ш	2011
74 1009214	1009214-002	STEVE MARKS CATTLE COMPANY	Adding a 100,000 gallon storage to meet contact time.	We are looking at getting a 100,000 gallon storage tank to meet the CT requirements.	D	0	с	The disinfectant residual levels/contact times did not meet all requirements. There was not enough contact times for disinfection. We hand delivered notices on 8- 21-09 to the housing occupants notifying them of this failure.	360,000	30	25 23	Fresno	Ш	2009
75 5403129	5403129-001	TRACT 403 MUTUAL WATER CO	Develope new well and second source for PWS	New well, distribution, chlorinator, and or consolidation.	D	0	с	Ground water system that is under the influence of surface water. This is treated as a groundwater system. A new well was drilled and provided an abundance of salt. A new well could go a long way.	500,000	22	30 12	Tulare	Ш	2008
76 1009258	1009258-001	SAN ANDREAS FARMS	CT Planning Study	Funding is needed to initiate a Planning Study to identify appropriate solutions to resolve the CT Citation	D n.	0	С	The Water System has received Citation No. 03-23-09C- 052, issued August 13, 2009 for noncompliance the Surface Water Treatment Rule. The System failed to maintain a daily CT ratio of 1.0 or greater for thirty-one (31) days in July 2009.	250,000	10	40 23	Fresno	Ш	2011
77 1009006	1009006-002	PAPPAS & CO (COALINGA)	Coalinga TTHM compliand	ce Study to determine and construction of best improvement plan from among identified options:1) GAC treatment2) Minimizing water age in the distribution system and maximizing reservior turnover3 Treatment optimization and increased DBP precurser removal through enhanced coagulation4) Disinfection dosage and CT ratio optimization5) Alternative disinfectant injection points6) Alternative disinfectants.	D 3)	0	С	Non-compliance with maximum contaminant level (MCL) for Total Trihalomethanes and/or Haloacetic Acids.Subject to quarterly testing and notification of exceedance of a Chemical MCL.	250,000	13	50 23	Fresno	Ш	2009
78 1009006	1009006-004	PAPPAS & CO (COALINGA)	Coalinga CT compliance	Funding is needed to initiate a Planning Study to identify appropriate alternatives to resolve the CT CO.	D	0	С	The Water System has received Compliance Order No. 03-23-090-027, issued December 21, 2009, for noncompliance with the Surface Water Treatment Rule. The System failed to maintain a daily CT ratio of 1.0 or greater for five (5) days in November 2009. Due to previous CT violations in October 2009, the above violation was classified as a continuing violation.	250,000	13	50 23	Fresno	Ш	2011
79 4900549	4900549-002	Sonoma County CSA 41-Freestone		Drill a new well and use it as primary, sole source. Use spring as standby source.	D	0	С	To provide adequate source capacity the system must use ground and surface water sources. The exisiting surface water treatment require upgrade to comply with the SWTR. Iron and maganese treatment for surface and ground water sources.	227,000	30	60 18	Sonoma	II	1998

80 2300730	2300730-001	Westport County Water District		Reconstruct infiltration gallery. Add new contact vessel to plant to change it to direct filtration treatment system. Install new disinfection system to ensure compliance with swtr.	D	0	С	Using unapproved in-line filtration system on surface source. Disinfection system does not meet swtr inactivation requirements. Infiltration gallery effectiveness decreased by lowered stream bed. Raw water nums failing	525,000	69	70 03	Mendocino	II	1998
81 4700503	4700503-001	Callahan Water District		Add storage or replumb to increase contact time for disinfection. Review condition of components of filter plant and repair or replace defective components to ensure proper filtration.	D	0	С	Unable to meet disinfection performance requirements (CT) due to inadequate contact time. In-line filtration plant occasionally fails turbidity performance standards.	712,550	29	70 01	Siskiyou	I	1998
82 1300572	1300572-001P	VALLEY MOBILE PARK	Planning	Construct a new surface water treatment plant.	D	0	С	Surface water treatment plant does not meet SWTR Regulations of treatment technique.	170,000	22	70 14	Imperial	v	1999
83 1200587	1200587-001	Briceland C.S.D.	SWTR Compliance	Design and Construct source protection. Optimize slow sand filter media construct settling basin an filter and storage capacity	D	0	с	Fails Turbidity standards at times during the winter months.	200,000	26	75 01	Humboldt	ļ	2000
84 5400506	5400506-007	NO KAWEAH MUTUAL WATER CO	Land acquisition, Groundwater Wells, Storage Tank, and Piping	This project would perform geophysical testing for prospective groundwater, acquire the land or easements to drill and equip up to three groundwater wells, construct a 120,000 gal storage tank, and install the necessary connecting piping and components to the wells, to the tank, between the existing distribution systems, and depending on the locations of the wells, furnish booster pumps, hydropnuematic tanks, and/or pressure reducing valves as may be required.	D	0	С	Both North Kaweah Mutual Water Company and Tract 403 (Washburn) operate separate water systems using source water under the influence of surface water. Neither meet the regulatory standards for filtration nor do they have adequate chlorine contact time to ensure proper disinfection. Both are required to notify their users each 90 days to not drink the water.	1,200,000	35	75 12	Tulare	Ш	2009
85 5301017	5301017-001C	Rush Creek Mutual Water System	Rush Creek MWC -LT1 ESWTR Compliance	<ol> <li>Upgrade water treatment plant to meet the LT1 requirement (through addition of approved filter technology). May and probably will require addition to existing treatment plant building to house upgrades.</li> <li>Update and upgrade turbidity meters and turbidity recording equipment to meet 15 min reporting standard.</li> <li>Repair or replace 14,000 gallon horizontal storage tank per state inspection dated Feb. 27, 2007.</li> <li>Replace worn 3 H.P. pump at creek pumping station.</li> <li>Convert 4 existing filters to dual media to eliminate the flow restriction imposed by the state inspection report of Feb 27, 2007.</li> <li>A rurbidity, and storage tank systems to provide indicators and alarms for critical levels (such as high</li> </ol>	D	0	C	<ol> <li>Water treatment plant does not meet the LT1 requirement.</li> <li>turbidity meters and turbidity recording equipment do not meet 15 min. reporting requirement.</li> <li>14,000 gallon horizontal storage tank needs to be repaired or replaced per Feb 27, 2007 state inspection report.</li> <li>Worn 3 H.P. pump at pumping station.</li> <li>current 4 filters need to be dual media to eliminate filter flow restriction (per Feb. 27 inspection).</li> <li>Flow, turbidity, and storage tank systems have no indicators or alarms for critical levels (such as high turbidity or low storage tank condition).</li> </ol>	10,000	37	80 01	Trinity	'	2007

turbidity or low storage tank alarms).

86 1000213	1000213-001	HARRIS FARMS/HORSE BARN	Harris Farms Horse Division Treatment Plant Modifications	New equipment items including the following are proposed for the treatment plant: A new pressure contact clarifier pretreatment unit, an additional 42 incl diameter pressure filter, a new 100,000 gallon capacity treated water storage tank, a granular activated carbon (GAC) filter system, an ultraviolet light reactor to disinfect filtered water, two (one duty, one standby) new distribution system booster pumps controlled by variable frequency drives to maintain system pressure, and new filtered water and backwash water totalizing rate of flow meters. The existing hydropneumatic tank and the two storage tanks would be demolished. The contact clarifier will improve the filtered water quality, and the GAC filter system will reduce organics and TTHM precursors. GAC treatment, along with UV disinfection to allow a reduction in the chlorine dose will resolve the TTHM problem, and the TOC removal ratio problem.	D h ,	0	C	The DPH inspection report dated December 2007 listed deficiencies for the treatment plant. The 100 gallon per minute treatment plant is approximately 30 years old and includes a pretreatment unit, 2 each 42 inch diameter pressure filters, two each 20,000 gallon storage tanks, a distribution system booster pump, a hydropneumatic tank, plus chemical feed equipment and instrumentation. These items require correction: Treated water contains TTHMs above the MCL; CT requirements are not being satisfied; and the TOC removal ratio is below the required ratio. In addition, the pretreatment equipment at the plant is not functional and needs to be replaced, the service flow rate through the pressure filters exceeds 3 gpm/square foot, and the storage tanks' capacity is less than required by Title 17 Code of Regulations Section 64554. Further, the existing tanks lack access openings to allow cleaning. The storage tanks and the hydropneumatic tank are also leaking water, and cannot be properly repaired.	388,000	20	100 23	Fresno		2009
87 2100519	2100519-004	ESTERO MUTUAL	Data logging and Recording Equipment	The project would include the installation and calibration of in line data logging and recording equipment. Installation would be in Estero Mutuals treatment plant, and consist of wiring, plumbing, and mounting of equipment into exsisting system. Monitoring equipment would allow for continual measurements of raw and finished water. Also any technical support for initial system start up, and for any problems that may arise after installation would be included in the project.	D	0	с	The surface water treatment plant does not have any data logging or recording equipment for raw or finished water. In order to be in compliance with surface water treatment rules, Estero Mutual needs to install in line monitoring equipment that can generate data for monthly reports. Scott Callow R.S. Marin County Health Department personal communication.	11,900	110	125 18	Marin	II	2007
88 2100519	2100519-006	ESTERO MUTUAL	Storage tank replacement	Obtain all permits, remove old tank and erect new wate storage tank. The new tank would provide reliable water storage for drinking and fire protection for the community.	er D	0	С	Estero Mutual's 200000 gallon drinking water storage tank is badly corroded and leaking. The tank needs to be replaced to ensure drinking water and fire protection to the community. Estero Mutual Water Company does not have the funds to replace the tank.	395,000	110	125 18	Marin	II	2009
89 4810025	4810025-001C	SID-Pleasant Hills Ranch	Solano Irrigation District	Install POEs treatment	D	0	с	Unfiltered Surface water source.	463,000	39	135 04	Solano	Ш	1999
90 1009028	1009028-001	HARRIS FARMS SOUTH #101-144	Harris Farms South Camp Water System Improvements	New equipment items including the following are proposed for the treatment plant: A new pressure contact clarifier pretreatment unit, an additional 42 incl diameter pressure filter, a new 100,000 gallon capacity treated water storage tank, a granular activated carbon (GAC) filter system, an ultraviolet light (UV) reactor to disinfect filtered water, two (one duty, one standby) new distribution system booster pumps controlled by variable frequency drives to maintain system pressure, and new filtered water and backwash water totalizing rate of flow meters. The existing hydropneumatic tank and the two storage tanks would be demolished. The contact clarifier will improve the filtered water quality, and the GAC filter system will reduce organics and TTHM precursors. GAC treatment, along with UV disinfection to allow a reduction in the chlorine dose will resolve the TTHM problem, and the TOC removal ratio problem.	D h x	0	с	The DPH issued compliance order #03-12-080-009 dated April 29, 2008 for the South Camp system. The 90 gallon per minute treatment plant is approximately 30 years old and includes a pretreatment unit, 2 each 42 inch diameter pressure filters, two each 20,000 gallon storage tanks, a distribution system booster pump, a hydropneumatic tank, plus chemical feed equipment and instrumentation. The compliance order requires improvements to correct these items: Treated water contains TTHMs above the MCL; CT requirements are not being satisfied; and the TOC removal ratio is below the required ratio. In addition, the pretreatment equipment at the plant is not functional and needs to be replaced, the service flow rate through the pressure filters exceeds 3 gpm/square foot, and the storage tanks' capacity is less than required by Title 17 Code of Regulations Section 64554. Further, the existing tanks lack access openings to allow cleaning. The storage tanks and the hydropneumatic tank are also leaking water, and cannot be properly repaired.	388,000	40	160 23	Fresno	11	2009

91 4500237	4500237-002	SWEET BRIAR CAMP	Study & Possible Consolidation	Study/planning/design to 1) Improve slow sand filter capacity, for potable water, or 2) Consolidate with Shasta County Service District No. 3 (Castella)	D	0	С	Sytem has problems meeting potable water capacity.	100,000	55	178 02	Shasta	I	2003
92 0510012	0510012-003	Camanche South Shore-EBMUD	Camanche Regional Wate Treatment Plant	r This project is the replacement of the Camanche South and North Shore water treatment plants with a 2.0 MGD Regional Water Treatment Plant (with Amador and Calaveras County partners). The project includes construction of an ultrafiltation WTP, a new raw water pipeline, new treated water pipeline, water storage tanks and related distribution system piping.	D	0	С	This project is the replacement of the Camanche South and North Shore water treatment plants with a 2.0 MGD Regional Water Treatment Plant (with Amador and Calaveras County partners) that meets DPH regulations. The 90% design is complete and the environmental documents (mitigated negative declaratiion) are complete. The Interim Enhanced Surface Water Treatment Rule requires a higher level of water treatment that provided by the Camanche South and North Shore Water Treatment Plants. Failure to meet regulations could result in non-compliance with the Dept of Health Services.	14,000,000	448	180 10	Calaveras	111	2009
93 2810009	2810009-002	Berryessa Pines Water System	Consolidation with Spanis Flat WD	h	D	0	с		660,797	78	200 03	Napa	Ш	2007
94 4900647	4900647-002	Sereno Del Mar Water Company (PUC)	Consolidation of treatmen works Salmon Creek/Carmet and Serenc Del Mar Water Systems	tt The project consists of the installation of 1-1/2 miles of dual pipeline, a 2" raw water line to deliver Salmon Creek's water sources to the treatment plant at Sereno del Mar and an 8" line to deliver finish water from the 300,000 gallon gravity tanks to Salmon Creek. This plan is similar to the project completed by Carmet-by-the- Sea in 2003 using USDA funds. This proposed project will complete the consolidation of the treatment plant, distribution systems and all water sources at Sereno de Mar, Carmet-by-the-Sea , and Salmon Creek. This proposed project is similar to SDWSRF Project 0003046 O1 submitted in June 1999, which involved the consolidation of all surface water treatment in the existing microfiltration plant at Sereno del Mar. The Sereno del Mar plan was constructed in 2001 using a State Revolving Fund Ioan.Sereno del Mar (124 users) and Carmet-by-the-Sea (64 users) are charged §6.75/month to repay the [DWRSRF-11197C307] \$250,000 Ioan. When Salmon Creek (100 users) is added to the system, the monthly cost for repayment on the Ioan will be reduced to \$4.50/month/service. Carmet-by-the-Sea is also repaying a USDA Ioan in the amount of \$140,000 for construction of the water intertie to Sereno del Mar. This repayment amounts to a \$10.50 charge/customer/month.Salmon Creek is currently repaying a SRF Ioan which financed the destable to seveen.	D I f	0	C	The Salmon Creek CSA #41 water system currently uses two separate sources. A shallow well, located adjacent to 3 residences, provides brackish water with a specific conductivity exceeding 2000 UMHOS/CM. This well may not have an adequate well seal. The second source consists of an underground spring which is collected in a 5' deep french drain, located adjacent to a public road. This source has a high turbidity during the winter storms so additional disinfection is applied to increase the "CT". On numerous occasions the brackish well is used when the spring turbidity exceeds 1.0 TO 3.0 NTU. Three boil water notices were issued in the past five years. Both water sources are subject to surface water intrusion and need to be treated in a surface water treatment plant. Fortunately, the micro-filtration treatment plant. Fortunately, the micro-filtration treatment plant located at Sereno Del Mar has excess capacity and may be expanded to accommodate the water sources located in Salmon Creek. The cost to expand this plant is approximately \$5,000. The community of Carmet and Sereno del Mar completed the initial consolidation in 1999. A small on-site surface water treatment plant at Salmon Creek may be expensive to operate and the continued monitoring may be beyond the financial capacity of the 100- customer community. Salmon Creek customers pay the highest monthly charge for public water system in	700,000	124	200 18	Sonoma	Π	2009

95 4900543	4900543-004 4900543-001C	Sonoma County CSA 41-Salmon Creek	Construction of a ground water treatment plant and water storage tank	In order to comply with the Surface Water Treatment D 4 Act, the Salmon Creek community of 100 customers must provide treatment to both the well and spring water sources. These two sources are under the influence of surface water. This project includes the construction of a building for the treatment works, a micro filtration Treatment plant, pump station, relocation of the existing generator, fabrication of a finish water storage tank, construction of a raw water pipe line between the existing concrete water tank and the new filter building. The replacement of the existing fire pump may involve an agreement with the Bodega Bay Public Utility District, and the construction of a short inter-tie for fire suppression purposes only. If an agreement can not be completed with the Bodega Bay Public Utility District, then a local fire water supply will require the construction of a larger finish water storage tank. This proposal includes funds to replace the existing fire pump and sufficient storage. The cost to comply with the Surface Water Treatment Rule will financially impact the water system users. Salmon Creek is currently repaying a SRF loan which financed the distribution system. This cost is \$28.00/month/user. This proposed improvement may increase this capital repayment by another \$20/month/user. Salmon Creek CSA #11 will need a forgiveness of principal to reduce the customers' monthly capital repayment charges. Construct elevated storage tank; NOW construct water D main to connect to adj public water system	0	с	The Salmon Creek CSA #41 water system currently uses two separate sources. A shallow well, located adjacent to 3 residences, provides brackish water with a specific conductivity exceeding 2000 UMHOS/CM. This well may not have an adequate well seal. The second source consists of an underground spring which is collected in a 5' deep French drain, located adjacent to a public road. This source has a high turbidity during the winter storms so additional disinfection is applied to increase the "CT". On numerous occasions the brackish well is used when the spring turbidity exceeds 1.0 TO 3.0 NTU. Three boil water notices were issued in the past five years. Both water sources are subject to surface water intrusion and need to be treated in a surface water treatment plant. The operation costs for a small on-site surface water treatment plant will be a burden for the 100-customer community. Salmon Creek customers pay the highest monthly charge for public water system in Sonoma County, exceeding \$100/month for a single family residence. This charge includes capital repayment costs for the installation of the water distribution system.	550,000	99	220 18	Sonoma	U	2009
97 3100058	3100058-005	DUTCH FLAT MUTUAL	Consolidation of Dutch Fla Water Co. with PCWA	t Do to the increasing federal and state treatment D mandates and personal responsibility for the existing volunteer operations staff, Dutch Flat Mutual is looking for alternatives to their continued operation of the treatment plant.Dutch Flat Mutual would like to purchase wholesale treated water from PCWA. The project would consist of hooking up to PCWA's treated water main, which would allow Dutch Flat to decommission its existing WTP.Service to Dutch Flat Mutual could be made with an extension of about 150 feet of pipeline, installation of a 2 inch meter, an altitude valve with a flow rate controller and telemetry equipment. This would be connected to the Dutch Flat Mutual storage system.	0	C	failures; NOW swtr violation The Dutch Flat Water treatment plant does not totally comply with the Cryptosporidium Action Plan, and will have difficulty complying with any new regulations. 1. The pre-treatment facilities (i.e. the rapid mix chamber, flocculation basin and sedimentation basin) are uncovered. This allows contamination from animals entering into these unit processes, becoming trapped and decaying immediately prior to the dual media filters; 2. The pre-treatment facilities are located in a heavily wooded area allowing large accumulations of vegetation to reside and decay in these basins. Monitoring TOC's in the raw water as required by law may ultimately not be representative of the actual TOC level that enters the filters. 3. Although enclosed within a 6' cyclone fence, the exposed pre-treatment facilities are close to a public road and subject to intentional contamination from vandals throwing contaminants into the facilities;4. Settled water turbidities can exceed 1.NTU which can be the same or higher than the raw water turbidity;5. The unit processes are all controlled by manual valves and thus highly subject to improper operation due to operator error. Improper sequencing of the valves could cause any number of problems leading to contamination of the treated water. 6. As the valves are manual, the operator must slowly open the valves following the backwash process in order to pradually increase the filtration rates which cannot he	220,000	94	290 02	Placer	I	2009
98 0410018	0410018-001	Del Oro Water CoStirling Bluffs	Surface Water Treatment Plant Improvements	Expand the existing plant by the addition of filters, D pumps and piping.	0	с	Existing surface water treatment plant does not conform to the surface water treatment rule-bed loading too high	500,000	162	313 21	Butte	I	2004

99 4900570	4900570-004	Palomino Lakes Mutual Water Co.	Well replacement to overcome the direct influence of surface water	Please note that "consolidation" is not an option. The D closest public water system is five miles away. There are no private systems with the ability to help within that same five miles. The problem of the well being substandard has been known for some time. The Palomino Lakes Mutual Water Company (PLMWC) Board began negotiations with vineyard owner (where the present well is located) some time ago. To date it has been an unsuccessful process however very recently the talks have become considerably more productive. Based on the progress there appears a successful resolution may be at hand. Additionally the Board is exploring a possible site on the adjacent parcel that was actually suggested by the reluctant vineyard owner while he negotiated. The solution is a new, deeper well, closer to the Russian River, where sufficient depth is available to allow the well to meet sanitation standards while being far enough away to minimize turbidity problems. All of the expected well drilling, casing, proving, drilling waste control and removal, etc expenses will be required.Also required are the usual support items including a pump, controls, electrical service, water treatment equipment and structure, monitoring equipment, underground piping to connect into the existing water main, etc. as well as additional access road and fencing.Since certain aspects of this project are givens, regardless of well location,	0	C	On May 10, 2011 the Department of Public Health (Department) Drinking Water Field Operations staff inspected the Palomino Lakes Mutual Water Company (PLMWC) facilities. This inspection, and test results from early 2011, caused the Department to notify the PLMWC the well was not at Department standards. The PLMWC the well was not at Department standards. The PLMWC immediately modified the water treatment procedure to meet a 3-log inactivation of Giardia and a 4-log inactivation of virus through higher disinfection. This action was reported to the Department during a June 17, 2011 meeting in Santa Rosa between the Department, the PLMWC system operator and the PLMWC Board of Directors. On June 23, 2011 Janice M. Oakley, P.E., Sonoma County Engineer for the Drinking Water Field Operations Branch based in Santa Rosa, formally notified the PLMWC the system's well was being reclassified as "a groundwater under the direct influence (GWUDI) of surface water". The Surface Water Treatment Rule, sections 6450-64666 of the CCR, was specifically cited. By instituting the higher disinfection rate and logging data on regular basis a "boil water" has not been necessary and all water users are being updated as needed. The problem stems from the well depth of only twenty-four feet and the surface seal only being four feet. Additionally this well is in a vineyard where the surface waters may contain farming chemicals as well as wild animal contaminants.	500,000	110	340 18	Sonoma	Π	2012
100 4400608	4400608-002P	FOREST SPRINGS	Forest Springs Water Upgrade	To address non-compliance regarding the surface water D treatment rule, Forest Springs intends to acquire a pre- engineered and prefabricated State-certified alternative treatment unit. The unit would be delivered to the site and construction would take place to install the unit at the treatment plant site, plumb the unit, and complete hook up of electrical power and control circuitry. During construction associated with the surface water treatment filtration unit, any cross-connections or other plumbing modifications would be completed and the sand filter backwash process stream would be modified. Additionally, process modification would be completed to increase chlorine contact time. All work would be completed according to County-approved design drawings and specification which will be included in the application. Work will also be completed to provide all necessary engineering report(s). The final stage of work would include system start up and final documentation.	0	c	The County of Santa Cruz, Ca has directed the Forest Springs Water System to address the following problems: 1) unapproved surface water treatment technology needs to be brought into compliance; 2) the existing sand filter is backwashed with raw water, which is not compliant; 3) cross-connection between raw water intake and clear well could allow filter bypass, which is not compliant; and 4) the system has insufficient chlorine contact time, which is not compliant. Since 2006, quarterly notices have been distributed to users that explains water treatment is not compliant with surface water treatment rule.	100,000	128	385 05	Santa Cruz	II	2009
101 4610002	4610002-001P	Downieville Public U.D.	Downieville PUD / Treatment Upgrades	The proposed project will provide a modern, approved D technology, water treatment system capable of coping with the full range of raw water turbidity typical of the source creek. The upgraded system will also be designed to provide adequate disinfectant contact time prior to the water reaching the first customer. We anticipate the new system to be either a micro-filtration system or a packaged system which provides coagulation, flocculation, sedimentation, and filtration. Additional contact time will be provided by increasing the detention capacity through additional storage at the plant prior to entering the distribution system.	0	с	The current mixed media direct filtration system is not an approved surface water treatment system. During periods of high runoff in the source creek, the increased level of turbidity overwhelms the filters and causes the treated water turbidity to exceed standards of the Surface Water Treatment Rule. The District was cited for a turbidity violation in 2003. The treatment plant is over 30 years old and lacks many of today's starndard automated control, alarm, and monitoring systems. Additionally, the treatment plant and associated storage is only able to meet about 30% of the required CT factor for pathogen reduction.	818,000	224	391 02	Sierra	I	2007

102 3301115	3301115-001P	CHIRIACO SUMMIT WATER DIST.		The new project will include a 300,000 gallon storage reservoir, plus a new pipe system from the canal to the reservoir which will split water into potable and non potable for use at the chiriaco site. All new plastic piping will be included as well	D	0	С	The present system is antiquated and needs to be updated to meet the state SWTR and federal regulations. We will send additional information and the drawings and information on the new system as soon as we have the finished plan.	0	24	400 20	Riverside	v	1998
103 1200538	1200538-001C	Myers Flat M.W.S. Inc.	Tank or Transmission improvements	Will replace 4-inch PVC main line under Highway 101 with 8-inch PVC. Replace 4-inch PvC with 6-inch PVC main stem line.	D	0	С	Inadequate water volume delivery under Highway 101 between storage tank and the system. Insufficient volume and pressure in system main stem line.	178,400	102	400 01	Humboldt	I	1998
104 5601117	5601117-014	SENIOR CANYON MUTUAL WATER CO	Instrumentation for SW Treatment Plant	The proposed project is ready for bid. IT includes installation of a utility enclosure, installation of raw and free chlorine analyzers, raw and combined effluent turbidimeters and controllers, chart recorder, power back-up, security fencing to protect equipment from elements and vandalism. This project was previously submitted and approved as a Prop 50 grant, and has been approved by the District Engineer for compliance with CDPH requirements for SW monitoring.	D	0	С	Currently, SCMWC utilizes a manual chlorine analyzer, and any adjustments are done by hand. Also, there is only one turbidimeter at the filter station (downstream). CPH personnel have stated that this arrangement is not adequate for the SWTR.Currently, the filter station and instrumentation is exposed in the open, in an area that where such equipment could be subject to degradation by sunlight, heat, cold, vandalism and/or wild animal induced damage.	185,000	240	450 06	Ventura	IV	2009
105 4500001	4500001-001	SHASTA CO CSA # 25 KESWICK	Keswick system SWTR Compliance		D	0	с	System does not meet standards for SWTR and disinfection; source is a conveyance from Whiskeytown Res to Keswick Res; filtration system is classified as in- line technology.Keswick service area is low income status	212,489	201	475 02	Shasta	I	2007
106 0910018	0910018-001	El Dorado ID - Outingdale	EID Outingdale	consolidate with EID Main system; 5 miles of 10 inch water main	D	0	С	SWTR violation	5,500,000	189	497 09	El Dorado	I	2002
107 1700568	1700568-002	Riviera West Mutual Water Co.	Improve System Reliability during Power Loss	Install emergency generators at the surface water treatment plant to operate the plant and the booster pumps. Install emergency generators at the booster pump station in the distribution system.	D	0	С	The Company experiences both fluctuating power surges and power outages during both winter and summer periods. The water treatment plant does not have any backup power.	130,000	240	500 03	Lake	II	2009
108 1700568	1700568-003	Riviera West Mutual Water Co.	Clarifier pretreatment with plant upgrade	By upgrading the existing water treatment facility to a direct filtration water treatment plant, including the installation of a contact clarifier and mechanical coagulant mixer, the water treatment facility will be deemed an approved water treatment facility. The major components proposed in this project include: Contact Clarifier including a Mechanical Coagulant Mixer UV Disinfection System Enhanced Surface Wash System Emergency Generator Switch, Connectors Piping Electrical/SCADA	D	0	c	The Department characterized the existing treatment facility on June 17, 1994 as an inline filtration treatment system. Inline filtration is not an approved water treatment technology because there is insufficient reaction time for the coagulant to form colloidal particles before waters reach the filtration site. The lack of coagulant reaction time contributes to sludge forming in undesirable locations downstream and potentially contributed to elevated total trihalomethane (TTHM) formation in the distribution system. The Company's water treatment facility is still deemed to be an inline filtration treatment system. As it currently exists, the water treatment facility is incapable of meeting the surface water treatment rule in accordance with Section 64653 of the California Code of Regulations (CCR).The Company does not treat surface water through approved filtration technology. The effectiveness of the alternative filtration treatment	585,000	240	500 03	Lake	Π	2009

process is deemed inadequate by the Department.

109 1700568	1700568-005	Riviera West Mutual Water Co.	Emergency Intertie	Construct an emergency intertie between the effluent I of Riviera West Mutual Water Company's surface water treatment plant and Buckingham Park Water District's distribution system.	D	0	С	To improve drinking water reliability to the customers of the Riviera West community, the Company plans to construct an emergency intertie. Buckingham Park Service District is the public water system located immediately north of the Company and less than 100 feet away from the water treatment plant transmission main. To facilitate improved reliability and health in the region, the Department investigated the site and finds this component to be eligible for project funding. The most recent water hauled to system was reported on October 17, 2003. Water outages were reported on June 22, 2004.	100,000	240	500 03	Lake	Ι	2009
110 1700568	1700568-001C	Riviera West Mutual Water Co.	Treatment Plant Improvements	Installation of another treatment process to enable facility to achieve two log Giardia removal.	D	0	с	Surface water treatment facility is In-Line system that cannot achieve two log removal of Giardia.	500,000	240	500 03	Lake	Ш	2004
111 2810013	2810013-001	Napa County Public Works-NBRID		Construct new treatment plant filter, Reconfigure piping I at clearwell to increase chlorine contact time.	D	0	С	Need second treatment plant filter to meet peak demands. Need to increase chlorine contact time.	1,392,500	237	500 03	Napa	Ш	1998
112 5400903	5400903-002P	TRACT 92 C S D	Tract 92 CSD Feasibility Study	Feasibility Study       It         The proposed feasibility study would include an analysis of options to provide a reliable source of potable water for the Tract 92 CSD. The study would include the preliminary engineering necessary to evaluate the costs options of connecting to other neighboring water systems.         Included in this evaluation will be the economics and practically issues related to connecting to California Water Service in Visalia.         Issues to be considered will include the viability of approval from the Tulare County Local Agency Formation Commission. There will be environmental andysis of the recommended alternative and documents will be prepared for filing under CEOA by the Tract 92 CSD. Following the CEOA process if a new leal site will be located and a test will direnative a new well site will be located and a test will direnative. Assuming the results of the test well are favorable, the preliminary design of the production well.	D	0	c	Feasibility Study Tract 92 Community Service District provides water to the unincorporated area known as Union Addition. This unincorporated community consists of approximately 135 households and one church and is located Southeast of the City of Visalia. This economically disadvantaged community is a mix of retired people, farm workers, and low-income families. The community's water system was established in the early 1960's. The water system has two wells drilled on one site. At least one of the wells is producing water that fails the Total Coliform Rule. Analysis is pending on the other well. Over the past 4 months has consistently failed the Total Coliform Rule. The two wells were tested and once they failed an additional 5 sites were tested and they failed as well for Coliform Bacteria. We have received Notices of Violation from the Tulare County Environmental Health Department for the preceding 4 months for the bacterial contamination. The District has distributed notices of the violation are sequired by Tulare County Health to the water system users.	300,000	91	500 12	Tulare	111	2007

years ago. It consists primarily of asbestos/cement

113 2810013	2810013-005	Napa County Public Works-NBRID	NBRID Water Treatment Facility and Intake Replacement Project	The project consists of the design and construction of a D new water treatment facility. The scope of work for the project will include replacement of the existing water treatment plant with a new facility that would meet or exceed all current water quality objectives for potable water, and include updated SCADA components for continuous monitoring by District operators and upgrades to mechanical and electrical equipment associated with the plant. Additionally, the confined space hazards that operators must deal with daily during routine operations must deal with daily during routine operations must deal with daily existing facility would be eliminated through the installation of a proper accessway and ventilation system. The existing facility would be decommissioned as a part of this project. All piping and equipment necessary to transfer the wastewater generated from routine cleaning of the filters to the sewer collection system will be installed as well, if the new facility is unable to recycle decanted backwash waste water from the filters through the water treatment system. The project also replaces the existing electric panel and wires supplying electricity to the intake pumps. Replacement of the panel and wires will ensure continuous power to the intake pumps and prevent future shutdown of the WTP due to power outage, under normal operating conditions. Finally, the project will include provisions to repair and uperade the access	0	C	A Master Facility Plan (MFP) was completed for NBRID in June 2006. There were two primary areas of concern listed in the MFP in regards to the District Water Treatment Plant (WTP): Age of the facilities and the requirement to meet SWTR provisions. In addition to the concerns listed in the MFP, the District recently discovered both electrical and mechanical issues with the District's water intake facility in Lake Berryessa. The age of the WTP is approximately 40 years and the mechanical equipment is largely past its useful service life. In 2004 an electrical problem at the WTP left the residents of the community without water for four days. An emergency repair of the electrical panels was completed, and new equipment was purchased to replace what was damaged by the electrical problem, but additional upgrades/replacement is required for optimum efficiency of the WTP. Additionally, several components of the CWTP. Additionally, several components of the single filter is of antiquated technology and is not compliant with SVTR gravity sand filter specifications. Should the filter be rendered inoperable, the WTP would need to be shut down until such time as the filter can be repaired. The filter is located in a confined space area of the WTP would inkely result in	3,500,000	237	500 03	Napa	Ι	2011
114 4510004	4510004-005	Shasta Co. Service Area #6	Jones Valley CSA#6 ESWT Compliance Project	R Project would install a large diameter flocculation D pipeline prior to filtration of the raw water. Coagulent would be injected into the raw water. The flocculation pipeline would provide the required contact time to react with the water. The flocculant would then be filtered through the existing filters. This system is an approved technology meeting the Enhanced Surface Water Treatment Rule.	0	C	The treatment plant of the inter and would intery result in The treatment plant uses in-line filter technology. Until 2009 it was certified by CDPH as complying with the federal Long Term 1 Enhanced Surface Water Treatment Rule. The Certification was based on a demonstration study previously approved by CDPH. In 2009, upon further investigation, CDPH determined that the system does not meet the Enhanced Surface Water Treatment Rule. The filtration system does not comply with CCR 64653.	350,000	377	1,119 02	Shasta	I	2011
115 1710013	1710013-003P	Callayomi County Water District	Callayomi Well Replacement Project	The proposed project is to replace the District's current D wells with two new wells along with the associated pumps, pump housing, piping and a new water storage tank. The new wells would meet current well construction standards for a domestic water supply source. This action would address the issue of the District's primary well being out of compliance with well construction standards. The proposed well sites' locations have been selected to minimize the possibility of surface water influencing the groundwater source. This action would address the current issue of the likely surface water influence on the District's primary well. Each well site would be owned and controlled by the District. Both sites would be fenced to exclude any livestock from getting to within 100 feet of the well sites. This action would resolve the current conflict with the rancher, costly lease fees, and give the District complete autonomy over management of the well sites. The addition of the new water storage tank is associated with one of the proposed well sites. This well site (specifically picked for its high water volume, good water quality and to avoid any influence from Putha Creek) is further away from our current water storage tanks, and by adding this new tank it would insure that customers on this end of the District would not suffer any loss in water quality and pressure. This proposed water tank would also insure adequate	0	C	On a regular basis, the primary well providing the water for the Callayomi County Water District (District) is being contaminated by Total Coliform and E. Coli pathogens. The source of the contamination is from nearby grazing cattle and/or another source of surface water seeping into the well. This well does not meet current well construction standards for a domestic water supply source due to its 20-foot annular seal.As per a California Department of Public Health (CDPH) directive, fencing was installed to keep cattle 200 feet away from the well site. This created a contentious issue with the rancher. The well is located on the rancher's private land and leased from the rancher. In addition to the well lease fees the District is chlorinating the well water at the pump, filtering the water and doing twice-monthly tests. The chlorination and filtration is adequately treating the water. However, the fencing has been in place for 5 months and the water is still testing positive for Total Coliform and E. Coli. The CDPH suspects that the well wilt its shallow surface seal could be pulling surface water from another source. The State Water Resources Control Board determined the source of water for this well to be percolating groundwater and nd surface water. But the CDPH uses different criteria to determine the	0	357	1,200 03	Lake	Π	2012

116 1710022	1710022-007P	Lake County CSA 20 - Soda Bay	County Service Area 20- Soda Bay Water System improvements	The final design and construction funding is requested D for the following components: pre-treatment equipment, ozone unit replacement, coagulant mixer unit, mixed media filter replacement, monitoring and controls, 100,000 of additional storage, repairs to the Riviera Heights storage tanks, and a supplemental water supply well.	0	С	The Soda bay Water System has insufficient treatment and storage capacity as identified in permit Number 02- 03-11P1710022. A connection moratorium has been enacted as a result of these conditions. The permit requires a number of specific capital improvements to be made to the system by stipulated deadlines.	0	596	1,342 03	Lake	Ι	2012
117 2110004	2110004-019	Stinson Beach County Wtr Dist	Surface Water Treatment Plant Replacement Project (Phase 2)	With regulatory requirements becoming more stringent D and currently accepted treatment process trending towards obsolescence, the District has decided to replace its aged conventional WTP with a pressure membrane treatment facility. The primary components of the new plant include a package 200 gallon per minute pressure membrane system, a new treatment building to house the pressure membrane system, a new laboratory, control room and equipment room, recyclable wastewater and waste storage tanks, pumps, all electrical and instrumentation, and a perimeter retaining wall at the existing WTP site to protect the new WTP facilities from slides which have historically caused damage to the existing facility. The project plans incorporate "green building" features. For example, construction materials will include steel framing, concrete pony walls, and exposed concrete as finished flooring, thereby reducing demand for wood and increasing the strength and durability of the new structure. The plans also include photovoltaic panels on south-facing portions of the roof. Environmental review and permitting for the project was completed in June 2008. The project involves two (2) phases of construction. Phase 1 involves construction of the perimeter retaining wall at the existing plant site. The District is filing a separate pre-application for the Phase 1 portion of the WTP Replacement Project. This pre-	0	c	The Stinson Beach County Water District's (District) existing surface water treatment plant (WTP), constructed in 1978, utilizes a package conventional treatment plant with coagulation, flocculation, sedimentation, and filtration which was manufactured by Microfloc Products (now U.S. Filter). The existing WTP has a capacity of 200 gpm. The process facilities are installed in a steel tank which is uncovered and exposed to the harsh elements of the coastal marine environment. Replacement parts are difficult to acquire for the WTP, and the steel tank and other components of the processing unit are severely corroded. Additionally, the existing structures that house the electrical and controls systems, the laboratory, and chemical storage have rusted due to the ocean atmosphere. The existing WTP has reached its useful life and is in need of replacement.	1,650,000	721	1,500 18	Marin	IJ	2009
118 4510002	4510002-009	Mountain Gate C.S.D.	Backwash Recycle ProjectWater Treatment Plant Upgrade	The Project would be to expand the plant to include a D third filter to increase the "effective capacity" to 2.96 MGD, and converting from in-line to direct filtration which will address the federal Surface Water Treatment Rule and Section 64652, Title 22, California Surface Water Treatment.	0	c	From the CDPH Annual Inspection Report [dated February 19, 2009] and a PACE Engineering "Preliminary Engineering Report" [dated May 2010], it was determined that a "Backwash Recycle Project" – or a Water Treatment Plant Upgrade – was required for the Mt. Gate CSD. Because, at this date, the District does not comply with current CDPH water quality standards. Currently, the Treatment facility consists of two Horizontal Pressure Filters, which during "downtime for backwash" the "effective output of the existing treatment plant is about 1.97 MGD." By adding one more filter, the output would be raised to 2.96 MGD, with only 5% backwash downtime. Also, the Treatment Plant is classified by CDPH as in-line filtration, "which is an unapproved technology." The Plant needs to be brought into compliance.	894,600	664	2,500 02	Shasta	I	2011
119 4510002	4510002-005	Mountain Gate C.S.D.	filter plant replacement [project funded by Prop 50 executed FA]	replacement of warnout 2mgd direct filtration system D D with new conventional filtration package plant.	0	с	the district has 2ea. 1mgd pressure filters installed in the 1970's and early 80's. These filters are an unaproved technology and need to be replaced with conventiona filtration. in 2006 both filters had reached the end of their usefull life and were in failure mode. Dhs issued citation for failure to meet turbidity requirements. the district made repairs to the warnout filters, as funds were unavailable for replacement.	1,611,000	664	2,500 02	Shasta	I	2009

120 2310004	2310004-003	Willits, Lity of	City of Willits Water Treatment Plant Improvements	The WIP dericiencies were evaluated by CDPH, and the D City's consulting engineer developed a Technical Engineering Report, reviewed by CDPH, which included the following. <sup>20</sup> Installation of a plant-wide SCADA system to enable WTP staff to continuously monitor water quality and treatment performance, and record data. Critical unit processes will be upgraded as necessary or designed (if new) to allow remote control and feedback. <sup>20</sup> Installation of a Solids Contact Upflow Clarifier (SCUC) to remove the bulk of the turbidity in the raw water, taking the solids load off the existing adsorption clarifier – media filters, and provide additional time for manganese flocculation. The SCUC will reduce turbidity to within the treatment capacity of the existing treatment units, and will the primary point of solids removal from the WTP, reducing the forward flush and backwash demands on the existing treatment units during the high turbidity events. <sup>20</sup> Installation of pH adjustment system using carbonic acid and lime. This will enable staff to optimize pH for general turbidity, manganese, or algae removal in the SCUC or in the existing adsorption clarifiers; increase alkalinity and free calcium to imcprove coagulation; and obtain a non- corrosive finished water. <sup>20</sup> Installation of chemical feed piping, valving and mixing facilities to allow pH adjustment and coagulant injection upstream and/or downstream of the SCUC. <sup>20</sup> Installation of fult 1-mgd	U	L	Ine City utilizes the Morris Reservoir as its raw water source. The reservoir is significantly impacted by erosion of colloidal clay bearing soils in the winter months and algal blooms in the summer months, and the water is naturally very soft, which hinders good coagulation. Morris Reservoir turbidities can exceed 250 NTU at times, and are often well above 50 NTU for extended periods in the winter. During these raw water quality events the existing WTP struggles to consistently and reliably achieve clarified water turbidities less than 10 NTU and filtered water turbidities less than 1.0 NTU. From January 4th to January 8th, 2008, with raw water peaks over 200 NTU, the City notified the Department of Public Health that filtered water turbidities loss than 1.0 NTU. Toro the WTP occurred for several hours. A Boil Water notice was also issued. In response, CDPH issued a citation of non-compliance for violation of the treated water performance standard of 1 NTU, and subsequently amended the City's Domestic Water Supply Permit with additional performance standards and monitoring requirements (CDPH, Domestic Water Supply Permit with additional performance standards and monitoring requirements to the Permit amendment contained several requirements that will be addressed by this Project.CDPH has also conducted several evaluations of the WTP, including a Surface Water Treatment Plant Evaluation in May of 2006, which indicated that the WTP only met Cryptosporidium	4,700,000	2,168	8,062 03	Wendocino	1	2011
121 0910013	0910013-005	Georgetown Divide PUD	Auburn Lake Trails Water Treatment Plant Upgrade	The existing plant will be converted from in-line to D direct filtration as required by the Surface Water Treatment regulations. This will be achieved by adding/modifying the following: new raw water pump station with VFD's, install new clarifier prior to filtration, relocate polymer feed injection location, install static mixer, modify existing filter header piping, construct new clearwell, upgrade chemical feed equipment to be flow paced, install streaming current meter for control of polymer dosing, modify plant process to meet requirements of Backwash Recycling Rule, modify existing solids handling capabilities, other	0	с	Upgrade the existing water treatment plant to an approved surface water treatment method as required by the current Compliance Order issued by the CDPH.	4,000,000	3,587	9,021 09	El Dorado	I	2009

maintenance/site improvements as necessary.

122 4910005	4910005-003	Healdsburg, City of	City of Healdsburg Gauntlett/Panorama Water Filtration Plant Expansion	The project entails the installation of two additional micro-filtration skids within the existing filtration building. It is anticipated the micro-filtration skids would be manufactured "off site", bench tested, trucked to the Gauntlett/Panorama Filtration Plant, craned into position through the existing roof hatch, plumbed, piped, tested again, disinfected and put into service. Estimated time to complete 180 days.	D	0	C	The Gauntlett/Panorama Filtration Plant was commissioned in 2005 and consists of three micro- filtration skids with a filtering capacity of approximately 2.5 mgd. Current peak daily demand during the summer requires supply augmentation from the City's Fitch Well Field which is adjacent to the Russian River. The Fitch Well Field is not currently connected to the water treatment plant and is subject to seasonal pumping prohibitions from November to May due to surface water influence from the Russian River. Due to this restriction and long range demand forecasts based on the City's General Plan, the Gauntlett/Panorama Filtration Plant was designed to allow for expansion of filtration capacity by installing two additional micro- filtrations skids, bringing the total filtration capacity to approximately 4 mgd. This would allow for most of the summer time demands to be filtered, provided adequate supply is available from the Gauntlett Well Field. Additional filtration capacity would also allow the City to consider extending a raw water pipe line from the Fitch Well Field to the treatment plant, which in turn would facilitate lifting the seasonal prohibition on the Fitch Well Field. The additional micro- filtration plant in the event one or more of the three existing micro-filtration skids had to be taken out of service.	2,800,000	4,272	11,706 18	Sonoma	U	2009
123 1910067	1910067-049	LOS ANGELES-CITY, DEPT. OF WATER & PC	OW Los Angeles Reservoir Ultraviolet Light Treatme Plant	Provide ultraviolet (UV) light treatment plant to treat tt he outflow from the Los Angeles Reservoir. This project would replace the Granada Hills Reservoir and Los Angeles Reservoir North/South Projects. The Bull Creek Extension Channel Realignment project is still required.	D	0	С	To bring the reservoir into compliance with the Long Term 2 Enhanced Surface Water Treatment Rule.	32,434,735	686,422	4,071,873 15	Los Angeles	IV	2012
124 1910067	1910067-011P	LOS ANGELES-CITY, DEPT. OF WATER & PC	DW d	Construct replacement storage tanks and new trunk line to replace reservoirs and remove reservoirs from service.	D	0	С	Upper Stone Canyon Reservoir is an uncovered finished water reservoir that does not conform to the Long-Term 2 Enhanced Surface Water Treatment Rule. Reservoir capacity is 137 MG; surface area is 14 acres.	220,000,000	686,422	4,071,873 15	Los Angeles	IV	2007
125 1910067	1910067-050	LOS ANGELES-CITY, DEPT. OF WATER & PC	DW Headworks Reservoir Flo Regulation Station and Power Plant	A flow regulation station with capacity of 250 cfs is being built as part of the Headworks reservoir replacing lvanhoe reservoir. A 4 MV hydroelectric power generating facility will also be constructed to take advantage of the pressure (up to 195 feet of extra hydraulic grade), entering the reservoir from the new RSC Upper Reach. The power generating facility will be housed in the same building with the flow regulation station.	D	0	С	The operational drinking water storage capacities of lvanhoe and Silver Lake Reservoirs must be replaced by other means in order to bring the Water System into compliance with state and federal drinking water regulations by the regulatory deadline of November 2014. The original design of the Headworks Reservoir, which is the intended storage replacement, placed half of that reservoir over soils which have the potential for liquefaction, the mitigation of which will cause a significant delay to the completion of the entire reservoir, which is now expected by December 2017.	25,000,000	686,422	4,071,873 15	Los Angeles	IV	2012
126 1910067	1910067-048	LOS ANGELES-CITY, DEPT. OF WATER & PC	0W Headworks West Reservc	ir The Headworks West Reservoir will complete the replacement of the operational capacities of Ivanhoe and Silver Lake Reservoirs.	D	0	с	The operational drinking water storage capacities of Ivanhoe and Silver Lake Reservoirs must be replaced by other means in order to bring the Water System into compliance with state and federal drinking water regulations by the regulatory deadline of November 2014. The original design of the Headworks Reservoir, which is the intended storage replacement, placed half of that reservoir over soils which have the potential for liquefaction, the mitigation of which will cause a significant delay to the completion of the entire reservoir, which is now expected by December 2017.	58,600,000	686,422	4,071,873 15	Los Angeles	IV	2012

127 1910067	1910067-039C	LOS ANGELES-CITY, DEPT. OF WATER & PO	OW Silverlake Reservoir Bypas Tunnel & Reg Station	s Approximately 5,000 feet of 66-inch diameter steel D pipeline 4,700 feet of which will be tunnel construction. The project also consists of a relief station, flow meter and a 4-legged regulator station (three 36-inch legs and one 30-inch leg). this pipeline will allow water to flow directly from the proposed River Supply Conduit, Lower Reach, directly into the Silver Lake Reservoir Outlet Line, bypassing Ivanhoe Reservoir.	0	С	Once the project is placed into service, Ivanhoe Reservoir will be taken out-of-service to comply with the US EPA's Long Term 2 Surface Water Treatment Rule.	46,701,335	686,422 4,	071,873 15	Los Angeles	IV	2009
128 2702595	2702595-001	CACHAGUA COMM CTR WS	Cachagua Community Center Water System Upgrade	Replacement of filtration system with slow sand filter or D design that has proven ability to meet Health Department standards. Distribution infrastructure can remain unchanged.	0	Р	Surface water treatment plant unable to maintain water quality standards. The filter system has been unable to meet Health Department requirements for turbidity despite 6 years of work and adjustments to the system.Most recent Boil Water Order issued October 3rd, 2008 and currently in effect.	150,000	6	32 05	Monterey	II	2009
129 4901095	4901095-001	Westminster Woods Camp	Westminster Woods Camp Second Slow-Sand Filter	b We are using the slow-sand filter system and would like D install a second one because they are the superior technology in water filtration, recognized by United States Environmental Protection Agency and the World Health Organization. These sand-filters are used all over the United States and Developing Countries alike. In order to install a second sand filter, we would require the resources to prepare a site for the tank, purchase a pre-engineered sand filter that could be linked in with our current operating system as well as sand to put in the system. Both the construction and set-up would be done in-house by our staff members that are certified by the Health Department as both a Treatment Operator and a Water Distributor.We anticipate that this project will take a few weeks worth of focus on the part of our employees to correctly install, test and get the new sand filter up and running properly. By using a pre-engineered system we are not only saving money in the construction of a new system but also in the salary of hiring out professionals to assemble a system from scratch. The project would involve a few levels of work. The first would be to determine the best location for the second filter and prepare the area either by compacting the ground level or installing a concrete slab to connect in with the piping system. Secondly, would be connecting the raw water source to flow meters and then connecting the new pipes and valves	0	Ρ	Westminster Woods Camp and Conference Center 501(C)(3) non-profit organization that strives to use our own resources when we have them available. We currently facilitate and run our own water system based on what we are able to gather from the local watershed. We run a distribution center containing two 10,000 gallon storage tanks being pumped from one sand filter. That one slow-sand filter is extremely important because it is contains the key to our being able to provide safe drinking water and function in a highly sustainable system of using water that is available on our site for all our guests. Recently, the Department of Health Services is requiring we have two sand filters installed so that we can always have one online while the other is being cleaned. We are asking the CDPH to help us address this problem by granting us the monetary help to purchase and install a pre- engineered second sand filter. The cleaning process requires that we drain the tank in order to scrape the top layer of sand, cleaning the system. We then fill the tank from the under-drainage until it is two feet above the sand before turning on the over drainage which fills the tank the rest of the way. While the tank refills, we monitor the turbidity of the water. Since the sand has been disturbed we must wait until the turbidity reaches a level below 1.0 before the water is usable again. If it takes too long for our turbidity to reach a level below	15,000	16	120 18	Sonoma	υ	2008
130 5301010	5301010-001	Bud Fine MWC	SWTR Compliance	Upgrade filter system, replace storage tank, and replace D deteriorated mains.	0	Ν	Turbidity standard failures. Filter system is not an approved filtration technology. Bolted steel tank is deteriorated and has leaks. Some water mains are deteriorated.	225,000	10	25 01	Trinity	I	1998

131 4901106	4901106-001	Catholic Charities - CYO Camp	CYO Camp Water System	Proposed Intertie to the Occidental Community Services District (OCSD) Water Distribution SystemThe OCSD receives its water under a Joint Powers agreement with the Camp Meeker Recreation and Park District, and distributes water to services within Zone 1, which encompasses most of the town of Occidental. Zone 2 encompasses the remainder of the OCSD and does not include water distribution, but is primarily a fire protection district. Four of the CVO camp's parcels are located in Zone 2; the fifth is within Zone 1, but not currently served by the water system. The project is the expansion of OCSD's Water Zone 1 to include the four remaining camp properties, allowing the OCSD to supply the entire CYO Camp with a new potable ground water source that would alleviate its need for continued treatment of its existing surface water source. The project would benefit the CYO Camp by providing a safe and secure source of water for potable use and a reliable supply for fire protection. The project would include an intertie pipeline from the OCSD water distribution system and the replacement of the CYO Camp's aging distribution system. The project would include new water meters and fire hydrants. The intertie would be approximately 600 feet of six-inch main from the existing OCSD main in Bitner Road to the existing CYO Camp distribution system. Trenching for the main intertie would be within an existing roadway		0	Ν	CYO Camp's Surface Water System serves approximately 20-25 permanent residents and some 6,000-7,000 children and adults each year at our 216 acre year round site through our Outdoor Education, Summer Camp, and Retreat programs. The following Water Treatment issues have been identified: A history of high E.Coli values in our drinking water source, an on- stream impoundment called Lake George, is present and will require CYO to implement additional treatment procedures for Cryptosporidium as mandated by the federal Long-Term 2 Enhanced Surface Water Treatment Rule (LT2). High turbidity values present problems during the winter storms. Hilliside erosion and landslides in our 120 acre watershed have made it impossible at times to process our raw water source into potable water. The raw water has high secondary contaminant levels for Iron (680ug/I vs. 300) and Manganese (60ug/I vs. 50). We do not currently treat specifically for these conditions. The following infrastructure and distribution improvements need to be addressed: The galvanized pipe distribution system covering entire 216 acre camp property is 40 years old, making it difficult to maintain CDPH-required chlorine residuals throughout the distribution system. There is an increased risk of potential contamination and water loss due to line breaks. The aging condition of pipe, improper bedding, cumulative ground movement, and	1,034,000	21	25 18	Sonoma	υ	2008
132 1700695	1700695-002	High Valley Ranch	High Valley Ranch well revitalization and well replacement /source development	Testing of existing seasonal well for suitability for development, consulting with a civil engineer, water specialist and well drilling company. Developing a feasability study and timetable for a solution to the problem. Exploring the consolidation of sources available and the option of drilling a new well with higher water quality and low iron and maganese content. Drilling for water that meets the "safe Water requirements.	D	0	Ν	Elligable Non-profit transient non-community public water system, application for funding as discussed with Amy Little of California Department of Public Health Drinking Water Field Operations Branch. Citation number 02-03-12C-017, system no. 1700695. We would like help developing a new source on site for our water. We would like to explore developing existing non- permited seasonal well and determining if additional drilling would provide adequate water, or drilling a new well in a location on the property if required. Our water supply currently in use has heavy iron and maganese minerals and is not suitable for drinking. We have a "Boil Water Order"currently.	200,000	10	50 03	Lake	Ι	2012
133 5305003	5305003-001P	Ruth Lake Marina	Planning Project	Relocate well sources above projected maximum flood level. Extend system to incorporate nearby individual recidence extense	D	0	N	Well sources under the direct influence of surface water with no filtration.	61,231	1	200 01	Trinity	I	1998
134 5305004	5305004-001P	Ruth Lake Recreation Area	Planning	Relocate well source above maximum flood line. Consolidate individual systems.	D	0	Ν	Well source is under the direct influence of surface water and has an unapproved filtration technology (cartridge filter). Individual private residences want to be served by the system.	55,705	1	250 01	Trinity	I	1998
135 4100529	4100529-001	CAMP LOMA MAR	SWTR Compliance	Add 4500 gallon storage tank, expand sand filter	D	0	Ν	Filtration system violates SWTR (no redundant filter) and doesn't meet turbidity performance standards.	50,000	10	350 17	San Mateo	Ш	1998

136 4901111	4901111-001	Bellevue Union Sch Dist-Kawana School	Kawana Elementary Schoo Diminishing Water Source	I Kawana School's water source concerns have an obvious and efficient solution. Just as the community of Santa Rosa has expanded outward, so has its infrastructure. Developments have provided mitigating funds to general and specific elements of the water, sewer, and electrical systems. Roads have been built and drainage systems established. There is a city water line that runs down Moraga Avenue directly in front of the school site. Why planners didn't include mitigation for the connection is not clear, but it didn't happen. Th distance from the water line to the school is less than 300 feet but the school does not have the capital funds to complete this connection on its own. To make this connection the controlling agencies we must work with are the City of Santa Rosa and its Public Works Department. Connection will include disinfection of the school's water system. This application is simply to connect the Kawana School site to the existing water line and consolidate this small system with the City of Santa Rosa's utilities. This application, made at the encouragment of the District Engineer, will insure clean and predictable water for the school community.	E of e e	45	Ρ	The water system at Kawana School is failing because the aquifer is diminishing. The loss of dependable water is an acute health hazard. Kawana School was built as a rural school in 1954. At that time the City of Santa Rosa water system did not extend out to the school site so the school district drilled the well to supply all domestic water to Kawana School. The well is 295 feet deep and produced a constant 105gpm. The plan included a 10,000 gallon storage tank which was fed through a 4 galvanized pipe. This well and storage system served the school with no performance change until 2005. The district supports its water systems with a licensed class "D" operator. The water quality at Kawana School is within acceptable levels, but when the well cannot keep pace with the flow out of the storage tank, the result is clouded water with visible iron oxide in suspension. The district has rescheduled the water well draw times and aligned the use times to reduce strain on the well. The problem continues as the current well strains to replenish the storage tank. The school district believes that the reduction in the well's capacity to recharge itself is due to the changes in land use around the school site. What used to be agricultural and open space, has had intensive residential development. Roads and contained drainage control move water away from the area. The rural site is now surrounded by hundreds of new homes. Water that	103,324	1	481 18	Sonoma	Ι	2008
137 2000511	2000511-003	MD#85 VALETA MUTUAL WATER COMPAN	r Intertie with City of Chowchilla	Extend the water main approximately 1.5 miles to the west to connect to the existing water system in the City of Chowchilla. Additional improvements would include installing additional distribution mains and water meters to encourage customers to reduce water consumption.	Ε /	35	C	The current water system is currently supplied water from one well that has very low production due to decreased water levels at this time. The existing source has high nitrates that exceed the current MCL. The system is currently experiencing water outages, which pose serious public health and safety issues due to the lack of sanitation facilities for the system scustomers. The system has already attempted to install a new booster pump at a lower depth, but this only offered a small amount of help. The County has issued a notice to the customers prohibiting all outside irrigation and non- essential water usage and advising the use of bottled water for drinking and cooking.	725,000	19	45 11	Madera	Ш	2009
138 4500028	4500028-001	SHASTA CO CSA #23 CRAGVIEW	Source capacity project	Armor slopes and relocate facilities.	E	25	с	Insufficient water source capacity resulting in water outages when intake failed last winter. Intake was repaired with a bandaid.	160,000	70	196 02	Shasta	I	1999
139 3700953	3700953-003	TECATE VISTA MUTUAL WATER COMPANY	Tecate Vista distribution system repairs and water conservation	project will replace failing lines with new ones, install security fencing aroung the wellhead to adress vandalism and install a scada monitoring system with meters at connections to improve water conservation.	E	25	Ρ	System is old and failing resulting in repeated breaks causing water outages and bacterioligical complications and violations. Several compliance orders have been issued.	505,696	13	200 14	San Diego	V	2009

140 1000054	1000054-002P	LAS DELTAS MUTUAL WATER SYSTEM	Las Deltas Distribution System Project	The project would replace distribution lines serving over E 200 homes in the community of Las Deltas on Shaw Avenue in West Fresno County. The current lines in use at the community are old and undersized and need to be replaced so that the community can consolidate witht he City of Firebaugh.	20	С	The distribution lines serving the community need to be replaced. They are old and dilapidated lines that are constantly breaking and leaking and in need of repair. Recent tests of the system show the water pressure going below 15 psi on multiple occassions during the week. It is likely that the decrease in water pressure is associated with leaking and broken lines. According to the California Water Works Standards, Article 8, Section 64602, "Each distribution system shall be operated in a manner to assure that the operating pressure in the water main at the user service line connection throughout the distribution system is not less than 20 pounds per square inch at all times." It is the hope of the mutual and the community to find assistance with funding to help the system becaome compliant with all regulations and to eventually be able to consolidate with the City of Firebaugh.	1,200,000	107	375 23	Fresno	Ш	2011
141 1910012	1910012-003	BELLFLOWER HOME GARDENS WC	Manganese Treatment	This system proposes several options. The selection will E be determined by the most cost effective method, and best engineering practices and standards. (1) Reactivate the existing well and treat the supply with Manganese oxidation and filtration onsite. Including an upgrade of the security fencing surrounding the site. (2) Permanently consolidate with a nearby water system. Or (3) drill another well to blend source and provide adequate supply.	20	с	The water system has one well. The water supply exceeds the Manganese SMCL and is currently in violation of SMCL with the CDPH. The well has been placed in inactive status and the system is buying water through an intertie with Bellflower Somerset Mutual Water Company. This intertie is not a permanent solution to securing an adequate source and quality of water. The system will need to add Manganese treatment to it's well and reactivate it, or will need a permanent consolidation with a nearby water system.	850,000	323	1,200 16	Los Angeles	IV	2008
142 3200114	3200114-002	Evergreen Motel & Trailer Park	Evergreen Motel and MHF	P Lack of water due to overdraft of well capacity.No bulk E water storage available to buffer peak demand periods.Repeated total coliform violations due to the lack of water in distribution system.	15	С	Insufficent water capacity as the well source does not produce sufficient yield for peak demands.	150,000	28	28 02	Plumas	I	2008
143 0600012	0600012-005	Colusa Co. Service Area #1-Century Ranch	CSA 1 Centry Ranch Well	Construct a new well deep enough to access a more E	15	с	The current well does not provide an adequate water current for the existing users	35,000	88	120 21	Colusa	I	2009
144 1900942	1900942-001	ALPINE SPRINGS MOBILE HOME PARK	Alpine Springs Mobile Home Park	The project is a community water system consisting of E 25-99 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	15	с	The Water system is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	53	133 16	Los Angeles	IV	2008
145 1900062	1900062-001	LA RETARDED CHILDREN RANCH WATER A	G L.A Retarded Children Ranch Water Agency	The project is a community water system consisting of E 15 to 24 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	15	с	The Water System is in need of an additional water source to meet the demands of the community, i.e new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	12	175 16	Los Angeles	IV	2008
146 1900055	1900055-001	BLUE SKIES TRAILER PARK	Blue Sky Trailer Park	The project is a community water system consisting of E 15 to 24 connections and a treated ground water source. The system is in need of an additional water source, upgrades to their treatment equipment and or water storage tank.	5	с	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	20	40 16	Los Angeles	IV	2008

147 1910249	1910249-005	WHITE FENCE FARMS MUTUAL WATER CO.	Well 3b Nitrate Treatment	THe project will be based on best engineering practices and the most cost effective solution. We propose to construct and install a nitrate removal treatment system at well 3b. The existing security fencing will be expanded to enclose the new equipment and will include water quality monitoring equipment within the security perimeter. The result would be well 3b supplying treated water to it's own zone; below the Nitrate MCL; and exclusive of dependence on AVEK. Well 2b is below the Nitrate MCL and supplies it's own zone adequately.	Ε	5	C	Well 3b has Nitrate level of 58, which is exceeding the MCL. 3b is a new well and is not permitted by CDPH to operate as sole supply. Well 3b may be used for blending with AVEK Water to lower the nitrate level in the distribution system, but AVEK is not a reliable source. Until we reduce the Nitrate level at 3b, we must depend on AVEK water. If AVEK water is unavailable to us, Well 3b can not be used due to it's Nitrate level. Well 2b is in a separate zone, and has a lower Nitrate level, but can not solely supply the demand of the entire distribution system.	890,000	445	1,760 22	Los Angeles	IV	2008
148 2310007	2310007-006	North Gualala Water Company	Water Source & Storage Construction	Following a planning study, NGWC plans to develop recommendations that address source capacity deficiencies. Our current source deficiency amounts to 250 gpm (or ac-feet). Our construction project would allow NGWC to comply with State Water Resources WR 2001-14 requirements. Build a reservior and water treatment plant to process the reservior held water. Water storage issues could be solved with enlarged tank farms to increase distribution.	E	5	C	By Order 2001-14, the State Water Resources Control Board (Board) requires our community to only operate two wells if minimum bypass requirements are met. These two wells account for 85% of our source production during maximum day demand. By Order WR 2001-14, our well field production capacity has been reduced from 250 gpm to 0 gpm, while maintaining our minimum bypass requirements. The elimination of the well field reduces our overall system capacity during maximum day demand conditions. The Calif. Code of Regulations requires our source capacity to, at minimum, meet our maximum day demand. As a result of Order 2001-14, our reduced source capacity can no longer meet maximum day demand. In fact, our total system source capacity (<100 gpm from waterboy plus 0 gpm from well field) is only <43% of the required source capacity (based on maximum day demand our system must supply 250 gpm plus 20% safety factor). North Gualala Water Company community is in the state of a major water shortage and needs to supplement current sources immediately.	10,200,000	1,033	2,595 03	Mendocino	Π	2006
149 4000775	4000775-002	MUSTANG SPRINGS MUTUAL WATER	Mustang Springs Insufficient Water	Annexation to the city of Paso Robles and connection to the city water system.	E	0	С	System experiences frequent water outages. It is located in a water-short area and drilling a new well is unlikely to solve this problem. This subdivision is adjacent to the city of Paso Robles. Annexation by the city and connection to the city water system is the most reasonable solution.	1,000,000	16	30 06	San Luis Obispo	IV	2008
150 3301643	3301643-005	Spring Crest Water & Power	Spring Crest Water & Power, Distribution System Repairs	Repair/replace leaking main transmission pipeline to reduce risk of water contamination. Repair/replace failed valves to isolate pressure zones and control system pressure. Well/Spring source wellhead improvements to reduce risk of contamination.	Ε	0	с	Distribution system has old failing transmission pipeline that is leaking and results in total coiform positives in the distribution system. System is CPUC Regulated and is under Court Ordered Receivership, with Louis DeMartino assigned as receiver. Riverside County LPA has issued enforcement actions for TCR violations and a Compliance Order that includes a moratorium on any further service connections for this system.	450,000	15	30 20	Riverside	v	2009
151 5700649	5700649-001	WESTUCKY WATER ASSOC	Westucky Water Association	Connect to City of Woodland , about 0.5 mile of distance, or drill a new well	E	0	С	chronic total coliform violations, not reliable source. pumpbroke down several times last year, resulting in no water.	100,000	12	33 09	Yolo	I	2008
152 1900785	1900785-004	MITCHELL'S AVENUE E MOBILE HOME PARK	K Mitchells Avenue E Mobile Home Park	The project is a community water system consisting of 15 to 24 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	E	0	С	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA County Water Quality Program.	10,000	24	35 16	Los Angeles	IV	2008

153 5301102	5301102-004P	Trinity Knolls Mutual Water Company	Trinity Knolls WC Capacity Protection and Improvement Project	The following Project Actions are proposed to prevent future water outages, to increase capacity and to maintain water quality for the Trinity Knolls Mutual Water System (TKMWC)A. TanksReplace the small tank with a new tank equivalent size to the large tank and reline or refinish the interior of the large tank and reline or refinish the interior of the large tank to prevent future deterioration and to preserve water quality. This will, in addition to protecting our existing capacity, add approximately 20% to our current storage capability. B. Well Rehabilitation and ReplacementVidec inspect wells 1 & 2 to determine well condition and suitability for rehabilitation. Rehabilitate these two wells if possible. This will maintain, or possibly improve the production capacity and assure continued high water quality from these two wells.Identify a location for a new well. Acquire rights, drill a new well, build pump house, install water pump, chlorination system and associated hardware. Provide power and phone lin to site. This will add to our production capacity and help prevent water outages. C. Main Line ReplacementReplace main lines running parallel to Highway 3 from Well #1 to the KOA manifold. Replace aging main lines in Trinity Knolls, Northwoods Estates, and KOA areas (including along N. Cutoff Road). Replace feed lines from all wells to the new mains. Install new	E e o e re p p	0	С	Problem DescriptionTrinity Knolls Mutual Water Company (TKMWC) is an aging system with 109 active memberships (including 47 belonging to a commercial campground) that has been capacity limited for some time. Previous actions such as instituting conservation measures, installing meters, charging for over consumption, rehabilitating our primary well, limited main line replacements, and monitoring production numbers very closely for early leak detection have kept the system from suffering serious extended outages, but aging infrastructure will lead to capacity problems in the near future if other actions are not taken.In addition to the existing capacity problems TKMWC has 35 undeveloped memberships owned by existing TKMWC shareholders. These represent long standing commitments to provide one residential connection per membership. Without improvement and expansion, the existing water system will not be able to handle the additional load as these parcels are developed. Areas needing improvement include:A. TanksThe two storage tanks were professionally inspected in 2011 and it was determined that the interior protective coating in the large tank has deteriorated and the tank is beginning to experience corrosion that will lead to structural deterioration and water quality problems. The small tank is older and sterous structural corrosion has	1,904,144	60	36 01	Trinity	I	2012
154 3200195	3200195-002	Greenhaven Homeowner'S W.A.	New Well	This will significantly reduce the risk of water outages to Drill second well.	E	0	с	occurred which has weakened the upper portion of the Insufficient source capacity resulting water shortages	100,000	19	38 02	Plumas	I	2006
155 2701423	2701423-001	ECHO VALLEY RD WS #05	Echo Valley Rd WS #05 -	Design and construction of new well.	E	0	с	and low pressure. Water outages due to insufficient water source	45,000	16	48 05	Monterey	П	2006
156 2700775	2700775-001	TIERRA VERDE MWC	Reliability Source capacity project	Construct a new well and storage tank to provide long- term reliability	Ε	0	с	capacity. Well failures have resulted in frequent water outages, lasting up to 72 hours at a time. Have implemented temporary repairs - need to have longterm solution.	75,000	16	48 05	Monterey	II	2002
157 2700731	2700731-001	Z RANCH MWC	Z Ranch Water Supply	Add one or two new wells.	E	0	с	Insufficient source capacity - service connection	80,000	22	62 05	Monterey	Ш	2006
158 4200514	4200514-001	CUYAMA MUTUAL WATER CO.	Reliability	Tie into Cuyama CSD or construct a new well. (Reranker to E from M 1/3/02)	ed E	0	с	Well has reduced production capacity which results in water shortages at times. Water quality problems due to high sulfates and hardness. Well has past history of nitrate MCL failure. Nitrates currently around 40 mg/l.	500,000	23	65 06	Santa Barbara	IV	1999
159 2701422	2701422-001	OAKRIDGE SUBDIVISION MWC	Source capacity project	Consolidation with Aromas Water District.	E	0	с	Insufficient source capacity - service connection	1,000,000	22	66 05	Monterey	Ш	1998
160 2701263	2701263-004	PARTINGTON RIDGE MWC	Rebuild Source Line and Collection System (County Compliance)	The project involves distribution and installation of 4300' of new 3" galvanized delivery pipe along rural mountain wilderness contours to replace a mix of PVC and cast iron pipe. Removing fire destroyed old pipe and emergency repair PVC pipe from the same area as new installation is completed. Also involved is repair and replacement of collection manifold piping and development and construction of new source collection sites.	n	0	с	Approximately 3800 feet of Pre 1950 3" Cast Iron Source delivery pipe, 600' of 2" spring source pipe and a 500gallon redwood settling tank in Partington Canyon was destroyed by the July '08 Basin Complex Fire in Big Sur Monterey. A temporary 'Emergency' Fix has been initiated on this portion of PMWC's system. This fix includes 4 different types of piping. County standards require one type of pipe material for water delivery. Our task is to upgrade this portion of the system to County Compliance as soon as feasible. We are currently and have been since Sep. '08 on County 'Boil Water Order' notification.	156,500	25	75 05	Monterey	Ι	2009
161 1900158	1900158-002P	LITTLE BALDY	Combined of 01, 02 and 04	EXPOSE OLD LINE, REPLACE WITH NEW 6 INCH PVC SCHEDULE 90 PIPE, AND REFILL TRENCH.	E	0	С	DISTRIBUTION SYSTEM CONSISTS OF 10 INCH CONCRETE IRRIGATION PIPE INCAPABLE OF SUSTAINING PRESSURIZED FLOW. FLOWS UNDER GRAVITY AND LOW HEAD CONDITIONS.	0	27	76 16	Los Angeles	IV	1998

162 4900620	4900620-002	Austin Acres Mutual Water Company	Austin Acres Mutual Wat	er Project will be to upgrade water system such that it has E	0	С	Austin Acres Mutual Water Company's system was	53,000	26	78 18	Sonoma	11	2008
			Company Pre App	a safe continual well source that meets standards,			designed 60 years ago to support up to 25 vacation						
				provides adequate reliable pressure, provides better			homes within the connected residential addition. It was						
				fire protection, and works such that the distribution			not designed originally to provide water in a						
				system does not suddenly shut itself off or fail at length			dependable manner to the load of full-time residents						
				during power outage.Engineering research on possible			now inhabiting the distribution area. Its well is very						
				system upgrades has been initiated by Kathy Walden, a			shallow (40 ft.) and depends upon the health of Austin						
				volunteer resident on the water system (engineering			Creek and will likely be insufficient at some point. The						
				degree BSEE). The below system improvements are			current storage tank is old/outdated and uses air (no						
				described in the event that it is not possible for Austin			tank bladder) for pressurization which means that						
				Acres Mutual Water Company to connect to an existing			sometimes distribution becomes impossible (water						
				nearby public water system. It is believed at this stage			system must be shut off and tank re-charged with air).						
				that the following will be necessary to get our system			This creates supply uncertainty and water pressure						
				working properly:1. Well 01 improvement to meet			problems with those residences that are uphill of the						
				State of CA code.2. Replacement of current 940 gallon			tank even when distribution is working properly. The						
				storage tank which is unpressurized except by air			storage tank is filled by the associated 1 HP well pump:						
				cushion (requires frequent manual recharge which			during power outages the community is without water						
				takes approximately 1 hour). Redesign of storage			unless the system operator is available to briefly						
				system which may include elevating a replacement			activate the generator used for that purpose. Extended						
				tank, adding storage tank(s), adding pressurizing			power outages such as the three-day outage we						
				pumps, or other changes required by currently accepted			suffered during January 2008 leave our community						
				methods. The following items may be necessary to get			waterless except for a brief 1 - 2 hour early morning						
				our system working properly:1. Possible upgrade of			periods when the backup generator is run. To sum up, in						
				current well pump to handle current full-time			the event Austin Acres cannot be connected to an						
				residential water requirement load.2. Possible			existing nearby municipal water system, it will need:						
				replacement of some system pipelines if inadequate.			Well improvement to bring Well 01 up to State code						
				narticularly to better our water system's fire protection			A new and larger storage tank design whereby existing						
162 0400004	0400004 0010	FOREST DANIEL MUTUAL WATER SVS	Wall conferences and	Clean existing 20 000 celler terk at Well "A" Abandar	0	c	Water sustem consists of two wells, Wall "A" was shut	COO 000	42	02.21	Dutte		2000
163 0400004	0400004-001P	FOREST RAINCH MUTUAL WATER STS	treatment plant expansio	Clean existing 20,000 gallon tank at well. A Abandon E	0	L	down due to BCE contamination, and can not be	600,000	42	92 21	Bulle	I	2009
			treatment plant expansio	and electrical for new Well "A" New proceure system			brought back on line because the source of						
				for Moll "A" lostell blow off (lucking up to a stall dood			brought back on line because the source of						
				and mains Dermanent Installation of Paskup			cumplying all water to homes and can not most the CA						
				concrator Bonlaco well bouse for Well "C" Install system			supplying all water to nomes and can not meet the CA						
				monitoring oquinmont Install backflow devices at each			system is 20, years old and poods gaperal upgrades						
				monitoring equipment.instan backnow devices at each			System is 50+ years out and needs general upgrades.						
				residence.Replace existing water meterskeplace			we have in the past had problems causing well C. to						
				existing main linesinstall fire hydrantskeplace well "C"			be shut down for several days for repairs, leaving the						
				storage tank with 60,000 gainstall an air/pressure			nomes with out water due to the lack of a back up						
				release valve of the water main at the highest			system.						
				elevation. Demo existing systems for Well "C" and Well									
				A									
104 5200502	F200FC2 001		NC Clau View CWD (Course	Deplese present (old) 20 000 college tools with 100 000	0	c	Water sustain has had sutages due to a remate well	405 000	0.0	120.21	Tabama		1000
104 5200502	5200562-001	SKT VIEW CWD (AKA PONDEROSA SKT RA	(NC Sky View CWD (Source	Replace present (old) 30,000 gallon tank with 100,000 E	U	L	Water system has had outages due to a remote well	495,000	98	120 21	Tenama	I	1998
			Renderera Sky Banch	galion tank. Install new well with pump for standby.			located on the opposite side of a creek.						
			PUTUETUSA SKY KANCH)	instan nyuroneumatic system on pressure tank. Install									
4.65 2204 404	2204 404 004 0			Chiorination system.	0	<u> </u>		4 04 4 400	22	120.20	Discontine		1000
105 3301491	5301491-001P	ALPINE VILLAGE	Correct conform failure	to ray the needed pipe to loop the system. We have 6 E	U	L	we have a lot of dead end lines that run out of water	1,814,400	55	130 20	RIVErside	v	1998
			related to distribution	other wells we could use but need pumps and electric			when the rest of the system has water. Would like to						
			system, etc	to run tnem.			ray pipe to loop the sytem and run electric to other						
							weils and need new pumps. System has had numerous						
							coliform failures.						
166 4200703	4200703-002	EL CAPITAN MUTUAL WATER CO	El Capitan Mutual & State Park Water System Consolidation	Both systems have water supply shortage issues due to E failing wells, and both have water distribution (storage) problems, which require the construction/replacement of storage tanks. These projects are CEQA exempt as they are in-kind replacements of existing facilities. The project will consist of:1 - Construct one replacement well, with a pump sized to meet the supply requirements of both systems. 2 - Abandon the Park System GWUI wells and treatment equipment. 3 - Construct a replacement storage tank (250,000 gallons) to serve the combined Mutual and Park System in a consolidated system. 4 - ECMWC will construct a metered service connection which ties direcly into the Parks distrubution system to serve them potable water. By constructing one replacement well and one replacement storage tank together, and consolidating the two systems, significant reliability, safety, and economic savings will result:1 - The low producing GWUI demerited wells can be removed from the (Park) system.2 - The need for surface water treatment equipment will be mitigated, simplifying the system and lowering acute health risk.3 - The replacement storage tank will serve both systems; correcting the diurnal demand shortage for the Mutual System, and providing a new reliable tank that benefits both systems.4 - The replacement well will be a deep well, sited and constructed to avoid a GWUI classification.5 - Water	0	c	The problem involves similar water supply and storage issues for two adjacent water systems. Because the systems problems are similar (complimentary), the consolidation of the two systems (combined with a single capital program) will make both systems safer and more reliable. The ECMWC system (Mutual System) currently handles about 400 AFY of potable water. The Mutual System currently suffers from documented water supply shortages and distribution (diurnal storage) shortages, which have resulted in loss of water to customers in summer peak demand periods. The Mutual System's West-Side wells have declined in production due to age, and a supplemental well source failure (due to untreatable water quality), has resulted in a critical water supply issue; currently, the system has zero redundancy in well supplies.Concurrently, increases in the amount and periodicity of the systems diurnal demands on the West-Side have exacerbated outages or 'near-miss' outages. Diurnal storage capacity needs to be increased by 50,000 gallons to meet West-Side customer demands. The adjacent water system serving the El Capitan Beach State Park (Park System) has similar problems. The Park System has two wells, both of which have suffered production losses due to aging. One of the wells has dropped to approximately fifty percent of production output. In addition, these wells were determined to be GWUI, and	500,000	20	135 06	Santa Barbara	IV	2009
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167 4200703	4200703-001	EL CAPITAN MUTUAL WATER CO	El Capitan Mutual Water Co. Water Supply Reliability Project	The project involves driver dubatications which failed Well 20, and constructing a 50,000 gallon storage tank near the existing Tank 2 location. The supply source increase from the well will reduce water shortages in the summer and will help to avoid a catastrophic water outage should one of the other west- side wells fail. The storage tank will increase system delivery capacity for daily peak outages if a well fails or if the adjacent storage tank requires maintenance.Both the well construction and tank installation are CEQA exempt; the project will only require a (ministerial) well drilling permit and a building (grading) permit for the storage tank. A CEQA CE is slated to be approved and filed in March 2009. Plans for the well project are 75 percent complete, and the tank project plans will be completed by June/July 2009.	0	с	The ECMWC is supplied solely by groundwater wells, and has two supply areas (East and West Sides) separated by approximately 2 miles. Well yields have declined (due to age) and recent well rehabilitation improved output only minimally. Well 20 had to be abandoned due to (untreatable) poor water qualility. ECMWC needs to drill a replacement well immediately to make up for a water supply shortage. This project is CEQA exempt.In addition, the system's West-Side storage is 25 years old and water demands on the West- Side have substantially increased over time. ECMWC needs to construct additional storage (50,000 gallons) to prevent water outages which occurred several times during the summer of 2007 and 2008. The storage tank is also CEQA exempt due to its size and location.	325,000	20	135 06	Santa Barbara	IV	2009
168 1500289	1500289-001	ATHAL MUTUAL WATER SYSTEM	Athal Water Supply Projec	t At well site #1: Drill a new well, install a new pump, well E meter, pressure tank and electrical controls, install secure fencing, destroy old well #1 and fund bid advertisement, legal, environmental and engineering services. At well site #2: Replace Well #2 pump, install 6 foot secure fencing and a well meter. 2000 Census DataKern County Census Tract 62.01, Block Group 1, Median Household Income = \$27,465	0	C	This small community water system serves 65 homes east of Weedpatch Highway about 1.5 miles north of Lamont. The communitys' main well has collapsed and their single and smaller remaining well has a pump operating at only 52% efficiency. Public notification to conserve water due to failure of the water well and restricted water supply was issued in the October/November 2009 and is currently in effect. Failure to meet minimum pressure standards as per Section 64602 (a) of Chapter 16 of California Drinking Water Standards: Low pressures below 20 PSI were recorded this spring. These pressure problems increase during summer and high demand periods.	350,000	62	150 19	Kern	Ш	2011
169 3301529	3301529-001P	RAMONA WATER COMPANY	Planning study to solve low pressure and outage problems.	Drill new wells, meters, and storage facilities.	0	с	Current chronic total coliform bacteria contamination which has resulted in repeated enforcement actions. Wells, storage tanks, & distribution system piping are in very poor condition resulting in low pressure & outages.	1,206,415	106	250 20	Riverside	v	2007

170 4500013	4500013-001P	LAKESIDE WOODS MUTUAL WATER CO	Lakeside Woods MWC	New storage tank, water main repairs and replacement stand-by generator for power outages and water meters to encourage residents to conserve water to preclude water outages.	t, E	0	С	Insufficient source capacity resulting in water outages, failing mains, and no backup power.	50,000	92	250 02	Shasta	I	1998
171 0900300	0900300-001	KYBURZ MUTUAL WATER SYSTEM	River Intake Enlargement	Increase size of river pump line to treatment plant	Е	0	С	2004 fire destroyed watershed and reservoir.	125,000	120	250 09	El Dorado	I	1998
172 2300644	2300644-001C	Woodside RV Park	Woodside RV Parks Water System Upgrades	In order to correct the problem our research indicates that 1 or more deep wells need to be added to our current system. Depending on the location of these new well(s), this would entail new pumps, pipe line to the distribution system and upgrading our current storage system. There are other deep wells nearby that produc good quantities of water year round. We currently hav one existing deep well that needs to be cleaned and deepened to obtain more flow. By obtaining a good quantity of water from new wells we could eliminate our shallow well and attendant problems. or as an alternative use them for emergencies. Quality water is hard to maintain coming from surface wells and the state requirmnets for these will be tightened shortly.	E w re re	0	с	This Park Serves Approximatley 100 Low Income Family units, year round. During the Summer this increases to abut 125 or more. Most all of our water sources are shallow wells. These wells fail to produce water at the capacity needed to support our community. Our current system is monitored by the state monthly and generally incures no problems. However, especially during dry years we have to import water at additional cost. We need financial help to cover the cost for engineering, plans and permits to correct this problem.	0	41	280 03	Mendocino	Ι	2009
173 5400641	5400641-003P	TEVISTON C S D	Teviston South Well Replacement Project	The Teviston Community Services District proposes to replace the South well with a new well since it is now evident that two wells are needed to maintain a consistent pressure above 20 psi. It is proposed that this new well be equipped with a new pump, storage tank, hypochlorinator and standby power source.	Ε	0	c	The source of water for the Teviston Community Services District is groundwater supplied by 2 wells (North well and South well). The lower portion of the older 50 year old South well is not currently usable and the pump is inoperable. A Video recording taken on 6/29/10 indicates that the bottom of the South well casing is in poor condition with numerous cracks and the bottom 60 feet of this well has been filled in and may have collapsed. Subsequent pressure readings on the system's distribution system indicate that with only 1 remaining well operating that pressure dips in the system well below 20 psi on a regular basis. Half the community's water supply is now gone.	0	70	300 12	Tulare	111	2011
174 5500077	5500077-002	SLIDE INN SNOWBOWL WATER CO	Slide Inn Snowbowl Water Company	inadequate source capacity	E	0	с	inadequate source capacity	100,000	100	315 11	Tuolumne	ш	2008

175 5500077	5500077-005	SLIDE INN SNOWBOWL WATER CO	SLIDE INN SNOWBOWL WATER CO PHASE 1 WELL DRILLING	Slide Inn Snowbowl Water Company Phase I Well Drilling Project Scope. To get two wells drilled this project would need an engineer consulted, the forest cleared (since trees have matured in 45 years), two wells drilled (completion of 2 new water sources) (& pipes, pumps, meters etc.), electrical work completed (wiring, installing a pole), structures built, equipment rented, booster pump purchased, aqua testing and lots of man power to get it all done. One new well is needed for each section (Slide Inn and Snowbowl sections). The project will require the participation of an engineer, well drilling company, electrical company, trees remova company, equipment rental company, aqua testing company and laborers. Antiquated pipes and equipment would need to be removed as well. The water district is located at 5,200 feet in the Sierra Nevada Mountains; we have a window of 9 months out of the year to work on this project. If funding can be made available, we would start this project at the end of March 2011 and work until the beginning of December 2011 and so on until it is completed. We have sent to the California Department of Health a map for your perusal to get an idea of the two sections that need wells drilled. Having two new water sources drilled will stop the water outages our customers have been experiencing for years and give our customers a reliable water source.	E	0	C	Slide Inn Snowbowl Water Company is requesting your assistance to complete our Phase I Well Drilling Project. We were invited and accepted for a grant submission last year, but the paperwork arrived two days after the grant was due. Slide Inn / Snowbowl Water Company is located in Long Barn, CA on Highway 108 in Tuolumme County. We provide water for 134 water connections (500 population) to individual property owners in the municipality of Long Barn. We need two wells drilled. One well is needed on the Snowbowl section and one on the Slide Inn section of Long Barn. A map has been sent to the California Public Health for your perusal. Currently the Snowbowl well is at 180 feet and unsustainable at this shallow depth. With the current depth and antiquated equipment, the well draws a measly 20 gallons of water a minute. Each year, when ground water is the driest (December), customers will experience a water outage for three or four days effecting 40 connections. The well is a hard rock well (80 foot well casing). This March, 40 of our connections experienced a water outage for one week. On the Slide, two wells working together have an output of only 20 gallons a minute. Both wells on this side are 45 years old, hard rock wells (580 feet) with an 80 foot well casing. On this side, both wells have had this output problem for the last 10 years. Almost twice a year 94	125,000	100	315 11	Tuolumne	11	2011
176 5400550	5400550-002	SEVILLE WATER CO	Seville Safe Drinking Wate Project	r The proposed project will be to drill a water test well which will determine if a sufficient quantity of potable water can be found in the community. If the test well is successful, a production well would be drilled and equipped with a pump and storage. The new well facilities would be tied into the community's water distribution system.	E 5	0	C	The Seville water system is supplied by one water well. This old and undersized well has recently seen an elevation of nitrate levels. The most recent level recorded was 43 ppm-very close to the MCL. It is anticipated that further sampling will determine that the nitrate level will exceed the MCL. The water system has other problems related to the distribution system for which a Statement of Intent has been issued by DPH and returned with the intention to submit that application prior to January 2008.	1,200,000	77	400 12	Tulare	III	2007
177 5400550	5400550-001	SEVILLE WATER CO	Seville WC - Reliability	REPLACEMENT OF THE ENTIRE PLUMBING SYSTEM. OTHER - DESIGN AND CONSTRUCTION	E	0	С	DUE TO OLD DETERIORATING DISTRIBUTION LINES, NUMEROUS WATER OUTAGES HAVE OCCURRED DUE TO LEAKING PIPES.	10,000	77	400 12	Tulare	Ш	2006
178 1900146	1900146-004	SUNNYSIDE FARMS MUTUAL	Water Production and Storage Capacity Improvement	This funding is requested to drill a new well and/or increase the pumping and storage capacity for our existing wells in order to meet consumer demand.	Ε	0	С	Three existing groundwater wells do not produce enough water to meet consumer demand. Our secondary water source (State Water Project via Antelope Valley East Kern Water Agency) is an interruptable source of supply and has informed us that they cannot provide our required supplemental water due to State-wide cut-backs.	250,000	139	405 16	Los Angeles	IV	2008
179 4910020	4910020-006	Sonoma County Water Agency	South Transmission System Pipeline	Construction of an additional pipeline, water storage tanks, booster pump, and related facilities between the existing Cotati tanks and the Kastania tanks in southern Petaluma.	E	0	С	Capacity of current aqueduct between Petaluma and Cotati is exceeded during summer months. The ability of the aqueduct to reliably delvier drinking water is compromised during this period.	80,000,000	136	500 18	Sonoma	II	2002
180 1710011	1710011-001	Buckingham Park Water District	Buckingham Park Water District Project I		E	0	С	replace existing filter, additional storage tank; additional pressure tank; distribution system upgrades; increased WTP capacity.	722,000	450	580 03	Lake	II	2010

181 4400502	4400502-005C	TROUT GULCH MWC	Install Water Meters for all Flat Rate Customers	I Install 170 radio-read meters in three phases: I. Procure E remote meter reading equipment and 5 meters and replace failed units. II. Procure and install 100 meters for all unmetered customers. III. Procure 65 meters and replace remaining old manual read meters. Radio-read meters are preferable over direct-read meters because radio-read meters support early detection of service line leaks or excessive consumption and provide far better support for water conservation programs. Much of TGW's service area is comprised of very steep single lane roads. Meter reading in such terrain is both dangerous and very time consuming. Some mains and service lines are not accessable by public or private roads. Total Project Cost estimate is based on recent actual meter installations by neighboring water purveyors and quoted Remote Reading Module for Customer Data Management, Meter Reading and Billings software application (RVS) in use by TGW.	0	C	Mar Vista Water Company (MVWC) facilities had supplied water to residents of Forest Glen subdivision and a number of adjacent parcels for at least 60 years. Only a few of these residents have meters. Meadow Ranch subdivision, built in the late 1980s, had its own well and residential meters. Meadow Ranch was added to MVWC in 1987. Most existing meters have reached the end of their expected service life and several have failed. MVWC was under orders to install meters for the remaining 120± customers. See PUC Resolutions W- 4579 - January 12, 2006 and Resolution W-4607 - July 20, 2006. TGW, a customer-owned mutual benefit water company, purchased theasets of MVWC on July 1st, 2008. These assets did not include uninstalled meters. Installation of these meters was one of the Santa Cruz County DEH's requirements for approval of the transfer of Domestic Water Supply Permit from MVWC to TGW on April 1, 2008. TGW has committed to an installation schedule for these meters. Note: DPW database updates: Ownership of this system changed on July 1, 2009. This system has provided water for 133 residences for a number of years. We have made efforts to update this data.	55,000	171	584 05	Santa Cruz	Π	2009
182 3600196	3600196-006	CSA 70 W-4	Supply Reliability - High Desert intertie transmission	Construct 5.3 miles of transmission line to High Desert E Water District	0	С	The District is currently operating under a building moratorium due to water quality and quantity problems	1,420,000	125	625 13	San Bernardino	v	2001
183 3710009	3710009-003C	Descanso Community WD	Emergency Pressure Improvement Project	The scope of the project is as follows. We intend to install approximately 1000 feet of 8" C-900 PVC pipe with one 8" gate valve on Veijas Grade Rd. In addition, 1 new Fire Hydrant will be installed on the new main. This project will create a loop between an existing 6" water main and an existing 4" water main. Currently the 4" water main is being supplied water through a 2" steel water main. This is its only source. The project is intended to alleviate low pressure problems to customers at the West end of Viejas Grade Rd., as well as 5 customers that are supplied off of the 2" water main. At times, when demand is high the pressure drops between 0 and 19 psi to these customers and fire flow is virtually non-existent. To our knowledge this problem has existed for 3 to 4 years. The project was designed 2½ years ago, but due to lack of funding the project has not moved forward.	0	C	Part of the service area located on the West end of Viejas Grade Rd. experiences low pressure when demand is high. During these periods the pressure has dropped between 0 and 19 psi and fire flow is virtually non-existent. This has resulted in customer complaints of no water. In addition, it has resulted in a violation of the Drinking Water Standards. To our knowledge this problem has existed for close to 3 to 4 years. The problem exists because the 4" water main at the West end of Veijas Grade Rd. is supplied by a 2" steel water main. This is its only sources of supply and it is insufficient in size and condition to keep pressure above 20 psi. Customers that are fed off of the 2" steel water main also experience these low pressure problems. This loss of pressure violates Drinking Water Standard Section 64602 (a) (Minimum Pressure).	35,700	313	870 14	San Diego	V	2009
184 3710009	3710009-004P	Descanso Community WD	Install Iron and Manganese removal plants at Well #5 and Well #6	e Evaluation of Iron and Managnese removal at both well E sites that are the Districts only source of supply. The planning and construction of iron and manganese removal plants at both well sites.	0	с	Inadequate source capacity and unacceptable water quality to meet system demands. In addition, a standby well, not approved as an active well due to unacceptable water quality, has been required to be brought on line and used without complying with the regulations for use of standby wells.	700,000	313	870 14	San Diego	v	2012

185 3610026	3610026-006C	SBDNO COUNTY SERVICE AREA 70 CEDAR	GL Pipeline Replacement, Well and Reservoir Project	The overall project costs to bring the District water system into compilance with the California Safe Drinking Water Act and the requirements of the State Department of Health Services is estimated to cost \$16,000,000 and will require 3 to 5 years to complete. A computerized hydraulic model was generated, using Version 3.0 of the MW Soft Inc. H2ONet program, to verify the project needs and to generate the phasing and priority of the improvements to be constructed. Phase 1 improvements are estimated to cost \$3,00,00 and will concentrate construction in that portion of the District designated as a low to moderate income area. Phase I improvements include the drilling and equippin of a new domestic water supply well (estimated yield is 100 gallons per minute (gpm)); replacement and upgrade of the existing 250,000 gallon tank to a 500,000 gallon tank; and the installation of 14,000 linear feet of new 8-inch diameter PVC pipe with hydrants placed in accordance with the local fire agency's requirements. Phase 2 improvements are estimated to cost \$4,600,00 and include the drilling and equipping of another new domestic water supply well (estimated yield is 200 gpm); upgrade of the interconnect to the adjacent agency from 2-inch to 6-inch piping and valving; construction of 1.0 million gallons of new reservoir capacity; and the installation of 35,000 linear feet of new 8-inch diameter PVC pipe with hydrants placed in	E 10 15 10	0	c	In 2003, the Arrowhead Manor Water Company (AMWC), a private water company under the jurisdiction of the Public Utility Commission, provided water service to approximately 590 connections in the Cedar Glen area of the San Bernardino Mountains. The population served at the time was estimated to be approximately 1,900. In October and November of 2003, the Cedar Glen area was ravaged by the "Old Fire" and the AMWC customers suffered major damage. After the fire, the customer base was reduced to approximately 290 connections. As a result, Special Districts Department of the County of San Bernardino has purchased AMWC and operates the water system. The water district currently has the capability of producing 103 gallons per minute (gpm) of potable water from District sources and maintains a connection with an adjacent water district which can provide up to an additional 110gpm. Combined, the total supply of water does not meet the State Department of Health Services and the California Safe Drinking Water Act requirements for the 327 connections, and is severely deficient to serve the original 590 connections as rebuilding in the area occurs. The water system supply requirement for 327 connections is 383 gpm and for 590 connections is 840 gpm. The system is also deficient in water storuge capacity, which proved to be diasatrous during the "Old Fire". Total storage capacity is 0.66	3,000,000	264	950 13	San Bernardino	v	2009
186 1010061	1010061-001C	FRESNO CSA NO. 51 (DRY CREEK)	CSA 51 Water Distribution System	The proposed project involves the installation of a water distribution system that will provide metered service to 432 properties in CSA 51. The proposed system will connect to the City of Clovis at E. Shepherd Avenue and N. Fowler Avenue and the City of Fresno at E. Behymer and N. Willow Avenue. The proposed wate system will purchase raw water from Tresno Irrigation District (FID) that will be treated and delivered by the City of Fresno will be delivered to the CSA for approximately 1 months out of the year when water is available to the Fresno surface water treatment plant from the Enterprise Canal. During the times that the Fresno plant is not operational, water will be given raw water in exchange for providing potable water. The proposed water system will also contain water storage facilities to meet peak demand and fireflow requirements. Booster pumps will be installed as necessary to maintain the required system pressure over the varying terrain.	E sr	0	c	CSA 51 is comprised of 432 parcels which are currently on individual wells with no water system of any kind. A number of the parcels have experienced water outages and have drilled additional wells that have been dry or very low yield. Some property owners pay to have water trucked to a holding tank on their property. A group of property owners asked the Fresno County Board of Supervisors to help solve their water shortage problem. CSA 51 was formed to provide a solution which involves obtaining raw water from Fresno Irrigation District and having it treated by the City of Fresno and City of Clovis and then delivered to the CSA.	18,573,390	400	1,000 11	Fresno	Ш	2009
187 3610118	3610118-001	Yermo Water Co	Source capacity project	Construct new well and reservoir, replace mainline	E	0	с	Inadequate source, storage and distribution system resulting in bacti failures and outages	1,500,000	348	1,100 13	San Bernardino	v	1998
188 4410016	4410016-001P	Forest Lakes MWC	Planning Project; hardrock well	Drill new well, replace aging system, install meters throughout system	E	0	С	Inadequate source capacity for hard rock well supply, end-of-life for piping, tanks and electrical, need meters	500,000	327	1,145 05	Santa Cruz	Ш	2002
189 2110005	2110005-013	Bolinas Community PUD	Slipline Overflow Pipe at Woodrat 1 Reservoir	Slipline existing overflow piping within reservoir dam face to protect and preserve its integrity.	E	0	с	Existing overflow piping through reservoir dam face (located directly behind and uphill from the district's water treatment plant) needs to be maintained and	100,000	587	1,200 18	Marin	II	2009

upgraded to ensure its integrity.

## 190 4910007 4910007-001P Sea Ranch Water Company, The (PUC) Funding for

# flow) Improvements

Construct Four Pressure Reducing Valves (PRV Stations): E Distribution/Storage (fire In 2012 and 2013 these pressure reduction facilities will be coincidental to the tank 8 construction. 

Construct Tank 8 at 0.99 MG: The initial phase of the tank 8 construction began with a geotechnical feasibility study in 2008. Permits and plans will be secured in 2011 and 2012, and construction of the tank will occur in 2013. Construct Zone 2 Water Mains: Water main installations which will address the deficiencies listed in the Hydraulic Master Plan are scheduled for design in 2011, with construction to occur from 2012-2014. Construct Pump Station 2 Pressure Reducing Valves (PRV) and 6-inch water main (2000 ft): Civil drawings will be completed in 2012 with construction of the PRV and water mains to occur in 2013• Upgrade Pump Station 1: This upgrade will be conducted with the Tank 8 construction. Civil drawings will be provided in 2011, with partial construction in 2012 with completion in 2013 as indicated in the Tank 1 Area Upgrades.

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The installation of a 990,000 gallon water storage tank and associated facilities to increase deficient fire flows and provide adequate storage for a safe and necessary water supply.1 - 2005 DHS Inspection Findings: "The system must investigate increasing either the storage or source capacity in Zones 2 and 5 in order to meet fire flow requirements. The system should also investigate the development of additional source capacity for use during the summer months when the treatment plant is the sole source of supply."2 - 2007 CDPH Inspection Findings: "The system must investigate increasing either the storage or source capacity in Zones 4 and 5 in order to meet fire flow requirements."The Sea Ranch Water Company has studied these deficiencies and as a result has developed a capital improvement plan to correct fire flow issues within the deficient zones which have displayed negative pipeline pressures under use of the fire hydrants, and boil water orders when supply numps in Zone 2 have failed. There were three boil water orders in 2005, 2006 and 2007 in Zone 2 as a

399,999 1.786 1.299 18 Sonoma 2009 ш

result of deficiencies involving Zone 2 pumps or piping.

191 4910021 Bodega Bay Public Utility District 4910021-001

Bodega Bay Public Utility The project involves construction of a new municipal District Bay Flat Road Well water supply well, transmission main from the well to the existing distribution system and a chlorine disinfection system. The location of the proposed well would be at 1681 Bay Flat Road, Bodega Bay. The approximate anticipated yield of the well would be 200 gallons per minute and would account for about 20% of the Bodega Bay Utility District's peak production capability. The well will be drilled to a depth of 80 to 150 feet utilizing a cable tool drilling rig method alleviating the need for the use of drilling mud. A fourfoot by six-foot concrete vault would be preconstructed offsite and placed in the excavation over the well head. An eight-foot by ten-foot cedar sided shed would be constructed to house a chlorine disinfection system to disinfect water from the new well. Disinfection would include the use of up to a 12 percent chlorine solution contained in a 30-60 gallon day tank or the use of a chlorine tablet system. Secondary containment of the chlorine solution would be provided. The hypochlorite solution would be delivered at the well by pumping through a ¾-inch solution line installed in a joint trench with the new water main. Controls will meter the flow of the solution to the water main to ensure adequate disinfection. A 6inch water transmission pipe would convey water from the new well to the existing water distribution system.

The town of Bodega Bay is the largest unincorporated commercial and residential center in western Sonoma County located along Highway 1, on the County's southern coast. Historically, the town was primarily a fishing village with relatively few permanent residents. The surrounding hillsides consisted largely of rangeland for sheep and cattle grazing. In recent times, Bodega Bay has evolved into a popular tourist destination with associated commercial development. In the mid-1970s, Bodega Harbour Subdivision, a major housing and golf course project was developed. Today, due to the desire to live at the coast, the town includes a broader crosssection of full and part-time residents. The Bodega Bay water system is classified as a small water system and serves residential and commercial customers. The approximate number of existing residential equivalent units (RUE) is 1900. The District is a publicly-owned utility with the Board of Directors elected by registered voters living within the District boundary. The District operates the water and wastewater facilities within Bodega Bay. Development within the District is guided by the Sonoma County Local Coastal Plan/Sonoma County General Plan and the Sonoma County Zoning Ordinance. The District obtains its water from three general sources as follows:1. Roppolo Well Field -Consists of three active wells with a total capacity of approximately 500 gallons per minute.2. Dunes Well

420,000 1,032 1,423 18 3010118 11 200	420,000	1,032	1,423 18	Sonoma	П	2009
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192 2110004	2110004-018	Stinson Beach County Wtr Dist	New Groundwater Well a Steep Ravine Tank Site	at The project involves drilling a new well at the District's E Steep Ravine Tank Site to determine the potential for groundwater development on that parcel owned by the District. The well will be drilled and tests performed to assess the quantity and quality of groundwater produced at the site. Based on the water quantity and quality results, the well will be completed and equipped with a pump and all appurtenant facilities necessary to deliver water from the new source into the District's water distribution system. The cost estimate and funding requested for this project assumes a finished groundwater well (25-50 gallons per minute) with all appurtenances. This Project is currently on the CDPH's Proposition 50 Project Priority List as part of a larger project, previously conceived to investigate groundwater potential on additional parcels owned by the District and to rehabilitate existing wells currently operated by the District.	0	c	The reliability of the District's water supply sources is highly vulnerable to climatic conditions, seasonal shortages resulting from the large, uncontrolled number of vacationers and visitors to the community of Stinson Beach and the Golden Gate National Recreation Area beach and park during the summer months when creek flows are low, and environmental constraints relating to maintaining creek flow for anadromous fish. To meet the challenge of a highly vulnerable water supply, the District has undertaken a number of steps, including the preparation of an Urban Water Management Plan, aimed at gathering water supply information, enhancing public awareness, and reducing water use. As part of its water supply and demand management studies, the District has undertaken an evaluation of its existing and needed source water capacity and storage volume, following the procedures outlined in the California Department of Public Health's (CDPH) Waterworks Standards (Title 22, California Code of Regulations), and has determined that the District's existing source water capacity is less than the source water capacity needed to meet the maximum day demand. This project is intended to help address the CDPH prescribed minimum standards for source water capacity and the deficiency identified by the District.	150,000	721	1,500 18	Marin	Ι	2009
193 5410017	5410017-003P	London Community Serv Dist	London Community Services District Water System Rehabilitation	The proposed project includes installing new 8-inch diameter water mains at various locations, installing of new water services from the water mains to the county road right-of-way limits at those locations where a new water main is being installed. The new services will be reconnected to the existing house services with a service box and shutoff valve. A new water well can provided the needed water capacity during typical high water demnads. The 1 million gallon welded steel storage tank and two (2) 300 gpm booster pump system will give the District added flexibility to meet maximum day demand, peak hour demand and fire flow.The District completed a Proposition 218 Process in 2008. A public Hearing on the Proposition 218 process was conducted on July 16, 2008. The CEQA Notice of Exemption was filed with Tulare County on December 20, 2007 and Federal cross cutting information was submitted to the CDPHS in January and February, 2009.	0	c	The District's existing water distribution system is old and predominantly consists of undersized pipelines. The majority of the distribution system was installed in the early 1950's. During the pipeline installation, there were very few sectionalizing valves installed in the distribution system. Due to the lack of sectionalizing valves, the District is unable to isolate portions of the water system to repair pipeline and service lateral leaks. This requires the draining of the entire or at least the majority of the water system to repair a leak. This can result in all of the residents being without water until the leak is repaired and the distribution system recharged. With the large water demands and small diameter pipelines and low well water capacity, the residents experience low pressures. The individual water services were installed directly on the water mains without service saddles. The service pipe material is a polybutylene which is known to be prone to cracking and eventual failure. Due to the materials and installation procedures utilized, the District has experienced numerous leaks on the water services. Repairs to the water services also require the draining of the entire water system.	0	432	1,638 12	Tulare	11	2009
194 5410014	5410014-003P	Tipton Community Services Dist	Burnett Road Consolidation Project	Permanent interconnection to Tipton CSD E	0	с	Single well system had well failure during July 2001. Emergency temproary interconnection to Tipton CSD.	0	587	1,992 12	Tulare	Ш	2001

195 2310007	2310007-016P	North Gualala Water Company	Water Source & Storage Construction	Following a planning study, NGWC plans to develop recommendations that address source capactiy deficiences. Our current source deficiency amounts to 250 gpm. Our construction project would allow NGWC to comply with State Water Resources Order WR 2001- 14 requirements. Build a reservior and water treatement plant to process the reservoir held water. Water storage issues coudl be solved with enlarged tank farms to increase distribution.	E	0	c	By Order WR 2001-14, the State Water Resources Control Board (Board) requies our community to only operate two wells if minimum bypass requirements are met. These two wells account for 85% of our source production during maximum day demand. By Order WR 2001-14, our well field prodcution capacity has been reduced from 250 gpm to 0 gpm, while maintaining our minium bypass requirements. The elimination of the well field reduces our overall system capacity during maximum day demand conditions. The Calif. Code of Regulations requires our source capacity to, at minimum, meet our maximum day demand. As a result of Order WR 2001-14, our reduced source capacity can no longer meet maximum day demand. In fact, our total system source capacity (based on maximum day demand our system must supply 250 gpm plus 20% safety factor). North Gualaa Water Company community is in the state of a major water shortage and needs to supplement current sources immediately.	0	1,033	2,595 03	Mendocino	u	2009
196 1710021	1710021-005	Lake County CSA 21 - North Lakeport	Trident Water Treatment Module	The North Lakeport Water Treatment Facility's Trident Treatment Module project will include the addition of one Trident filter module. The current configuration includes three operating modules. The facility was designed and constructed to accomodate five filter modules, but due to the number of customers and demand at the time of original construction, only three were needed to satisfy demand. The Siemens Company manufactures the Trident filter modules here in United States. The steel module will provide an added treatment capacity to meet current demand. The new module will be delivered to the North Lakeport facility and positioned in the 4th treatment bay originally constructed at the plant. Associated inlet, outlet and drain piping, monitors and controls will be added to the existing facility. Mixed filter media (gravels, and sands) will then be loaded in stages within the module and run through several backwash and disinfection cycles and testing before bringing the additional unit online. Ancillary facilities including GAC filtration, chlorine contact tank and additional ozone contactor will be included in the uggradeOnce the Trident filter module is online, the North Lakeport Water Treatment Facility will be fully compliant, providing sufficient quantities of water for current customers and entitlements in CSA #21 customers, and a small amount of growth.	E	0	c	The North Lakeport Water Treatment facility serves customers in County Service Area #21. The facility treats surface water from Clear Lake to drinking water standards utilizing a treatment process including Trident filter modules. The facility was designed and constructed to accomodate up to five (5) modules, of which three (3) are currently in place and utilized. The Special Districts Administration was issued a Compliance Order (#02-03-08-002) for the North Lakeport Water System on May 13, 2008 for failure to provide source capacity. Population served by the water system has grown to a point where demand is outpacing adequate treatment capacity. The additional Trident treatment module will provide the additional Trident treatment module will provide the additional divident So single family dwelling equivalents.HEALTH BENEFITS include ample supply of clean drinking water, and fire flow.ECONOMIC BENEFITS include construction (engineering, equipment, labor to install, and filter media. Additional economic benefit through servicing and media replacement.COMPLIANCE BENEFIT includes the additional couplies with the compliance Order.	2,000,000	1,204	2,868 03	Lake	IJ	2009
197 3610109 198 2310008	3610109-001 2310008-005	SHEEP CREEK WATER COMPANY Redwood Valley County Water District	Source capacity project Redwood Valley Off Stream Storage	Construct new source Evaluate proposed off stream storage sites, including project design and environmental review. Also includes preliminary land survey.	E	0 0	c c	Alternate source of water needed Redwood Valley is currently under a court ordered moratorium that does not allow new services. The District is also subject to a Cease and Desist Order from DWR regarding annexed areas that are currently being served. This feasibility study would allow the District to explore the possibility of constructing off stream storage for high winter flows. Off stream storage would create a viable water supply that is currently lacking since the two primary water sales contracts that supply the District are both for surplus water subject to cut off during water short years.	10,521,466 4,000,000	1,108 1,339	3,019 13 3,969 03	San Bernardino Mendocino	V II	1998 2007

199 2310008	2310008-008	Redwood Valley County Water District	Redwood Valley Well Construction	The State Water Resources Control Board is urging this E District to locate and develop a ground water source supplemental to its seasonal and surplus surface water supplies in order to avoid enforcement action. The District has identified three available agricultural properties that show promise for water supply wells. This project would fund up to three test wells, purchase of a property, two supply wells, and development of appropriate treatment to remove iron and manganese commonly found in the area. Additional costs would be power, security, and a pipeline to tie in to the existing distribution system. The estimated yield of 100-200 gpm would be sufficient to remove the threat of enforcement action and to provide emergency water supplies when the main source at Lake Mendocino is unavailable.	0	С	Redwood Valley CWD is under threat of enforcement action by the State Water Resources Control Board for providing water outside its place of use. The areas that are being served consist of four "annexations" on the edges of its recognized boundaries, including a small Rancheria with 30 homes. RVCWD has petitioned for a change of place of use, which is still pending. Such a change, if granted, would not remove the threat of enforcement action due to the seasonal and surplus nature of the other water supplies available to the district. RVCWD has been directed by the SWRCB to locate another source of water, preferably ground water, with which to serve these areas.	3,500,000	1,339	3,969 03	Mendocino	IJ	2009
200 5410001	5410001-003C	Cutler PUD	Replace undersized distribution system	REPLACE THE OLD AND UNDERSIZED PIPELINES AND E INSTALL HYDROPNEUMATIC TANKS ON EXISTING WELLS TO REGULATE THE PRESSURE. OTHER - DESIGN AND CONSTRUCTION.	0	с	UNDERSIZED MAINS AND OLD PIPES IMPACT THE PRESSURE IN THE SYSTEM. CURRENTLY, THE PRESSURE IS REGULATED BY AN ELEVATED STORAGE TANK. Reranked from M to E (1/14/02)	0	1,197	6,200 12	Tulare	Ш	1998
201 4910002	4910002-002	Cloverdale, City of	City of Cloverdale - New Well Construction	This project involves the design, construction, and E inspection of a new municipal water well. Construction will include drilling and construction of new well head facilities and connection to the existing water treatment facility	0	с	Existing facilities are at 93% of the current capacity during summer usage and have no provision for backup. The existing wells and well field are supplied by surface flows and have diminishing production capacity and have the potential for significant water capacity shortages.	514,800	3,114	8,200 18	Sonoma	II	2009
202 4910002	4910002-001	Cloverdale, City of	City of Cloverdale - 16-inch Transmission/Distribution Water Main	This project consists of installing a 16-inch main in Asti E Road and connection to an existing 12-inch water main. This phase of the project will extend the 16-inch diameter main from Citrus Fair Drive north to E. First Street and is approximately 0.5 miles long. Upon completition the project will provide a direct connection from the Water Treatment Plant to the storage facilities located on the south end of the City with minimal demands on the main. Computer modeling has determined that this project will allieviate the problem with maintaining tank levels with current demands. This project will also maintain safe fire flow pressure in the hydrants in the south end of the City.	0	С	The southernmost tanks in the domestic water system are gravity fed by the main reservoirs. During high demand periods, draws on the pipeline system limit the ability of the southernmost storage tanks to maintain adequate water and fire suppression reserves. The tanks partially recover during non-peak hours however they do not fully recharge, presenting a potential for interruption of service to the southern part of the City. Fire prevention in the southern part of the City will also be impacted by the difficulty in recharge.	900,700	3,114	8,200 18	Sonoma	II	2009
203 1910204	1910204-003C	LOS ANGELES CO WW DISTRICT 29 & 80-N	ብA Owen water tank	CONSTRUCT A 500,000 GALLON TANK TO IMPROVE E SYSTEM RELIABILITY.(See new definition and water outage noted in project 08)(4/	0	с	OWEN WATER TANK. THE EXISTING TANK IS VERY OLD AND UNDERSIZED. THIS IS A STRATEGIC LOCATION FOR A LARGE RESERVOIR FOR THE SITE IS LARGE ENOUGH TO ERECT A LARGE TANK THAT CAN BENEFIT MOST OF THE TOPANGA CANYON RESIDENTS.	0	7,733	27,807 16	Los Angeles	IV	1998

## 204 1910034 1910034-006 DOWNEY - CITY, WATER DEPT.

# Consolidation - City of Downey and Rancho LA Rahab Center

Water Systems

The City of Downey will consolidate with the Rancho Water System to provide water services to cover entire Rancho System service area.- Rehab the two existing wells and upgrade their motors and pumps- Install VFD motor drives to more effectively to control the supply system- Install SCADA system to have a 24-hour monitoring and control of the system- Upgrade the hospital fire services to install two 8" service connections with DCDA- Installed three 6" metered domestic service connections with RP backflow devices to protect drinking water source and system- Install all associated piping and devices- Introduce recycled water services to reduce potable water demand- Demolish inactive facilities (wells and reservoirs) to avoid cross contamination- Provide engineering service to updated all required documentation and system planning- Use certified water distribution and treatment operators for the O&M activities.

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205 2110002 2110002-007 Marin Municipal Water District

Operation Improvement Project

MMWD Reservoir

This project consists of three elements, and will result in E increasing the District's reliable water supply by 1000 AFA. Project elements include: Replacing the Alpine-Bon Tempe Pump<sup>®</sup> Increasing capacity of the Federal Works pump station? Constructing a new pipeline from Nicasio Reservoir to Kent Lake Replacing Alpine-Bon Tempe PumpThe current pump, a submersible located at the upper end of Alpine Lake, has become inefficient and unreliable, and is at the end of its service life. While this pump provides most of the water used at the Bon Tempe Water Treatment Plant, its location is such that it has access to only about 1/2 of the water in Alpine Lake. This project element includes replacing the submersible pump with barge mounted pumps serving pipelines floating in Alpine Lake. This is the solution that the District pursued in the drought of the early 1990s and it has continued to function very well in the years since. Locating the replacement floating pumps farther downstream of the existing pump site will allow more of the lake storage to be utilized. Recent studies indicate that the best location for this type of facility would be a little over 2000 feet below the existing pump site. A pair of barges at this location and their attendant pipelines would provide access to about 2000 AF of additional storage, about 1000 AFA for each year of the two year design drought. In order for this project to be operated to increase reliable water supply there must

providing domestic service to hospital and more than seven (7) other nearby LA County facilities. Their facilities and service areas are within the limits of the City of Downey. The system is currently operated under its Facilities Maintenance Department. In June 2008, the system had a MCL violation of TCR and Boil Water Order was issued. State DPH and LAC DHS have co investigation and inspection and found man deficiencies of the system and its operation the LA County DHS inspection report dated 2008, there are sixteen deficiencies need to corrected. These issues include: - The aging system has been lack of maintenance and re which cause the significant bacteriological a There is no in-house certified water system There are no backflow devices installed to p water source and system from medical, irrig institutional facilities - No updated bacteriol sampling plan - Lack of planning to meet ma to comply new Water Works Standards - Ne addtional water sources to meet future dem O&M Plan - No updated service area map -Emergency/Disaster Notification Plan - Do r to track water usage and loss - There are no water pressure and volume for the require to meet the fire code Rancho System has approached

The Rancho Los Amigos System is a NC-NT small system

Marin Municipal Water District currently has a 3300 AFA water supply deficit. This project will partially close the gap between supply and demand by making an additional 1000 AFA available to the District. Seventyfive percent of MMWD's supply comes from surface water collected and stored on the District's watershed lands. The District's reservoir system has existed in its current configuration (five reservoirs located in the Mt. Tamalpais watershed and two additional reservoirs in West Marin) since 1983. The reservoir system capabilities and limitations have become well defined through experience during these 25 years. In light of the current water supply deficit, it is important to increase the amount of water available from this reservoir system where possible. This project meets Safe Drinking Water SRF Project Ranking Criteria for Category E: Water systems with water outages or significant water quantity problems caused by source water capacity or water delivery capability.Since regulatory constraints preclude increasing the storage capacity of MMWD's local reservoirs, the focus has been on more effectively utilizing existing storage capacity and finding justification for reducing the required minimum reservoir storage level included in the District's "reliable water supply" calculations. Current allowable minimum storage is about 10.000 acre-feet; about 13% of total storage capacity, meaning

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206 3710020	3710020-068	San Diego - City of	Alvarado 2nd Extension Pipeline & Morena Blvd Cast Iron Replacement	Build 22,504 If of new 48" Alvarado 2nd Extension Pipeline from the western terminus of the existing 48" Alvarado 2nd Pipeline (at I-805 and Friars Road to Morena Boulevard and Napa Street); Use existing surface streets in Mission Valley to avoid tunneling under the SR-163 freeway and other bridge crossings; The Alvarado 2nd Pipeline is only used as a second supply to the high side of the Texas Street Regulators and has a low flow rate relative to its capacity; Replace the aging Kearny Mesa Pipeline transmission route with a new transmission route that uses the Alvarado 2nd Pipeline; Replace 17,032 If of existing 20"/16" Cast Iron Morena Boulevard Pipeline with new 36" Morena Boulevard Pipeline; this 36" line will run from the end o the 48" Alvarado 2nd Extension Pipeline and connect to the Kearny Mesa Pipeline at the north end, operating at a 536 HGL; Replace 15,598 If of parallel 16" distribution line from Friars Road and Morena to Morena and Balboa Avenue; new 16" line will operate at 390 HGL connected to the existing 16" line on Friars Road and terminating at Morena and Bunker Hill Street.	E of ot	0	C	Replace Cast Iron pipe; provide redundant transmission to the coastal zones of La Jolla and Pacific Beach for supply reliability; improve water quality; reduce energy waste at the Miramar CWA Pumpback facility; reduce peaking problems in the Miramar Water Treatment Plant service area; and provide supply flexibility (Alvarado vs. Miramar); Part of a larger plan to improve transmission reliability to the coastal Pacific Beach/La Jolla Zones by replacing the aging Karny Mesa Pipeline as the lead supply, and adding a second transmission route to the coastal zones.	64,000,000	273,015 1,	266,731 14	San Diego	v	2012
207 3710020	3710020-066P	San Diego - City of	University Avenue Pipeline Replacement	e Installation of water mains in the City of San Diego occurred in the 1900s to the late 1940s and were typically made of cast iron. The intended service life of these lines was 50 years, and while most have lasted much longer, the lines are gradually deteriorating due to corrosive soils. In the mid-1960s, the Water Department began a systematic effort to identify and replace nearly 600 miles of these pipes throughout the City's jurisdiction. Under the current City policy, cast iron water main replacements are coordinated with the replacement of aging and deteriorating concrete sewer located within the same public right-of-way. The City increased the cast iron water main replacement program to award 15 miles of replacement pipeline in FV08 and 20 miles in FV09 through FY11. Approximatelp 117 miles of cast iron pipeline were replaced from 1990 to 2008. A brief description of the project is below: 1. University Avenue Pipeline - Replace existing 20", 24", 30" and 36" cast iron mains with 16" PVC. The project limits are from the intersection of West Lewis Street and Stephens Street. The length of University Avenue Pipeline is 16,220'; 2. Park Pipeline – Replace 16" cast iron and asbestos cement main in Park Boulevard from University Avenue to Robinson Avenue with 16" PVC. Total length of 750'; 3. Sth Pipeline – Replace 24" cast iron in Sth Avenue from University Avenue to Robinson	E S S	0	C	The replacement of aging and deteriorating water mains provides an important infrastructure need to the citizens of San Diego and ensures progress to meet the Federal Safe Drinking Water Att's goal of ensuring that public water systems "provide an adequate, reliable supply of sage, clean drinking water." The main replacement project will provide direct funding assistance in meeting the Department of Public Health Compliance Agreement, No. 04-14-96-22 (Amendment No. 11), Compliance No. 73. The DPH Mandate requires that starting July 1, 1998, the City of San Diego is to award contracts for construction of at least 10 miles of water main replacement per fiscal year.	0	273,015 1,	266,731 14	San Diego	v	2012
208 0900410	0900410-001	LATROBE ELEMENTARY SCHOOL	Millers Hill School	Construct additional well and connect to storage tank.	E	0	Ρ	Miller's Hill School system needs additional source capacity to prevent water outages.	558,000	2	100 09	El Dorado	I	1998

209 1200684	1200684-003C	Mattole Elementary School	Mattole (#1200684)- Replace Transmission Piping.	This project will consist of replacing approximately one E quarter mile of transmission line between the well site and school site.Construction of a new treatment building at the well site to house filters and monitoring equipment.Installation of a new DE water filter.Installation of a 10,000 gallon clear well to increase storage capacity, and installation of a new lift pump at the well site.Replacement of the old cement tanks with 2 5,000 gallon tanks at the school site.Moving the iron filters closer to the source to prevent fron and magnanese from entering the system. New monitoring equipment will be installed to better monitor and automate the treatment process this will include flow meters on both wells and for the distribution system, Raw water and finished water turbidity, an additional CL-17 for disinfection monitoring at the clear well.	0	Ρ	Transmission Piping is 20+ year old PVC in a shallow trench with no bedding the pipe needs constant repair to maintain water supply to the school site. The clear wells are old concrete tanks that are cracked and deteriorating and sluffing off material into the water supply. This material is getting into the disribution system and creating other problems with the quality of the water. This project will also include the moving of the Iron filters to a location closer to the wells to improve the systems ability to remove the iron and manganese in the water source. This water system consistantly fails routine Bac-T sampling, requiring the School district to shut the system down for disinfection procedures and retesting. This School site is also the OES Emergency shelter for the Petrolia Area. With the current condition of the water system it is doubtful that this facility could perform this function.	675,700	1	100 01	Humboldt	I	2009
210 0202509	0202509-001C	LAKE ALPINE IMP. ASSOC.	Lake Alpine Improvement Association Water System Replacement and Upgrade Project	E In order to meet California drinking water standards, E the redwood water tanks that store spring-captured fresh water will be replaced with a 30,000-gallon steel storage tank for the Lake Alpine Tract system and a 15,000-gallon steel storage tank for the Lake Alpine Tract system that meet current state and federal standards. The increase of tank sizes is to 1) be equipped for future fire fighting capabilities, and 2) meet the demand of the growth in population served. Since the 1950s the total hook-ups for LAIA community have increased from 26 to 45, and the population served has increased to 150 people per day during the months of May through September. The new tank for the Lake Alpine Tract system will be equipped with a chlorinator and automatic tester. The integrity of the current cement pads are not expected to be adequate, and will most likely need further reinforcement. The aging galvanized and PVC pipes (1" to 11/2") that transport water from the original sources, Poison Spring and Bee Gulch Spring to the new storage tanks, will be replaced with approximately 7,520 feet of polyethylene pipe, from the Bee Gulch tank, as its 1200 feet line (1") is inadequate for proper pressure to the cabins. Four water-testing stations will be placed appropriately. To monitor water usage and leaks, four meters will be installed.The	0	Ν	Lake Alpine is a tiny rural community nestled in Stanislaus National Forest, located on Highway 4 at the 7,300-foot level in Alpine County. The area is home to part-time residents occupying 37 cabins on Forest Service land for 4-5 months of the year and visitors who stay at the Lake Alpine Resort, a lodge consisting of a restaurant, general store and 10 rustic cabins. Two water systems serve the Lake Alpine Improvement Association: the west-end system referred to as the Lake Alpine Tract system (LAT) serves 25 resident cabins and the lodge, and the east-end system, referred to as the Bee Guich Tract system (IAT) serves 25 resident cabins. Tanks: The LAT system includes two storage tanks: a 12,000-gallon redwood tank that stores nonchlorinated water for 25 cabins and the lodge and a 20,000-gallon steel tank that stores chlorinated water for the lodge. In 2008, the Lake Alpine Tract resident community was mandated to chlorinate the drinking water that is delivered to their cabins. For health reasons the chlorination process could not be achieved in the wood tank. As a result, during the summer months the cabin water supply line is diverted to an outflow pipe from the lodge steel tank. (A balanced chlorinated system is difficult to maintain as fresh water is fed from the wood tank to the steel tank.) Over the years the wood tank has developed several leaks caused by cracked staves and holes. The leaks are	119,712	26	25 09	Alpine	I	2009
211 4200872	4200872-001	VENTUCOPA WATER SUPPLY	Well and tank project	Construct new well and storage tank; may include E meters	0	Ν	Low water production and inadequate storage to meet demand.	735,000	9	25 06	Santa Barbara	IV	2001
212 3601048	3601048-001P	Barton Flats Water System	Surface water treatment plant expansion	Construct a new filtration system to supplement E existing treatment plant	0	N	Frequent water outages resulting from inadequate capacity of existing filtration system that can't run at higher rate to produce water.	319,300	12	25 13	San Bernardino	V	2006

212 2700771	2700771-002	SPRINGEIELD MM/C
213 2/00//1	2/00//1-003	SPRINGFIELD WINVC

## District (PSMCSD)-Springfield Water System Distribution & Well

Water System

Improvements for

Water Companies

Pajaro/Sunny Mesa The project, as proposed, will include the development F Community Services of a deep, new, large groundwater well with a deep sanitary seal to provide service to the various small systems and customers in the Springfield/Struve Road area. The well will be developed by the PSMCSD on the Moss Landing Middle School site within a permanent easement for the development of a new well. The easement has been granted and a test well has been drilled within the easement. Current water quality testing of the water produced by the test well demonstrates that the water produced at this location is free of both bacteriological and nitrate contamination that has compromised the potable of other wells and water systems in the area.Additionally the project will include the construction of a large new storage tank, including a backup power generator, within the easement to serve the school and the adjacent existing customers. The project will also include complete replacement of distribution lines on both Springfield and Struve Roads and for the Moss Landing Mobile Home Park and Moss Landing Middle School.

214 1510006 1510006-009 East Niles CSD

# The proposed project will consist of replacing all four F existing water systems in the respective water Consolidation of Four company's service areas with new piping, fire hydrants, valves, and service lines as well as constructing a new groundwater well with arsenic removal equipment. Connections will be made to the District's water facilities; however, a new groundwater source will be required to be constructed along with arsenic removal equipment and a standby generator. All existing water wells in the water companies's service areas will be abandoned.Water pipelines of 12-inches in diameter to 8-inches in diameter are to be constructed with resilient seat gate valves, fire hydrants, 1-inch copper water services, meters, and meter boxes. Pipe material will be AWWA C900 PVC pipe. Asphalt concrete pavement repair is anticipated and several road borings are also anticipated to be constructed. It is anticipated that once the existing water systems are abandoned, water connections from District meter boxes to customers' house plumbing will be necessary and is therefore to be included as part of the project.

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Moss Landing Middle School, a public school, has high 4.000.000 nitrates and other water guality contaminants that prohibit their well from being used for potable purposes at the school. The Moss Landing Mobile Home Park, a low income community, is proposed to be incorporated into this project due to insufficient supplies from their well to serve their customers. The Springfield area, occupied by low income farmworker families, currently is experiencing severe groundwater contamination due to leaking septic tanks (biological contamination) and the leaching of commerical fertilizers from agricultural enterprises, into groundwater supplies. This constitutes an existing threat to the public health and safety of the area's residents. The resultant bacterialogical and nitrate contamination in groundwater supplies upon which the small, bankrupt systems depend can only be remedied with development of a deep, new well with a deep sanitary seal that can eliminate contamination from upper aquifers into lower aquifers. Currently, not only do the systems suffer from chronic and acute contamination but they also have no emergency power sources and distribution pipelines that are so old and deterioating as to cause infiltration of polluted groundwater into the potable systems. The bacteriological contamination (e-coli) as previously required public notification (quarterly). Additionally, PSMCSD is required to provide quarterly notices to Four water companies near the District's service area 7,800,000 have had or are currently having water quality issues and water reliability issues with their respective water systems. The problems, according to preliminary engineering reports, are as follows:East Wilson Road Water Company has experienced high nitrate levels as high as 120 mg/l, exceeding the 45 mg/l MCL, from its groundwater and were issued violation notices from CDPH. Del Oro Water Company has experienced nitrate levels close to 45 mg/l and arsenic levels exceeding 10ug/l from its groundwater wells. Additionally, Total Dissolved Solid concentrations have been as high 1,300 mg/l exceeding the Recommended and Upper Secondary Maximum Contaminant Levels.Victory

Mutual Water Company has experienced noncompliance issues as noted by CDPH in addition to

the water system not being able to meet a 500 gpm fire

Company has experienced high nitrate levels as high as

109 mg/l from its groundwater well. Additionally, the Water Company has no backup well and has experienced water supply reliability problems in the

flow with maximum day demand for its 185 service

connections.San Joaquin Estates Mutual Water

42	200 05	Monterey	Ш	2009
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								past.All these water systems were constructed with materials that are not of the same standards. Therefore the proposed project would include constructing new water system infrastructure.						
215 2400053	2400053-001	EL NIDO MOBILE HOME PARK	Nitrate compliance	Construct a new well or install treatment facilities.	F	25	С	Well No. 2 exceeds the nitrate MCL.	225,000	49	250 11	Merced	ш	2002
216 1510012	1510012-011	Lamont Public Utility Dist	Lamont PUD Well #16 Water (Arsenic/Perchlorate) Treatment Project	The proposed project is for the purchase and installation of a 900 gpm BWIX/ Ion Exchange treatmen and removal system for arsenic, and enhanced media for the removal of perchlorates	F	25	с	Well #16 is producing water that exceeds the MCL for both Arsenic and Perchlorate.	2,000,000	3,603	13,296 12	Kern	Ш	2009
217 5400555	5400555-001	CITRUS SOUTH TULE SCHOOL	Nitrate compliance	Drill a new well	F	25	Ρ	Exceeds nitrate MCL.	100,000	1	50 12	Tulare	ш	2001

218 5400994	5400994-001	HOPE ELEM SCHOOL	Well 2 Nitrate Remediation	Hope School is a rural school locate 4 miles south       F         Porterville. Ground water       is our only source of drinking water. There are no public systems near the facilities.         The project will consist of exploratory drilling and sampling of various sites       within the campus. Analysis the of sampling will be evaluated to determine the best location for the new well.         Drill well to depth of 500 feet. Well will be sealed with cement for at least       130 feet.         Install distribution infrastructure for potable and irrigation systems. Install intertie between well 2 and the new well so well 2 can be used for back up source.       Final part of project is proper abandonment of well 1.         Well 1 is       contaminated due to deteriation of the steel casing       Final part of project is proper abandonment of well 1.	25	5	Ρ	System tested above allowable Nitrate levels. Test results were .67 mcl.	85,000	1	100 12	Tulare	ш	2007
				Presently well 1 is										
219 5400919	5400919-001	BUENA VISTA SCHOOL	Buena Vista Drinking Water	used for irrigation only and is not tied to drinking water This project will include the following: hire a consultant F to oversee project drill test well water quality and access will be assessed prior to continuing with project. drill new well with pump and water storage system cap and dismantle existing water system.	25	5	Ρ	Buena Vista Elementary School District is a one-school school district in rural Tulare County. Buena Vista maintains one domestic well that serves the students, staff and community members on campus. The District has had consistent nitrate MCL violations since 2004. The District has been providing bottled water for drinking and cooking purposes. The MCL for nitrates is 45 ppm. The violation range for Buena Vista for 2006 was 47-67, with an average of 55.	900,000	4	130 12	Tulare	III	2007
220 5400795	5400795-001	WAUKENA ELEMENTARY SCHOOL	Waukena Elementary School Safe Drinking Water Project Request	The project needed would first include the drilling of a test well in order to determine if a sufficient quantity of potable water could be found. Included in this stage would be the costs of any necessary permits, engineering reports, or other requirements for drilling a public test well. If a sufficient quantity of potable water was determined to be available, then a production well to provide the necessary amount of water for operation of the school would be drilled. Included in this stage would be the costs of any necessary permits, engineering tests or reports, or other requirements to construct the new well. In addition to a new well, a storage facility will be built in order to provide water when needed for various uses of the school. Connection to the existing school water system would be left, as it supplies water to the Waukena Volunteer Fire Department when needed.	25	5	Ρ	The groundwater used as a source of drinking water for Waukena Elementary School exceeds the Maximum Contaminate Levels for Nitrate. The average Nitrate level from the last four quarterly tests is 65 ppm. A summary of test results is as follows: September 2006 64 ppm, December 2006 58 ppm, March 9, 2007 70 ppm, and June 2007 68 ppm. Other contaminants identifed are Arsenic and Lead. Lead tap sampling on September 2006 indicated a 90th percentile of 66 ppb (.066 ppm), and Arsenic levels indicated were 3.0.ppb. We routinely notify our school staff and families of these contaminates, informing of the dangers of nitrates for infants and expectant mothers, the dangers of lead poisoning in children, as well as health problems that can be caused from arsenic, such as cancer risk, and circulatroy system problems when consumed over many years. As a temporary solution we have a bottled water exemtion in order to to supply safe drinking and cooking water to all students and staff. This project would provide a permanent solution to providing safe and reliable drinking water and permit Waukena School to meet safe water standards.	10,000	5	230 12	Tulare	111	2007
221 1000112	1000112 001				25	r	P		158 200	10	402.22	<b>F</b>		1008

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222 1502549	1502549-001	POPLAR AVENUE COMMUNITY	Consolidation Project with City of Shafter	Project would consist of consolidation with City of F Shafter. City of Shafter already has pipes in our service area. Project would consist of connecting all our customers to City of shafter water system. We will also destroy our well as part of the consolidation project.	20	с	We only have one well. The well showed total coliform bacteria in June 2008. In May and June 2008, we experienced total coliform problem in our distribution system. In June 2008, we failed the total coliform MCL and also had E.Coli +ve samples in the distribution system. We had to go on boil water order for several days in June 2008. Our main problem is total coliform MCI failurer	40,000	9	30 19	Kern	111	2008
223 5400523	5400523-003P	EL MONTE VILLAGE M.H.P.	El Monte Village Mobile Home Park Nitrate Remediation Feasibility Study	In order to provide lower nitrate water, El Monte Village F Mobile Home Park proposes to address the stated problem by rehabilitating the existing well site serving residents of the mobile home park. Specifically, the project proposes conducting a feasibility study in order to determine the best possible alternative to addressing the nitrate contaminant issue at El Monte Village Mobile Home Park. Furthermore, should consolidation be identified in the Feasibility Study as the preferred alternative, the project will negotiate with key stakeholders from the City of Dinuba in order to pursue the consolidation alternative.	20	C	The EI Monte Village Mobile Home Park proposes to address high nitrates in the water and end sporadic low pressure conditions. The EI Monte Village Mobile Home Park located in Dinuba, California has a total population of approximately 150 residents and 49 service connections. Furthermore, on 5/24/2011 EI Monte Village Mobile Home Park received a Notice of Violation from the Tulare County Environmental Health Department that their Maximum Contaminant Level (MCL) for nitrate contamination has exceeded 45 ppm. In addition, the nitrate violation regarding the sites exceedence of the Chemical MCI. Additionally, the water systemwas required to issue a drinking water warning notice to inform pregnant women and women with infants that the drining water had exceeded the Chemical MCL and that it could cause harm to their children. The Notice of Violation is currently still in effect.	600,000	49	100 12	Tulare	111	2012
224 5400682	5400682-002	CENTRAL WATER CO.	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate F alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	20	C	Water System currently violates the Nitrate MCL.	500,000	42	170 12	Tulare	III	2012
225 5400957	5400957-005C	WEST GOSHEN MUTUAL WATER CO.	West Goshen Nitrate Remediation Feasibility Study	At this time, a feasibility and planning study is required F to determine the best course of action. West Goshen is located approximately two miles from the town of Goshen (served by Goshen Community Services District), and therefore a consolidation project may be feasible and would be considered in an engineering study. Other possible solutions to be considered include drilling a new well or treatment. The feasibility study would examine the alternatives and recommend a solution, and then design the necessary facilities to solve the nitrate problem. West Goshen may also be a potential candidate for point-of-use or point-of-entry treatment systems as an interim solution.	20	С	West Goshen Mutual Water Company delivers water from one primary drinking water well, which recently exceeded the nitrate standard (with nitrated detected at 51ppm, over the MCL of 45ppm). The nitrate level has been steadily climbing in recent years. The water system also has a second backup well, and although it currently meets standards, it violated the nitrate standard in 2011 (50ppm). The water system is also without residential water meters. The system is stressed by too many connections, and as a result, the system particularly experiences low pressure conditions which can cause bacteriological contamination. Water meters would help to reduce water consumption.	500,000	69	200 12	Tulare	Ш	2012

226 1503558	1503558-002	El Camino Pines Lutheran Church	Resolution for high nitrat and fluoride problem in Well 01	We will request permission from Lake of the Woods Mutual Water Company (LOWMWC) to tie into their system. This work will involve trenching and pipe installation to reach LOWMWC's nearest pipes. We don't know exactly where that tie-in point would be, but believe it would be 200 to 500 feet from our system. Additional work would involve some reconfiguring of the present plumbing to separate the irrigation and fire protection systems from the potable water system, so that LOWMWC would only have to provide our potable water needs which are quite low. We would also need valves, meter, regulator, etc. We are a small church and estimate our average potable water usage inside the church at less than 200 gallons per day. We made a similar request of LOWMWC prior to establishing our own water system, but were turned down. In the event that we are turned down again by LOWMWC, we plan to resolve our water quality problem by installing a treatment system.	F	20	Ρ	Last annual sampling in July 2010 showed a nitrate level of 50 ppm. The followup sample on August 12, 2010 showed 49 ppm nitrate. The fluoride has consististly hovered above the 2.0 ppm MCLAt this time we have posted a notice of high nitrate level, have removed the drinking fountain, and put a bottled water dispenser in its place.	250,000	1	70 19	Kern		2011
227 1900304	1900304-002	DEL SUR GARDENS TRAILER PARK	Nitrate Remediation	The proposed project is for installation of a new well F and/or nitrate blending. Consolidation feasibility will be assessed during the planning phase as a preferred solution.	F	20	Ν	The water system is in exceedance of the Nitrate MCL and has a history of exceeding Coliform (TCR) MCL. They have been issued Violations.	325,000	20	25 16	Los Angeles	IV	2012
228 0001001	0001001-001P	Easton CSD	Easton Safe Drinking Water Project	The recommended solution is to provide a reliable source of drinking water for the community of Easton. The proposed project would include the installation of a water distribution system to serve the community. For a supply of potable water it is anticipated that at least one community water production well would be drilled and/or an intertie with other neighboring water systems would be installed. Potential intertie and/or consolidation entities are the City of Fresno, Washington Union High School and the Easton Estates Water System. Prior to construction activities it is anticipated that the Easton CSD would apply for feasibility study funding to investigate in more detail potential solutions to the community's water supply and quality issues. As part of this study, it is contemplated that the Feasibility Engineering Report prepared in July1997 would be updated. Also, the drilling of a test well, CEQA and LAFCO work as well as project design would be completed under the proposed feasibility study.Please note: This is NOT a pre- application for a public school water system. The "yes" button was accidentally clicked for question D. This is for a community water system.	F	20	Ζ	Easton is a small, unincorporated town, located about 5 miles south of downtown Fresno straddling old Highway 41. The community has a population of about 2,000 residents and is comprised of approximately 550 homes, an elementary school, a high school, several churches and a strip of commercial establishments along Elm Street (old Highway 41). The Easton Community Services District provides street lighting, storm drain, and park, and landscape services to the community and potentially may be able to provide water services as well. The vast majority of residents in the Easton utilize individual domestic water wells for water supply. Sewage disposal is provided by individual on-site septic tank systems creating a potential health hazard. The soil in and around Easton is sandy. There is historical information to document that the quality of water produced from Easton's wells has problems. In the 1990s some community wells were sampled and found to be contaminated. In addition, several small water systems in the community currently show that their water exceeds the Maximum Contaminant Level (MCL) for nitrate and DBCP. Examples of these contaminated wells serving regulated businesses within the boundaries of the Easton Community Services District are: Business Address Nitrate Level Sample DateExtreme Pizza 6072 5 Elm 1800 Fa0273354 73.5 ppm 12/4/08 Korita's Restaurant 6130 S Elm 1800	500,000	550	2,000 23	Fresno		2012
229 3900579	3900579-001	CENTURY MOBILE HOME PARK	Century Mobile Home Pa	rk The water system exceeded Nitrate in both Well #1 and F the standby Well #2. The new well (Well #5) installed to mediate the Nitrate issue but the water exceeded arsenic. The strategy at this point is blend the two sources and destroy the Standby Well #3. Treatment may be necessary if blending fail to bring the water system into compliance.	F	10	С	The average of 4 sample results of the new well (#5) in 2007 was 13.5 ug/L, and exceeds the new MCL for arsenic of 10 ug/L, National Revised Primary Drinking Water Regulations, Federal Arsenic Rule, Section 141.62(b), 40 Code of Federal Regulations. The average of 4 samples in the old well (Well #1) in 2006 exceeded the MCL of 45 ug/L for Nitrate, California Code of Regulations, Title 22, Section 64431 (a).	10,000	16	50 10	San Joaquin	111	2008
230 2710008	2710008-001	Greenfield, City of	Nitrate compliance	Install a water main to this property to hook up residences to City water.	F	10	С	Insufficient number of homes to form special assessment district.] Nitrate levels in certain private drinking water systems are too high.	300,000	3,408	17,547 05	Monterey	II	1998

231 4200872	4200872-004	VENTUCOPA WATER SUPPLY	ventucopa water supply improvements	Connect new well to provide system with better quality F water that meets nitrate MCL. Blend new well water with Old well #1 water to meet Nitrate standards. Provide water storage that meets DHS standards Provide chlorination equiptment to maintain proper system disinfection Add storage tanks, rehabilitate and upgrade, distribution system and add service and main meters. Provide adequate distribution system including fire protection for approximatley 19 service connections.	10	Ν	The water system has only one well which exceeds the MCL for nitrates. The water system was established in the 1930's and does not meet DHS standards and community needs. Water system exceeds nitrate standard, and does not meet quantity and quality standards. Additionally the system has no storage, connections are un-metered, water pipes are old, undersized, leaking and system lacks fire flow.	845,000	9	25 06	Santa Barbara	IV	2007
232 2700999	2700999-002	OAK PARK WS	Nitrate compliance	Drill and equip a new well or else install nitrate removal F treatment.	10	Ν	Fluctuating levels of nitrate in wells. Nitrate exceeds MCL most of the time and overall trend of nitrate concentration is increasine.	25,000	1	29 05	Monterey	Ш	1999
233 5700707	5700707-002	ROLLING ACRES WAT MUTUAL	Rolling Acres Water System Repair and Upgrade	The RAMWC water system was installed initially as a fire protection system in 1969, but has been utilized for potable water for the developed subdivision since 1975. Upgrades to the system are necessary to make the system compliant with today's recommendations for drinking water. An engineering firm, West Yost Associates, was engaged to provide a proposed project for remediation of the problem, and in consultation with CDPH regarding non-compliance symptoms, it is proposed to rehabilitate the existing well, replace the pressure tank and all well site equipment. This will entail (1) removing the pump and performing video logging of well, (2) performing well cleaning, including acid and biocide treatment, swabbing, surging and brushing, (3) performing video survey to confirm well condition, (4) testing pump well, (5) sizing and selecting new vertical turbine pump powered by a 40-hp, 440-volt constart speed motor, (6) extend pedestal to required height, (7) install pump, (8) engineer and construct concrete pad for the tank and well, (9) replace electrical panel, and (10) re-gravel the well site. It is anticipated that these upgrades will eliminate the positive tests for total and fecal coliforms and help us to maintain DHS compliance. This approach for upgrading the system has been chosen, rather than converting the system to a more efficient variable speed (on demand) pump with small storage tank, to maintain the County	5	c	The well servicing the current members of the Rolling Acres Mutual Water Company (RAMWC) was drilled in 1969 as a mandate by Yolo County to provide the means to apply for subdivision status by the availability of water for required fire protection services. The well is 504' deep, 18" in diameter, with a current water level between 50-70'. It is sealed from the surface to approximately 50' depth. In 1975, the homeowners living in the subdivision and using the well for drinking water incorporated the existing system as RAMWC and maintained the facility to operate for potable home use as well as for fire protection serving over 50 local homes. A used 10,000-gallon supply tank was bought in 1975 to replace the original 5,000 tank, and was placed on an unegineered and inadequately structured tank base. There are currently 13 homes relying on the system for potable water with a total of 31 full time residents. Yolo County requires monthly testing of the RAMWC well for compliance with Title 22, California Code of Regulations, Chapter 15, Domestic Water Quality and Monitoring, maximum contaminant level (MCL) for total coliform and fecal coliform (E. coli) bacteria in drinking water. The MCL for coliforms is the confirmation of the presence of coliforms (total coliforms, fecal coliforms, or E. coli) by a certified environmental laboratory and is reported to DHS. Since inception of testing there has been chronic positive	185,650	11	33 09	Yolo	I	2009
234 5400660	5400660-002	LAKE SUCCESS MOBILE LODGE	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate F alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	0	с	Water System currently violates the Nitrate MCL.	500,000	18	20 12	Tulare	III	2012
235 1502017	1502017-002	WHEELER FARMS HEADQUARTERS	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate F alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	0	С	Water System currently violates the Nitrate MCL.	500,000	13	25 19	Kern	Ш	2012
236 3500526	3500526-001	Arnold Park (O Bannon s MHP)	Planning	locate new source water or treat existing groundwater F for nitrate removal	0	С	Nitrate level exceeding 45 mg/L in only supply well	10,000	14	28 05	San Benito	Ш	2000

237 1500152	1500152-003	MIRASOL COMPANY WATER SYSTEM	Project to Correct Bacteriological Problems- E.coli & total coliform Positive Samples	As part of the planning project, we will evaluate different alternatives including x-connection control program, installation of continuous chlorination treatment, and consolidation with Buttonwillow CWD located about 1.5 to 3 miles away from Mirasol Company Water System facilities.	F	0	С	Our water system is experiencing bacteriological quality problems. In April 2011, our distribution system showed E.coli positive samples and well showed total coliform positive sample and we failed the total coliform MCL. A boil water notice was issued in April 2011 and is still in effect. In August 2011, our water system again had E.coli positive samples from the distribution system and again failed the total coliform MCL. An updated boil water notice was issued on August 11, 2011 and continues to be in effect.	1,500,000	13	30 19	Kern	Ш	2012
238 4300630	4300630-002	Foothill Mutual Water	Construct New Well	Construct new deep well to locate water that complies with state standards	F	0	С	Source exceeds nitrate MCL	10,000	15	30 17	Santa Clara	П	2007
239 5402047	5402047-001	GLEANINGS FOR THE HUNGRY	Nitrate compliance	Drill a new well.	F	0	С	Exceeds nitrate MCL.	100,000	12	31 12	Tulare	ш	2001
240 1502699	1502699-001	EAST WILSON ROAD WATER COMPANY	Nitrate compliance	Ion exchange System	F	0	С	Nitrate levels exceed allowable MCL of 45 mg/L. We are at 87 mg/L. Included is a copy of Compliance Order #03-19-010-004	150,000	14	35 19	Kern	Ш	2002
241 4301004	4301004-001P	EMERALD VALLEY MUTUAL WATER COMF	A Emerald Valley Estates Water Company New Wells Project	The following solutions to solve the high nitrate problem were evaluated: 1. Blending the water from the three wells 2. Reverse Osmosis system 3. Separate irrigation and potable water system 4. Drill new wells) Blending: Blending the water from the three wells would require installing a separate supply line from the wells to the storage tank. A new well would have to als be drilled to correct the Ohlone Well "work standard" problem and probably another well would be required to satisfy long term water requirements. The cost for this proposal was estimated to be \$200,000. Due to the cost this solution is not being proposed. ) Reverse Osmosis System: Installing a Reverse Osmosis System on the New Well would be an ideal solution, if the disposal of the "concentrate" from the RO System coul be developed. Currently there is no sewer system available to accept this concentrate. Hauling the concentrate to a disposal site is cost prohibitive. Due to not having a solution for disposing of the RO concentrate this solution is not being considered. ) Separate Irrigation & Potable Water Systems: Separate the current water system into an irrigation system and potable water systems. From a water conservation standpoint this would be an ideal solution, because it would allow the Water Company to use the existing water supply from the current New Well for irrigation. new well would have to be drilled to solve the "work	F o d d	0	C	Emerald Valley Estates Mutual Water Company, Inc. is a community water system located two miles northwest of the City of Gilroy, California. The Water Company provides potable water (9,000,000 gallons annually) to approximately 50 residents through 15 active service connections. The community consists of 18 residential lots, 2 ½ acres or more, of which 13 of the lots have residences constructed on them. When the 4 empty lots have homes constructed on them, the water demand will be approximately 12,000 gallons. The Water Company accesses its water from the Llagas Subbasin. "Land use over the Llagas Subbasin is mostly mixed agricultural and rural residential development, with two main incorporated areas consisting of the cities of Morgan Hill and Gilroy. While the incorporated areas are served by municipal wastewater systems, the unincorporated dispasal have lagas Subbasin. Thus, just about every known source of nitrate is present, or was present at some time, in the Llagas Subbasin." The Water Company consists of there active groundwater supply wells: Ohlone Drive Well, Day Road Well and New Well; one 37,500 gallon steel storage tank; and a distribution system. The Ohlone Drive Well has an output of 10 gpm. Its nitrate level average is 23 pm.	125,000	13	35 17	Santa Clara	Ι	2012
242 5403110	5403110-001	SIERRA MUTUAL WATER CO	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	F	0	с	Water System currently violates the Nitrate MCL.	500,000	15	39 12	Tulare	Ш	2012

243 2701241	2701241-002	ENCINAL RD WS #1	Encinal Rd. WS#1 Disinfection/Nitrate Removal System	Central Portable Exchange System - for Nitrate removal F Quoted by Culligan July 23, 2007 \$111,600 Cost of land and building to house system \$100,000 Cost to bring in power \$ 25,000 Cost to separate domestic lines from irrigation for treatment of domestic water only - to reduce cost \$ 75,000 Engineering costs \$ 38,400 Total Estimated Costs \$350,000 The treatment system will include a disnfection component that will disinfect all domestic water using liquid Sodium Hypochlorite. Monitoring devices and controls will be an integral part of the system to bring it into compliance with Health Department requirements.	0	C	Encinal Road Water System #1 has one well serving businesses and homes with domestic and irrigation water. The system has one older Ag. well with no treatment and no storage. Nitrate levels in this system are increasing each year and a recent test showed 228 mg/l against an MCL of 45 mg/l. For the past several years every Coliform test was positive for total Coliform and each time the well requires disinfection. Due to the unique geological setting a new well can not be drilled below 450 feet due to a granite shelf. Therefore, Nitrate contamination can not be avoided by drilling a deeper well. The company is under a Compliance Order from the Monterey County Health Dept. to bring the system into compliance with all health requirements. This will mean that a treatment system must be installed. There are no known nearby systems with better water that would afford possible consolidation.	350,000	14	41 05	Monterey	I	2007
244 4300996	4300996-001	Valley View Ranches	Valley View Ranches Mutual Water Company	We would be installing anion exchange treatment equipment sufficient to treat 4500 gallons (75x 15 homes x avg 4 people per home) per day. We would also need to install storage tanks for buffering peak flow demands. We would also need a booster pump to pressurize the new distribution loop and possibly an electrical service upgrade. Then, 3000 feet of distribution pipe as a secondary distribution service to supply just potable water to each home. Landscape and fire hydrants and possibly fire suppression service will remain on the existing storage system and distribution loop. We may use the primary well as a source, or a secondary well, to be determined. We will run secondary service lines to each house and separate landscape service from potable water. We will need to install incremental backflow devices at each house.	0	C	CDPH is requiring us to come into compliance with the MCL for nitrates, which we have historically been significantly over. Our water company has made a proposal to come into compliance by installing distillation units in each home which would service multiple point of use taps. Distillation is certified by the EPA as a "Small System Compliance Technology" (SSCT). Despite that, CDPH rejected that plan. We also offered to installed point of entry anion exchange units. The EPA lists Anion Exchange as a Best Available Technology for nitrate treatment. CDPH also rejected that plan. Each home is currently treating drinking water with POU reverse osmosis systems. The EPA lists RO as a Best Available Technology for nitrate treatment. CDPH rejects that as a solution. CDPH has asked us to install an anion exchange and storage equipment, this would require us to install a dual distribution system. This would require us to install roughly 3000 incremental feet of 4" pipe under our street since it would be prohibitive to treat all of our water (including landscape). We would also need to install new service lines with incremental backflow devices to each house. Most of these secondary service lines will have to pass under significant installed landscaping, including hardscape such as driveways and walkways. Both of these latter two items will add significant expense over	290,000	15	45 17	Santa Clara	U	2008
245 5401038	5401038-001	AKIN WATER CO.	Excess nitrate - consolid w Porterville	Connect to city of Porterville to provide water meeting F nitrate standard	0	С	Ongoing nitrate contamination; with notification	250,000	22	50 12	Tulare	Ш	2004
246 5000217	5000217-002P	FAITH HOME TEEN RANCH	Faith Home Teen Ranch/San Joaquin Valley Teen Challenge Well #2	We are applying for funding that will allow test drilling F to find an uncontaminated source of water and develop that source. This will include the cost of drilling, well casing, installation of pump and all necessary electrical service and new distribution piping for residential use.	0	с	The Faith Home Teen Challenge Ranch drinking water for approximately 50 residents has been pumped from one on-site well. That well has tested high for nitrates. To remedy the problem a new well was drilled in 2008 in search of acceptable nitrate levels. The new well produced water with an acceptable level of nitrate, however, the new well now exceeds the standards for arsenic. We now have two wells which exceed state drinking water standards.	0	1	50 10	Stanislaus	ш	2011

247 2701036	2701036-001	APPLE AVE WS #03	Apple Ave WS #03 - Nitrate compliance	Drill deeper well or consolidate with City water system.	F	0	с	Well exceeds nitrate MCL - may need to hook up to City water.	64,896	20	60 05	Monterey	Ш	1998
248 2702094	2702094-002	BLACKIE RD WS #18	Blackie Road #18	New water storage tank.backup power generator.Nitrate treatment plant.	F	0	С	Single well nitrate contamination, no emergency power.Tanks corroded, not acceptable designBankrupt systems	800,000	20	60 05	Monterey	II	2008
249 2701063	2701063-002	RIVER RD WS #25	drilling of new well at 52 River Rd.	In order to allow new uncontaminated water to be produced, a new water source, a new well will be drilled adjacent to the existing water source. However the depth of the new source should be several hundred fee deeper than the existing one. All required pumps, pipes, machinery involved to produce such water source will be utilized.	F d t	0	с	The water system exceeds the Maximum Contaminant Level allowed for nitrates in drinking water. To solve this problem a new well drilled deeper should allow for drinkable water to be available.	60,000	19	65 05	Monterey	II	2008
250 1500373	1500373-002	SEVENTH STANDARD MUTUAL	Consolidation project - Category F excessive nitrates in distributed water.	Installation of a 12" pipeline to delivery water to the general neighborhood and new pipelines and meters to each resident. The scope of the project also includes disconnecting and abandonment of existing wells and tank.	F	0	С	Nitrate levels exceed drinking water standards in both wells. We notify residents on a quarterly basis on the nitrate levels. In addition, iron and other chemicals also exceed recognized standards. This system serves 22 family homes each consisting of 2 acres or more. The water system is approximately 50 years old and maintaining the current system has involved frequent water disruptions and high flat rate increases for each resident. Numerous options have been explored. The most efficient and cost solution to this on-going problem is consolidation with the nearest available mutual water company. Some of the solutions explored include the cost to drill a new well with unknown drinking water quality and a nitrate filtration system.	1,890,350	22	66 19	Kern	III	2009
251 1500373	1500373-001	SEVENTH STANDARD MUTUAL	Alleviate high 1,2-	UNDETERMINED UNTIL STUDY IS DONE. OTHER -	F	0	с	1,2 - D1 CHLOROPROPANE ABOVE MCL IN BOTH	1,890,350	22	66 19	Kern	ш	2006
252 2700686	2700686-006P	GARLEN COURT WS	Treatment Plant for Nitrates for Garlen Court Water System Well	A small treatment plant would be designed and built for the Garlen Court Water System to treat the water from the System's only well. The plant will include treatment for nitrates, monitoring equipment and tanks for containing any waste effluent. It is hoped that the System's current pump and distribution infrastructure can continue to be used.	r F	0	C	For several years the nitrate levels in the Garlen Court Water System have been high. In December 2003 the Monterey County Health Department ordered the System to increase the frequency of sampling to quarterly due to the fact that a November 2003 sample had nitrate concentrations of 43 ppm, which exceeded 50% of the MCL in violation of Section 64432.1(a)(2), Chapter 15, Title 22, California Code of Regulations. A Bottle Water Order was also issued which has remained in effect until the present. A water sample taken in June 2008 showed nitrate results of 46 ppm. A confirmation showed nitrate results of 45 ppm. Based on these findings the Monterey County Department of Health issued Compliance Order No. 08-013 in early 2009 which foud the System in violation of the provisions of the California Health and Safety Code (HSC), Division 104, Part 12, Chapter4, AKA the California Safe Drinking Water Act and California Code Regulations (CCR), Title 22, Chapter 15. The System was ordered to provide an acceptable permanent water source by pursuing for instance, "new well development, water system consolidation, water treatment, etc. The System decided that the alternative that would provide the best long term solution to the problem would be the installation of a treatment facility for the existing well. The System is requesting funding for a treatment facility.	178,000	23	69 05	Monterey	Π	2009
253 1500494	1500494-001	WILSON ROAD WATER COMMUNITY	Nitrate Correction Project of Wilson Road Community/Intertie with East Niles CSD	A treatment or intertie with East Niles CSD is needed to solve the nitrate problem.	F	0	с	Wilson Road Water Community has only one well with nitrate problem.	1,000,000	20	72 19	Kern	Ш	2008

254 1500569	1500569-001	VALLEY VIEW ESTATES MUTUAL WATER CO	System 4 high nitrate levels - need for new well	It appears our community water system must replace Well #4 because of the nitrates contamination. This was the recommendation of Mr. Abdel Shurbaji of the California Department of Public Health, Division of Drinking Water and Environmental Management. Mr. Shurbaji inspected our system on July 23, 2007, after the cycle test results showed a high nitrate level averaging 58 mg/L. We predict from past experience a new well would need to be approximately 450 feet deep. Funding is also being requested for the pump, required electrical controls, utility pole, and necessary piping to connect the system. A new well is important in order to maintain our engineered GPM requirements. We are also requesting funding to move at least one and possibly two septic tanks which may be causing contamination.	0	с	Well #4 has a nitrate level that often exceeds the MCL of 45 milligrams per liter. Since August of 2006, nitrate levels have varied from 24 to 106 mg/L. A well cycle test was completed on July 11, 2007, and the average result of this test showed nitrates at 58 mg/L. We were required by the California Dept. of Public Health, as per Section 116450 of the Health & Safety Code, to notify customers of these results and the possible health risks especially to infants less than 6 months old and pregnant women. We were also notified that we would be receiving a compliance order for the nitrate MCL failure.	58,000	39	79 19	Kern		2007
255 1500584	1500584-001	GOOSELAKE WATER COMPANY	Second Well for the Water System or inter-tie project for increasing the reliability of the water su	Funds are needed to drill a second well or consolidate F with nearby water system. The goal of the project is to ensure served people of a reliable domestic water supply.	0	С	With only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	200,000	32	80 19	Kern	III	2008
256 5402048	5402048-001P	River Island Service Terr #2 [Del Oro Water	( Water Supply Reliability	Locate, Drill, outfit and install new wells.	0	с	System's wells violate the Nitrate MCL.	10,000	29	87 12	Tulare	ш	2005
257 2000557	2000557-002	MD#43 MIAMI CREEK KNOLLS	Construct New Well	Construct a new well, storage and distribution facilities. F This system would also be consolidated with the MD#60- Dillon Estates system.	0	с	The well exceeds the nitrate MCL and provides an inadequate supply of water. Also, the system's storage and distribution facilites are old and deteriorated.	1,039,500	37	100 11	Madera	ш	2007
258 5400805	5400805-002	SOULTS MUTUAL WATER CO.	Soults MWC Water Quality	P DEEPEN WELL, RUN WATER CONNECTIONS THROUGH F FRONT YARDS. OTHER - DESIGN AND CONSTRUCTION	0	С	BACTERIOLOGICAL & NO3 > MCL	100,000	36	100 12	Tulare	ш	2006
259 3900649	3900649-002	GLENWOOD MOBILE HOME PARK	Well Replacement and pressure tank to meet nitrate standards and MDD PHD requirements	Construct a 8-10 inch diameter well with a PVC casing to F a depth that has tested below the MCL for nitrates. LPA records of notes wells constructed to a depth below 500 feet and sealed to 250 feet below surface grade, have tested for nitrates below the MCL. New Well will require a water meter, capacity test, full Title 22 water analysis, electrical drop from PG & E, subpanel, surface pad, new distribution line to the water system and 5 horse power pump.The Water System currently has two bladder tanks. A new Hydro tank that is capable to hold a MDD worth of water is required. Mobile Home Park serves 36-service connections with 72 occupants. Per HCD standards of 25 gallons per person per day, system requires at least 2700 gallons of water held in storage. System still does not have a meter installed to determine MDD and PHD flows.Consolidation is not an option. Water System is located several miles from the city of Stockton and any water utility service. The closest Small Public Water System is a mile away.	0	С	The system was confirmed over the nitrate MCL on November 24, 2009. The LPA issued a Notice of Violation for exceed the standards for nitrates. The owner was reuierd to conduct public notification to the residents and to submit a Complinace Agreemnt to the LPA for when and how the system would return into compliance. The water system begain public notification on January 1, 2010 and submitted a Compliance Agreement to the LPA indicating a new well would be drilled by June 2011. In March of 2011 the water system asked for an extension until March of 2012 to construct the well as he did not have the funds. As of June 27, 2012 the well has not beed constructed, due to limited funds.	50,000	50	100 10	San Joaquin	ш	2012

260 2700738	2700738-001P	SAN MIGUEL WS #01	Well replacement and system upgrades	We have two wells that supply 34 houses. These wells F are in need of replacement with deeper wells. We have researched extensively, and have determined that we can get quality water at a deeper depth. We were ordered to come into compliance due to high nitrate levels. Current levels are high 50's low 60's in both wells. We are on a bottled water notice from Environmental Health Dept., and are on regular testing requirements. We are in hopes of installing a new well(s) to 600' with a ten inch casing, and a much deeper seal to rectify our water quality issue. We are fairly confident that we will have a long term, potable supply of water. Along with dilling new well(s), we will be destroying our other well(s), so as to not contaminate our new source. We are also in need to recoating our storage tanks, and replace existing meters for the housing involved.	0	с	We have very high nitrate levels in both wells. Currently we are on a bottled water order from the Environmental Health Department. And we have been ordered to come into compliance to meet State standard MCL levels. Both of these wells are circa 1963 and 1975 respectively. Both wells have shallow sanitary seals. One well has only forty foot seal, and the other is only fifty feet down from ground surface. We feel that this is the issue with our water quality. Public nitification is currently in effect, and constant monitoring is also being enforced.	0	34	100 05	Monterey	Ι	2009
261 1502690	1502690-004	DUNE III Water Co., LLC	Duen III - Two well chlorination	This request is to provide safe drinking water. To install F a chlorination devices to mitigate the coliform violations that have occurred. Consolidation would not be the best sollutions since the two wells are widely separated and introducting chlorination at one spot would not solve the problem of adequately getting it throughout the system. The two separate wells have their individaul storage facility. Since this is not a "circulating system" the chlorination would have to be introduced to each separate facility in order to solve the problem.	0	C	Our intent is to provide safe drinking water. However in 2011 it was cited for a violation of Total Coliform in two consecutive months. Our best determination was that it was caused by a possible backflow from a residence. This problem was handled by a manual application of chlorination into the distribution lines. It was suggested by the CDPH that we consider the installation of a Granular Calcium Hypochlorite, 65% available chlorine system. It would be required that all field maintenance staff be familiar with the installation procedures and operations. Also involved would be the building site requirements for the additional area for the equipment/supplies to be stored in a protected/housed environment. This request is to include two separate storage sites.	59,000	32	100 19	Kern	II	2012
262 4000501	4000501-001	HALCYON WATER SYSTEM	Ozone and filtering syster	n Central RO system or other treatment scheme to lower F	0	с	water system exceeds the selenium and nitrate MCLs	100,000	35	105 06	San Luis Obispo	IV	2011
263 2700665	2700665-001	OAK HEIGHTS W & R CO INC	Funding for Compliance Order # 08-002, Nitrate Contaminant Removal	The following are suggested solutions to address the F Nitrate Contaminant problem: (1) A certified professional install a reverse omosis system under the sink of every Oak Heights Water and Road Company, Inc., residence (35 units) (2) Install an Ion Exchange system at the well source. (3) Drill a new well and hope that the nitrate levels are in compliance. This would require additional pipe, connections and electrical hook ups. (4) Install a Nitrate Removal system and capture pond at the well source. This would require the expensive removal of nitrate sludge captured in the pond, which is considered a waste hazard (not cost effective. (5) Hire a certified blend operator, which requires constant monitoring (not cost effective).	0	C	The Oak Heighats Water and Road Company, Inc., has been notified by the Monterey County Department of Health that they are in violation of the California Safe Drinking Water Act and California Health and Safety Code Regulations (Section 64431 CCR/Section116555 HSC). A Compliance Order No. 08-002 was issued to the Oak Heights Water and Road Company, Inc., on March 25, 2008. The water systems nitrate levels exceded the legally permissible level of 45 mg/L. The Monterey County Department of Health ordered the Oak Heights Water and Road Company, Inc., to come into compliance by October 1, 2008. The water system is comprised mostly of fixed income families or families earning less than \$45,000 per year. The water system does not have the monetary reserves/resources to finance a new water source (drilling a well), purchase equipment for treatment and monitoring the water system or hiring a certified blend operator. The Oak Heights Water and Road Company, Inc., cannot comply with the Monterey County Department of Healths compliance directive, without financial assistance.	50,000	35	105 05	Monterey	I	2008
264 5400651	5400651-001	BEVERLY-GRAND MUTUAL WATER	Excess nitrate - consolid w Porterville	Excess nitrate - consolid w Porterville     F	0	с	Ongoing viol of nitrate w public notification	801,000	28	108 12	Tulare	Ш	2004

265 5700788	5700788-001	NORTH DAVIS MEADOWS	Connection of the North Davis Meadows County Service Area Public Water System to the City of Davis W	This Project for the Nitrate reduction within the North Davis Meadows County Service Area would be by induction into the much larger City of Davis Public Water System via pipeline connection. Currently the North Davis Meadows water system is made up of two 500 ft deep wells capped at 50 ft, and one above ground storage tank. The system is currently owned by the County of Yolo, but operated under contract by the City of Davis. The wells were drilled in 1996 and 1997 and there is a golf course irrigation well als connected to the system only to be used in an emergency. The distribution system is essentially looped between older and newer sections of the neighborhood and is comprised of PVC water pipes in 6 inch and 8 inch diameters that feed the 95 parcels in the subdivision. Nitrate levels have been monitored in the wells since inception, and multiple alternatives to fixing the nitrate problem have been reviewed. The City of Davis Public system is obviously a much larger system with 21 wells, etc. The connection via pipeline to this sytem, represents a much more stable environment with regards to nitrates and other contaminants. A pipeline connection would include trenching 8270 linear feet and installation of 12" Ductile Iron Pipe to the City's Water Main Tie-In. This connection would also include the necessary 1" water meters to the CSA's distribution system and all automatic control valves as well as Pipe	0	C	North Davis Meadows County Service Area Water System has experienced a problem with Nitrate contamination in both of its drinking water wells. It has had to shut off both 500 ft wells at one point due to contamination. Nitrate levels have been monitored in the wells since their inceptions and the levels have continued to escalate in the last 10 years. Currently there is one well that is not in use due to exceeding the nitrate minimum contaminant level. The second well was shut off at one point as well, and due to exceeding nitrate levels the County Service Area has decided to install a inlatable packer to block off the upper aquifer, as a temporary solution. This well is currently under the MCL level with the packer installed, however results also fluctuate. The source of the nitrate in the NDM wells in unknown, however there are septic systems in the area and the wells are surrounded by agricultural activities.According to CDPH this Category F project is one that would rectify the directive currently standing. This Nitrate Contamination is one that does not meet the Operational Requirements listed in Section 11655 of the Drinking water statute stating "Any person who owns a public water system shall ensure that the system does all of the following: (1) Complies with primary and secondary drinking water standards"The Nitrate contamination is one that also exceeds California Code of Regualtions Tittle 22. Domestic	1,873,948	35	110 09	Yolo	I	2009
266 5400735	5400735-002	RODRIGUEZ LABOR CAMP	Rodriguez (California Camp) Water System Safe Drinking Water Project	The proposed project would be to consolidate with the F Richgrove Community Services District water system. The project would include the purchase of capacity into the Richgrove system as well as the extension of a water main from Richgrove or the new well site to serve this farm labor community.	0	С	The Rodriguez (California Camp) Water System has one water well that provides water to the residents of this Farm Labor Camp. The well provides water that exceeds the Maximum Contaminant Level (MCL) for nitrate with levels in the range of 130 ppm. The system's owner has received Notices of Violation and Compliance Citations as a result of this high nitrate level, almost 3 times the MCL.	500,000	35	110 12	Tulare	III	2007
267 3701341	3701341-002	BUTTERFIELD OAKS MOBILE HOME PARK	Water System Treatment and Storage Construction	The goal of the project is to resolve the Nitrate issue F with a treatmennt plant, improve water storage and fire flow with a new tank and better manage water usage and conservation by installing customer meters IAW	0	с	System currently is in MCL violation for Nitrates, has inadequate storage and has no means to mange water usage/conservation due to no customer meters.	800,000	48	120 14	San Diego	V	2012
268 2701068	2701068-002	IVERSON & JACKS APTS WS	lverson and Jacks Apts Water System	Provide clean pure drinkable water for my 30 families. F There are some 150 people, 90 of which are children. I supply affordable housing for these families. The average rent for family is \$600.00.The adults are by large farm workers. Nitrate intrusion in the water, from surrounding farms is a danger to both children and adults. My well tested 74mg/l the acceptable amount is 45mg/l 1 propose to update my water system by drilling a new third well and installing a storage system. The new well that was recommended – 800ft.deep with a 620ft sanitary seal, a 3hp pump, and a 5000gal storage tank. I would contact a geological engineer for recommendations for the project. Also I would seal the 2 contaminated wells on the property to insure no cross contamination.	0	c	Iverson & Jacks Apts Ws Problems: Continued contamination of Nitrates in water supply.Deemed unsafe for drinking and cooking testing at 74mg/Ll tested on7/1/07 State drinking water limit 45mg/L	10,000	31	150 05	Monterey	Η	2007
269 2702007	2702007-002	VIERRA ESTATES WS	Vierra Estates	New water storage tank (250,000 gallon).Emergency F power generator.Nitrate treatment plant.	0	с	Single well nitrate contamination.Existing tank corroded, no useful life left.No back-up power.Many bordering residences desire to join system.	900,000	48	164 05	Monterey	II	2008

270 1500578	1500578-002	LONG CANYON WATER COMPANY CORP.	Long Canyon - Weldon Regional Project Feasibility Study	The study would evaluate the best location and size of the pipeline that would inter-connect these systems an also the needed storage tanks and booster pumps that would be needed to supply the entire interconnected small systems. The study would evaluate the needed source capacity for the entire system and the need for additional new source(s) to serve the completed project.	F d	0	с	This project would inter-connect small water systems that have existing sources of supply in violation of arsenic, nitrate, uranium and secondary MCL's. The project would also interconnect small community water systems that have only one existing source of supply. The project would serve two schools who have uranium and nitrate water quality problems and other small non- community systems in the area that have nitrate MCL violations.	80,000	67	197 19	Kern	111	2007
271 1500578	1500578-003	LONG CANYON WATER COMPANY CORP.	Long Canyon - Weldon Area Regional Solution Construction Project	The construction project would include new sources (if needed) to meet demand of the entire completed system, 11-mile long pipeline that would inter-connect these systems and also the needed storage tanks and booster pumps to supply the entire interconnected small systems.	F	0	с	This project would inter-connect small water systems that have existing sources of supply in violation of arsenic, nitrate, uranium and secondary MCL's. The project would also interconnect small community water systems that have only one existing source of supply. The project would serve two schools who have uranium and nitrate water quality problems and other small non- community systems in the area that have nitrate MCL violations.	15,000,000	67	197 19	Kern	III	2008
272 5400616	5400616-001P	LEMON COVE WATER CO	Alleviate nitrate exceedance [planning	Drill a new well or connect to system OTHER- Design and Construction	F	0	с	One well system which has nitrates above the MCL	0	50	200 12	Tulare	Ш	2006
273 2700771	2700771-001P	SPRINGFIELD MWC	Springfield MWC - Nitrate	We need funds for evaluation, design, and repairs.	F	0	С	Well exceeds nitrate MCL.	0	42	200 05	Monterey	П	1998
274 1500575	1500575-001	SAN JOAQUIN ESTATES MUTUAL	Nitrate compliance	Equipment repair and replacement or drill a new well depending upon investigation or laying a new water lin less than a mile to east Niles CSD line	F	0	С	Excessive Nitrate Levels in the system well	350,000	59	220 19	Kern	ш	2003
275 2010012	2010012-003	HILLVIEW WATER CO-RAYMOND	Raymond 2010012 Nitrate and Arsenic Compliance	Raymond Wells No. 8 & 9 both have Nitrate levels which exceed the Nitrate Maximum Contaminant Level Raymond Well No. 8 is the largest water producer of al the Raymond wells. Several of the Raymond wells also have Arsenic levels which exceed the Arsenic Maximum Contaminant Level (MCL). Raymond has a total water supply which is marginal at best and the Nitrate levels i the blended well water exceed the MCL. We cannot remove Raymond Well No. 8 from service since it is the primary source for the Raymond system. We propose t develop several wells outside the existing service area and pipe the water into Raymond, expand the storage capacity to allow blending of all the sources prior to entering the distribution system. This solution will be more cost effective than trying to treat the existing wells for Nitrate or Arsenic and also will result in lower operational and maintenance costs.	F	0	С	Raymond Wells No. 8 & 9 exceed the Nitrate Maximum Contaminant Level. Well No. 8 is one of the primary wells in Raymond which has a marginal water supply at best. Arsenic is also a problem in several of the wells. The Nitrate level in the blended well water does exceed the Maximum Contaminant Level and Hillview is required to notice our customers quarterly of the violation. We are unable to take well No. 8 off line since it is the primary source of water for Raymond. Some customers also are supplied with water which exceeds the Arsenic standard since we are unable to blend those wells with wells which have little or no Arsenic prior to the distribution which serves these few customers.	1,999,650	80	243 11	Madera	Ш	2005
276 1500544	1500544-003	ENOS LANE PUBLIC UTILITY DISTRICT	Nitrate Removal/Blending Treatment or Consolidation with Vaughr Water Company	One alternative is to provide nitrate blending treatment. The other option is to conslidate with Vaughn Water Company which is over 3 miles away.	F	0	С	We have two systems wells. one of the wells exceed the nitrate MCL of 45 mg/L.	10,000	82	250 19	Kern	Ш	2007
277 5403043	5403043-001	YETTEM WATER SYSTEM	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	F	0	С	Water System currently violates the Nitrate MCL.	500,000	64	350 12	Tulare	Ш	2012
278 5400666	5400666-001	WATERTEK - GRANDVIEW GARDENS	Nitrate Compliance	DRILL A NEW WELL. or connect to City of Porterville	F	0	С	EXCEEDING NITRATE MCL	250,000	102	350 12	Tulare	Ш	2006

279 5400966	5400966-002	WESTLAKE VILLAGE M H P	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	F	0	С	Water System currently violates the Nitrate MCL.	500,000	139	350 12	Tulare	111	2012
280 5410007	5410007-003	LSID - Tonyville	Tonyville Interconnection	A pipeline that interties the District and the City of Lindsay is needed to provide the District with water during canal water supply interruptions and eliminate the need to utilize nitrate-contaminated groundwater wells. The intertie also affords the opportunity for the District to pursue permanent domestic water system operations by the City of Lindsay. The proposed Project consists of the installation of an intertie pipeline between the Tonyville water distribution system and the City of Lindsay's water system. This intertie will allow Tonyville to receive water from the City of Lindsay during periods when the Friant-Kern Canal is out of service and cannot deliver water for the Tonyville water treatment plant. The Project provides a dependable water supply during canal outages in the Friant-Kern Canal. In addition, this intertie will enable the District to eliminate its use of nitrate-contaminated wells.	F	0	с	The Lindsay-Strathmore Irrigation District (District) provides water for domestic and/or agricultural irrigation purposes. The District utilizes imported surface water as their primary water supply. The District has a contract for Class 1 water from the Central Valley Project. The water is delivered via the Friant- Kern Canal. The District owns and operates a water treatment plant that serves the Tonyville Tract. The Tonyville system serves approximately 50 connections. The District utilizes five (5) groundwater wells for the Tonyville system when surface water is not available. These wells, however, have nitrate levels that exceed the regulatory maximum concentration level (MCL). The nitrate concentrations ranged from 43 mg/l to 65 mg/l in twenty samples collected quarterly in 2006. The nitrate concentrations of the well water averaged approximately 54 mg/l. One well has not been utilized since 2005 due to high nitrate levels.	1,038,000	50	400 12	Tulare	III	2007
				The proposed Project will consist of the design and construction of the interconnecting pipeline. The District and the City of Lindsay will also need to develop the terms and conditions for the operation and maintenance of the pipeline. The Department of Health Services is encouraging the District to consolidate its small domestic water systems into nearby domestic	1			The Friant-Kern Canal is dewatered every two to three years during the winter months for maintenance activities. In addition, the canal is subject to unscheduled outages that would disrupt the water supply. These situations result in the District having to utilize its nitrate-contaminated wells to meet domestic water demands.						
281 5400670	5400670-002	TRIPLE R MUTUAL WATER CO.	Well Replacement and Nitrate Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, POU/POE, centralized treatment, and replacement source(s).	F	0	с	Water System currently violates the Nitrate MCL.	500,000	130	400 12	Tulare	111	2012
282 2701515	2701515-001	MOSS LANDING HARBOR WS	Moss Landing	New well (minimum 350 gpm).Water treatment plant.Replacement of waterlines (12,000 ft.).	F	0	с	Single well nitrate contamination and seawater intrusion.Undersized asbestos cement waterlines.	3,500,000	134	402 05	Monterey	Ш	2008
283 1500409	1500409-002C	BROCK MUTUAL WATER COMPANY	Brock Mutual Water Company-Consolidation with Vaughn WC	As part of this consolidation project, Brock Mutual Water Company will consolidate with the neighboring Vaughn Water Company. Vaughn Water Company's pipeline is less than 1,000 feet from Brock Mutual WC. As part of the project new distribution system, meters, and service lines will be installed.	F	0	С	Brock Mutual Water Company's well produces water with nitrate above the MCL of 45 mg/L. The Water Company is in violation of the nitrate MCL.	213,380	155	500 19	Kern	III	2008

284 2701676	2701676-007P	SAN LUCAS WD	Well Replacement and Pipeline - San Lucas Water District	A "Hydrogeolic Characterization and Test Well Feasibility Analysis" was prepared in Sept 2010 regarding the Total Dissolved Solids issue. A supplemental Technical Memorandum regarding the Nitrate contamination issue was prepared in June 2011 Both reports recommended relocation of the well to a location approximately 1,800 feet west of the existing well. The first phase of implementation will be to acquire a temporary construction easement and drill a test well at the indicated location, and implement a comprehensive sampling and testing regime. If the testing program indicates the location is appropriate fo a long-term reliable public water source, the next steps will be to prepare a Project Description, conduct CEQA environmental review, acquire permanent easements for the production well and pipeline, prepare final engineering plans and specifications, advertise for bids, and construct the improvements.	F  5	0	c	San Lucas is a small unincorporated rural farmworker community in southern Monterey County. The municipal water system has approximately 90 service connections, and is owned and operated by the San Lucas Water District. The current water supply is derived from a single groundwater well located in the center of an agricultural field approximately 1 mile south of town. All customers of the San Lucas Water District are presently on an indefinite "Do Not Drink" order from the Monterey County Division of Environmental Health due to excessive levels of nitrates in the District's well. Nitrate levels are currently running approximately 60 ppm. The groundwater from this well also contains excessive levels of Total Dissolved Solids (secondary standard). TDS levels are currently running approximately 2,000 ppm. The Monterey County Division of Environmental Health has directed the San Lucas Water District to implement a new source of water that meets all public water quality requirements as soon as possible. Until that time, the "Do Not Drink" order will remain in effect.	0	88	500 05	Monterey	U	2012
285 3400172	3400172-003	TOKAY PARK WATER CO	Well Replacement	Install intertie with at least one large public water system and replace the existing contaminated well with associated pumping and pumps.	F	0	с	The primary well exceeds the MCL for perchlorate.	50,000	190	525 09	Sacramento	I	2008
286 3700923	3700923-001	LAKE MORENA OAK SHORE MW CO.	Nitrate Compliance	put in treatment	F	0	с	Nitrate MCL violations.	100,280	200	700 14	San Diego	v	1999
287 5401003	5401003-004	EAST OROSI C.S.D.	East Orosi Well Rehabilitation Project	The District proposes to rehabilitate the existing two wells serving the community to provide lower nitrate water. This is considered Phase I of the Water System Improvements planned for the Community.	F	0	С	The District hopes to address high nitrates in the water and end sporadic low pressure conditions.	200,000	700	700 12	Tulare	Ш	2009
288 5401003	5401003-001	EAST OROSI C.S.D.	Planning	DRILL A SECOND WELL FOR FUTURE USE IF PRIMARY WELL IS SHUT OFF. OTHER - DESIGN AND CONSTRUCTION	F	0	С	WELL OVER NITRATE MCL	10,000	700	700 12	Tulare	Ш	2006
289 3700923	3700923-003	LAKE MORENA OAK SHORE MW CO.	LMOS Treatment of dist system and consolidation with another	Project will provide treatment for the nitrates in the Oak Shores syteem thus providing a reliable source of state apporved water. It will then connect the two systems consolidationg them into one, Oak Shores system, and relieving the RV park from manditory bottled water.	F	0	С	Lake Morena Oak Shores currently is in receipt of compliance orders for excessive Nitrates. Additionally, a neighboring smaller system, Lake Morena RV Park, has arsenic and nitrate violations requiring them to use bottled water. Both systems deisrie to consolidate the RV park into the Oak Shores system and have submitted a funding application.	202,280	200	700 14	San Diego	V	2009
290 5400792	5400792-003	WOODVILLE FARM LABOR CENTER	Woodville Farm Labor Center	This is an existing Farm Labor Center near the City of Woodville in S/E Tulare County. The Center was first built in about 1937, and has been remodel several time since the orginal construction date. Details of work done on the existing Well, and storage tank is not known. The system does receive regular inspections. The Woodville Farm Labor Center houses 173 families.	F 25	0	С	County inspection report (June 18, 2007) has revealed that the system is over the maximum contaminant level for nitrates.	100,000	181	725 12	Tulare	Ш	2007
291 5400665	5400665-002C	River Island Service Terr #1 [Del Oro Wate	r ( Correct Nitrate MCL Violation	Locate, drill, outfit and install new wells.	F	0	с	System's sources violate Nitrate MCL.	200,000	239	810 12	Tulare	ш	2005

292 5400542	5400542-006	DUCOR CSD	Ducor Water Supply Project	Evaluate and develop water supply options to obtain F and maintain clean, affordable and adequate water supplies (surface and/or wells). Locate sources of clean and adequate water (surface and/or wells). Design and develop the water supplies, storage and their related water distribution system. Ducor and other water users will benefit from a clean water supply and the prolonged life of their water wells and supplies.	0	c	The Ducor Community Services District (District) South Well has Nitrate contamination above the 45 ppm Maximum Contaminant Level (MCL). The Tulare County Health Department has cited the District for failure to meet the Nitrate MCL. Public notification for Nitrates has been in effect since January/February 2009. The South well is also operating at significantly reduced flows due to casing failure, leaving the District with a restricted and contaminated water supply since 2006.Many area residents, farms, homes and communities are faced with falling water tables and reduced water supplies due to contamination and overdraft of groundwater supplies.	1,500,000	125	850 12	Tulare		2011
293 5710004	5710004-003	Knights Landing Svc. Dist.	Well Replacement for Knights Landing Service District	The proposed project involves drilling a 6" test hole and F generating an electric log to determine the depths and characteristics fo existing aquifer zones. Based on this information a well will be drilled and finished with 16" diameter casing. Based on historical information it is believed that the well will be approximately 500 feet deep. The well will consist of a a verical turbine pump, an electric motor in the 100hp range, and electrical controls. The well will make use of two existing hydropnuematic tanks. The controls of the tanks need to updated and the tanks will require sandblasting and recoating. The site work required will consist of an access road, gravel yard area and a fenced enclosure.	0	C	The proposed water well is needed to replace a 40 year old well (Railroad Street Well) in Knights Landing, California. The Railroad Street Well was completed in 1971. About 20 years ago the casing of the well cracked making it susceptible to shallow groundwater contamination. At the time the casing was repaired by inserting and expanding a sleeve in the well casing at the crack location. In year 2009 multiple successive water quality tests conducted by the Yolo County Health Department on samples taken from the well yielded positive results for total coliform. Subsequent chloring disinfections of the well failed to produce negative results for total coliform. Prior to 2009 and from 2009 to date water quality tests have periodically yielded positive results for total coliform. Inspections of the well have concluded that potential above-ground contamination sources do not exist. It is suspected that the repair of the cracked casing has failed. The combination of the wells age and casing problems has led the District to the decision that the well needs to be replaced in order to maintain a reliable water supply to the community.	500,000	287	1,300 09	Yolo	I	2012
294 5410026	5410026-002	Poplar Comm Service Dist	Water Supply Project - 2007	The Poplar Community Services District (District) has identified the need for a new groundwater well for domestic water supply purposes. The District's proposed project consists of designing and constructing a new groundwater well. The proposed Project will include the preliminary engineering necessary to complete the well including: technical design, reports, California Environmental Quality Act procedures, surveying and permits. The preliminary engineering will culminate with the preparation of final plans and specifications for bidding purposes. As part of the Project, the District will select a general contractor through a public bidding process. Finally, the Project will include the construction and start-up of the new well. The well will consist of approximately 400 feet of 14-inch diameter well casing, a 75 horsepower vertical turbine pump and associated piping and appurtenances. The District anticipates between 700 and 800 gm from the new well. The new well will operate off of water supply system pressure.	0	C	An evaluation was conducted on the system's water demand and the system's capacity relative to the State's revised Title 22 Water Works Standards, effective March 9, 2008.In summary, the evaluation findings are as follows:1. Given available data, the present system water capacity is unable to meet the Title 22 Water Works Standards for meeting Maximum Day Demand (MDD) and Peak Hour Demand (PHD).2. The District's water consumption is higher than similar surrounding communities; 3. The south well nitrate concentrations exceed Title 22 Maximum Contaminant Levels (MCL's) since June 2007, seven (7) out of eight (8) samples; and 4. Recommendations included verification of water demand and alternative projects to increase water production and provide water that meet Title 22 water quality standards.	1,873,000	555	2,200 12	Tulare	Ш	2007

295 0310021	0310021-003C	Amador County Service Area #3/Unit 6	Camanche Water Quality Compliance - Disinfection Bi-Products Requirement Improvements	The project proposes to construct a direct tie from the Wells 9 and 14 to the Storage Tank 9 which will provide the required Contact Time to meet Chlorine Disifection Bi-Product requirements prior to domestic service.	0	C	The North Shore Lake Camanche Ground Water System has had a history of issues with Ground Water Wells. This past year the Department of Health Services required the Agency to establish a new source for the service area prior to any additional connection. A total of wells (6, 8, 9, 10, 12, 12A, & 14) have been drilled and placed in operation over the years of which 3 have gone bad and one has lost 63% of its capacity. A new well was drilled spring early summer of 2007, well 14. It is expected to be fully operational within the next couple of months. Currently wells, 6, 9, 12A & the soon to be operational well 14 are sustaining the service area. Well 9 has had pass issues with bacteria tests. Well 14 has been established to be on the same aquifer and therefore it is anticipated to have similar bacteria issues. In addition these wells have chlorine treatment onsite at the well. These wells provide direct domestic water service to customers. There currently is no contact time for the chlorine treatment prior to this direct domestic service.	0	723	2,386 10	Amador		2007
296 1510025	1510025-003	Stallion Springs CSD	Nitrate/Perchlorate Contaminant New Source Blending Project	The proposed project will consist of the following improvements together with the necessary, engineering, hydro-geology, CEQA processing, administration, land, right-of way and incidental items:1. A new water well with a target capacity of 500 to 600 gpm. A pilot hole will be drilled and water bearing zones will be isolated to test for water quality. Final well construction will exclude zones producing contaminated water. If the well yield and water quality are acceptable, a well pump, piping, well building, chlorination facilities and electrical will be constructed. A connecting pipeline to the District 12" Cummings Valley pipeline will be constructed. 2. A blending tank will be constructed in the Cummings Valley to blend water from each of the water wells before delivery to the Stallion Springs service area. The estimated required capacity is 200,000 gallons. The blending tank will be used to blend water from high nitrate wells (CV- 1) with water from low nitrate wells (CV-2 and future well) to produce a blended water supply meeting all MCLs. 3. A new booster pump station will be constructed to pump water from the blending tank to the District service area. It is estimated that three 500 gpm capacity pumps will be required. 4. Replacement of the existing pumps and motors for CV-1 and CV-2 wells to meet the new head conditions that will occur as a result of using the blending tank. 5. Installation of	0	c	Stallion Springs CSD is a rural community located within the Cummins Valley Water basin that supplies its customers through local groundwater supply wells. Cummings Valley one (CV-1) the Districts largest producing well provides 90% of the source of supply for the District in the peak season. This well exceeds the MCL for nitrate at a range of S0 to 60 mg/L and perchlorate at 34 ug/L at initial startup, or whenever this well is idle during short duration of time. After extended and complicated flushing techniques have been completed District staff must adhere to strict sampling requirements to ensure the CSD does not violate the MCL for both forms of contaminants and as a measure to meet CDPHS standards. For the first few weeks of initial operation the CDPHS requires daily samples for nitrate with a hach field test kit, including weekly nitrate samples and daily perchlorate samples sent to a State certified lab. After the well has been operated continuously for about 3 to 4 weeks both nitrate and perchlorate drop to below the MCL. This amount of discharge is approximately 50 acre feet of water pumped to waste the District wishes to conserve, and cannot utilize due to high levels of chemical contamination.Water may be diverted to waste at anytime when demand is low or nitrate or perchlorate levels are elevated. With final permission from CDPHS, the well is put into service and operated	1,874,600	1,115	3,000 19	Kern	11	2008
297 5410019	5410019-002	ivannoe Public Utility Dist	Wells 1 & 5; Drill new well	Construct new well F	U	C	Nitrate MicL exceeded in Well 1 and Well 5	967,500	1,1/4	4,474 12	iulare	111	2007

298.2010008	5010008-011C	Hughson, City of	Well #7 Replacement Project	The Well #7 Replacement Project will consist of F constructing a new deep well. Currently, City wells yield water from shallow zones, starting at approximately 200' below ground surface. The replacement well will target deeper zones in the 400' to 900' range. Since there is a confining clay zone between 300' and 370', surface contaminants will be reduced or eliminated. Construction of the deep well will ensure the City of Hughson has a long-term, reliable water supply that is not susceptible to surface contaminants. Since all existing City production wells are shallow, this project is vital to the City water supply program. Time is the essence as other wells could soon be lost to nitrate contamination, so constructing a replacement well is urgent. The project consists of (1) drilling a 900' exploratory well to identify deep water bearing zones and associated water quality (ensure exclusion of nitrates), and (2) constructing a deep well based on the exploratory well findings, and (3) site/mechanical improvements, as described below: (1) Exploratory well is required prior to production well construction. The exploratory well will be a special "casing hammer" type well so accurate water quality samples can be obtained. This process will confirm that nitrates have not migrated below the confining clays and that other water quality parameters are acceptable. The	0	C	The City of Hughson relies solely on local groundwater for its drinking water supply through the operation of five (5) high production water wells. Currently no alternative water source supplies are available for the City. In early 2012, the City of Hughson's Well #7 was removed from service due to an MCL violation for nitrates. Laboratory test results indicated water from Well #7 was consistently above the MCL. Equally as alarming, the City is also finding rising nitrate concentrations in other critical City production wells. In response, the City is proceeding immediately with construction of a replacement well. The replacement well will be designed to exclude surface contaminants including nitrates and DBCP.	1,165,000	1,779	6,082 10	Stanislaus		2012
299 5410001	5410001-001	Cutler PUD	Alleviate high nitrate and DBCP	INSTALL NEW WELL, BLENDING TANK, AND F APPURTENANT FACILITIES to replace high nitrate and DBPC wells DESIGN AND CONSTRUCTION.	0	С	HIGH NITRATE/DBCP LEVELS IN INACTIVE WELLS NEEDED TO MEET DEMAND. Reranked from M to F (1/14/02)	2,295,775	1,197	6,200 12	Tulare	Ш	1998
300 5410006	5410006-004P	Lindsay, City of	Perchlorate Blending Facility	Optimize coagulant dosage at SWPT, and install F chloramination at SWTP and at each wellhead. Bench- scale testing designed to determine optimum coagulant dosing.	0	C	Well No. 11 produces water above the perchlorate MCL.	2,118,600	2,335	11,450 12	Tulare	Ш	2006
301 3410016	3410016-003P	Orange Vale Water Company	OVWC Well No. 3 Perchlorate Treatment Project	This project would include treatment of groundwater F from the newly installed Well No. 3 and potentially from existing Well No. 1 and would provide up to 2,000 AFY of reliable water supply for the OVWC. More specifically the tasks would include the additional well and treatment process permitting through the Department of Public Health (including a monitoring and reporting program), all water quality testing required for the design of the treatment system, and the design, construction material, installation, and startup of an ion exchange system to treat water from Well No. 3 and potentially Well No. 1. The most frequently used technology for perchlorate treatment is ion exchange. Ion exchange is a non-destructive phase transfer process where ions held electrostatically on the surface of a solid are exchanged for ions of similar charge. The media used for this process are typically strong-based monofunctional and bifunctional resins. The ion exchange process effectively reduces perchlorate concentrations to less than 4 µg/L and is employed at several drinking water systems in southern California.An accurate water chemistry analysis is vital to the success of any treatment system because the performance of individual resins change significantly with changes in the water chemistry. Published perchlorate treatment data is insufficient for design of a treatment system. In addition, an evaluation of	0	с	The Orange Vale Water Company (OVWC) is located in northeast Sacramento County, encompasses approximately 4.8 square miles and serves approximately 17,500 customers. OVWC now receives 100% of their supply from surface water supplies through its parent wholesale agency, San Juan Water District (SJWD). Two groundwater supply wells have been previously installed and used for emergency and dry year supply (Well No. 1 and Well No. 2); however, these wells have deteriorated over time which has resulted in the production of an unacceptable amount of sand, significantly reduced specific capacity of the wells, and Well No. 1 has now been impacted by perchlorate. Both wells are no longer reliable and OVWC has lost a combined 2,500 gallons per minute supply - even for emergency use. This makes OVWC vulnerable to lack of water supplies as well as providing conjunctive use supplies to SJWD. In 2007, through Proposition 50 grant funding and in coordination with the Regional Water Authority and SJWD, OVWC was awarded \$400,000 in grant funds for the installation of a conjunctive use replacement well (Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) with a total cost of \$1.4 M. The new Well No. 3) w	650,000	5,327	17,500 09	Sacramento	I	2008

## 302 1910038 1910038-004 EL MONTE-CITY, WATER DEPT.

303 1910143

1910143-006 SAN FERNANDO-CITY, WATER DEPT.

Well No. 4 and Well No. 10 To bring Well No. 4 back to service condition, a blending F operation between Well No. 4 and Well No. 10 water is proposed. Blending the flows of Well No. 4 to the nearest Well No. 10 is accomplished by construction approximately 3,700 linear feet of a new 12" pipeline connecting the two wells and then combining flow through a static mixer. Water in Well No. 10 has a low nitrate concentration (in the range of 15 mg/L as NO3) and can reduce the nitrate concentration of Well No. 4 through blending. The proper blending of the wells is accomplished by closing the existing valve (V-102) at Well No. 4 and throttling the existing valve (V-100) at Well No. 10. This action prevents flow from Well No. 4 from entering into the El Monte system directly. The proper amount of blend water is pumped from Well No. 10 through the new 12" pipeline and the flow is combined with the full production of Well No. 4. The blend water then passes through the static mixer to the water system. Operations personnel are responsible for manually throttling the valves (V-100 or V-101) at well No. 10 to ensure appropriate blending.New analyzers (AE-101, AE-102, and AE-103) will be integrated into the City of El Monte's SCADA system. During blending

Blending

Centralized Nitrate

4A

Removal System at Well

recorded on AE-102 and AE-103 will provide the real

0

С

С

0

Prior requests for funds to DPH were predicated on a strategy to provide localized treatment at each of the affected wells exceeding the MCL for nitrates. Since then, due to increasing levels at the majority of the wells it has been determined that a consolidated approach with a geographically centralized nitrate removal system will better address current and future needs in a more cost effective manner. To date, the city has not received any grants through DPH to address this issue. The project consists of the installation of a nitrate removal system at Well 4A, which is geographically central to the other city well locations. Well 4A is also one of two sites containing the city's reservoirs. By being centrally located, water can be sent using existing water transmission lines to Well Site 4A for treatment as needed from Well Sites 3 and 7A. In order to treat water from the remaining Well Site 2A, the project will also include the construction of a new 1820 linear feet water transmission line to also send water to the reservoir at Well Site 4A as needed. Water from Well Site 2A can then be sent to Well Site 4A as part of a proposed blending plan for which the City would seek approval by DPH. The nitrate removal system will utilize conventional ion exchange with ion exchange columns, and a salt storage tank for regenerative brine. Nitrates will be removed to provide finished water with a maximum nitrate concentration of 27ppm (60% of the

operations, Well No. 4 will be operated at full capacity and only the required blend water from Well No. 10 will be conveyed to the Well No. 4 site. Nitrate values

Water drawn from Well No. 4 in the El Monte water system has recently experienced a rise in nitrate 45 mg/L as NO3. Samples have been taken and mg/L, above the state MCL level.

1,500,000 3.524 22,828 16 Los Angeles IV 2009

concentration. The well was shut down in January 2008 when the nitrate concentration approached the MCL of currently the nitrate concentration is approximately 46

1,000,000 5,049 23,564 16 Los Angeles IV

2011

primarily due to the fact that the City had local ground water rights to support its independence as a city. Since 1911, the City has exclusively relied on local water sources by right to meet 90% to 100% of its water supply needs. In January 1979 a Superior Court Case maintained the city's rights to local ground water sources through adjudicated rights to the Sylmar Water Basin. This basic right, which was the primary reason for the city's independence, is now threaten by rising nitrate levels which is expected to eventually terminate the use of the city's local water source unless a treatment system can be installed. There are four Well Sites that pump water from the Sylmar Basin and are identified as Well Sites 2A, 3, 4A and 7A. In May 2007 Well Site 7A was taken offline because nitrate levels exceeded the MCL. Due to this incident, this exceedence was posted to the public via the Annual Water Quality Report in June 2007. In November 2009, Well 3 had a nitrate reading in excess of the MCL that also required that it be shut down. Of the two remaining wells, Well 2A has seen a steady increase of nitrate levels with readings currently in the 36-38 range. Water samples for this well site are now conducted every two days to protect against a sudden spike in the nitrate levels. In February 2007, after extensive research and analysis, a consulting firm, Waterstone

The City of San Fernando was incorporated in 1911

304 1510006	1510006-008	East Niles CSD	Consolidation of Country	Country Estates (Del Oro Water Company)	F	0	С	Country Estates (Del Oro Water Company)	4,322,750	7,338	25,500 12	Kern	III	2007
			Estates and Oasis Rd. with	1 Abandon ovicting distribution system				Lough of accoric and nitrate at or evened the DHS						
			EINCOD	Abandon existing distribution system     Justall 4 800 ft of 8 inch nyc distribution line valves				regulated Maximum Contaminant Levels (MCL)						
				and annurtenances				Noncompliance with:						
				3 Install 2 000 ft of 12 inch transmission line				1. Failure to provide reporting on bacteriological						
				4. Install 8 fire hydrants				testing.						
				5. Install 89 metered services				2. Failure to report monitoring requirements for						
				6. Purchase Del Oro Water system				radiological, radiochemical, lead and copper, asbestos.						
				7. Misc. legal, engineering, annexation and assessment				specific conductance EC, and other chemicals.						
				fees				3. Failure to file an updated Emergency Response Plan.						
				8. Abandon existing well				4. Failure to provide an Emergency Notification Plan.						
				9. Install new well to provide backup source				5. Failure to file a detailed flushing program with DHS						
				10. Install new or rehab existing pneumatic system and	Ł									
				booster pumps				Oasis POA						
				Oasis POA				1. Latest arsenic sample at 10 ug/L						
				Perform "Feasability Study"										
				1 Install transmission line to consolidate with ENCSD										
				2 Abandon existing distribution system										
				3 Install new distribution system										
				<ol> <li>Install pressure reducing or regulating valves to new</li> </ol>	,									
				services										
				5. Install water quality monitoring system for										
				"Homeland security"										
305 1510006	1510006-007	East Niles CSD	Consolidation of East	Consolidation of East Wilson Road Water Company, San	n F	0	С	1. San Joaquin Estates Mutual Water Co.	5,008,020	7,338	25,500 12	Kern	Ш	2007
			Wilson, San Joaquin and	Joaquin Estates Mutual Water Company and Victoty										
			Victory Mutual	Mutual Water Company into the East Niles Community	/			<ol> <li>Ongoing non-compliance with the Nitrate MCL of 45</li> </ol>						
				Services District will require the following infrastructur	re			mg/L						
				construction, replacement and abandonment.				2. Sample results as of 8/01/05 (64 mg/L)						
								3. Ongoing non compliance of order No. 03-19-04E-098						
				East Wilson Road Water Company				to provide public notification of MCL excedence.						
								4. Ongoing non-compliance with the Nitrite (as N) MCL						
				1. Abandon existing water well				of 10,000						
				2. Abandon existing water distribution system				5. Sample results as of 10/25/2000 (11,000)						
				3. Install 9,500 It. of 8-inch PVC distribution lines, valve	25			6. Non-compliance with the lead and copper						
				A Install 4 000 ft of 12-inch transmission line				(Number of camples collected)						
				5. Fire hydrant installations				(Number of sumples concerced)						
				6. Install metered services				2. East Wilson Road Water Company						
								1. Ongoing non-compliance with the Nitrate MCL of 45						
				San Joaquin Estates Mutual Water Company				mg/L						
								2. Sample results as of 2/15/05 (78 mg/L)						
				1. Abandon existing water well				3. Ongoing non-compliance to provide public						
				2. Construct new water well				notification of Nitrate MCL excedence.						
				3. Abandon existing water distribution system				4. Ongoing non-compliance with the Nitrite (as N) MCL						
				4. Install 8,200 ft. of 8-inch PVC distribution lines, valve	es			of 10,000						
				and appurtenances.				5. Sample results as of 5/25/99 (15,600)						
				5. Fire hydrant installations				6. Non-compliance with lead and copper monitoring						
				<ol> <li>5. Fire hydrant installations</li> <li>6. Install metered services</li> </ol>				<ol><li>Non-compliance with lead and copper monitoring requirements.</li></ol>						

306 5410010	5410010-014	Porterville, City of	Consolidation of Private water Companies	The three private water companies located along the edge of City limits repeatly ask that the City of Porterville provide water to their private water delivery system via a master meter.City policy requires that private water companies abandon their offending wells, pay all connection fees and annex to the City. If funding thorugh this program becomes available, staff will propose to the City Council that annexation not be mandatory. Funding will pay for the design of a new water delivery systems, anticipated to range in pipe size from 4 to 8" in diamter, abandonment of the existing private wells, installation of indivdual meters and connection to the city's main water grid.	0	с	The City is surrounded by private water companies whose wells exceed the MCL level for nitrates. If funded, staff will recommend to the City Council that plans & specification be drawn to abandon the offending private wells and piping system. The City will construct a new water delivery system (new pipelines), install new meters at each residence and connect the new system to the City's water system.	2,000,000	14,562	51,467 12	Tulare	111	2009
307 5410010	5410010-012	Porterville, City of	New water source and interconnect 7 adj sws w nitrate contam	The City needs to construct three new wells and F construct hookups to each system with a master meter and a backflow prevention device.	0	с	The City's water system is needed to supply water to seven different privately owned public water systems located around the periphery of the City limits. These systems have nitrates that exceed the MCL.	2,100,000	14,562	51,467 12	Tulare	Ш	2004
308 5710006	5710006-023	City of Woodland	First Ground Level Tank Project No 08-33	The project involves the construction of a 3 million F gallon tank in the south west region where well 11 and 13 used to serve at full capacity. Due to elevated nitrates in these wells, torage is required to meet fire flow requirement. These wells have elevated nitrate above 45 ppm.	0	с	Well 13,11and 17 all have elevated nitrate above 45 ppm, there is needto store water from the good wells in order to offset loss of supply from these wells. This 3 million gallon tank would provide the required storage.	10,000,000	14,065	56,000 09	Yolo	I	2012
309 5710006	5710006-009C	City of Woodland	Well Replacement (Replace Well 17)	The project involves drilling of a rep[lacement well with F upper and intermidiate seals to block off the highly contaminated water.	0	C	These wells have nitrate levels in excess of the MCL.	1,500,000	14,065	56,000 09	Yolo	I	2009
310 3310012	3310012-016C	Elsinore Valley MWD	County Water Company, Consolidation with Elsinor Valley MWD	e F	0	C	Single Well source exceeds the nitrate drinking water standard. Riverside County LPA has issued a Compliance Order to take corrrective actions. Quarterly public notification is on-going.	0	36,817	121,420 20	Riverside	v	2009
311 3310009	3310009-067C	Eastern Municipal WD	County Water Company, Consolidation with Eastern MWD	F	0	С	Single Well source exceeds the nitrate drinking water standard. Riverside County LPA has issued a Compliance Order to take corrrective actions. Quarterly public notification is on-going.	0	141,243	414,710 20	Riverside	v	2009
312 5401006	5401006-003	UC DAVIS-VET SCHOOL	UC Davis - Tulare Campus Well (New Potable Water Source)	UC Davis VMTRC proposes consolidation with the City of F Tulare water system. The proposed project is to construct a new water well, built to City of Tulare specifications (1,000 ft deep; sealed to 300 ft.; 800 GPM), which will provide potable water and adequate volume for fire protection needs for the Tulare campus. The University and City of Tulare have discussed and agreed to the basic terms of joint development of this well. The City connection will be at the proposed annexation site which is adjacent to the UC Davis Tulare Campus (less than ½ mile from the proposed well project). In addition to addressing the VMTRC's current critical need for potable water, new construction is scheduled for 2010, which will double the potable water requirements for the UC Davis Tulare Campus. The California Animal Health and Food Safety diagnostic lab will begin construction, it was determined that a more cost effective and long-term alternative was needed to address the needs of all UC Davis programs located at the Tulare site. Therefore, to resolve the current water contamination problems for all existing and future programs, the University is proposing this consolidation project with the City of Tulare general Plan indicates considerable growth in this area	0	Ρ	The VMTRC site is currently served by two existing water wells. Several years ago, these wells were found to be in excess of the State limits for nitrates and arsenic. Current water system exceeds the nitrate MCL (currently 46 ppm) and previously tested above the arsenic MCL (12 ppb). Currently tested at 9 ppb. After this time, the water produced by these wells was declared to be non-potable. Since this declaration, the VMTRC and all on-site staff have been require to utilize bottled water for all potable purposes. The Tulare County Health Department granted a special exemption for this bottled water use and has already granted one extension to this exemption (ending 06/06/09). Additionally, the current combined flow from these wells is insufficient to provide adequate fire protection pressure and volume in the event of emergency.In addition to providing potable water to over 45 UCD employees, our facility also provides drinking water to veterinary student housing: CDFA employees (Tulare Branch Office located on the East side of our facility); ongoing middle & high school student tours; and College of the Sequoias students (20 – 30 students for evening classes; 3 – 4 times/week). Therefore, for public health and safety reasons, we are requesting construction funds to drilla class I Water Well with the intent of consolidating with the City of Tulare in near future.The	800,000	6	80 12	Tulare	11	2009

313 1900304	1900304-003	DEL SUR GARDENS TRAILER PARK	Del Sur Gardens Storage Tank Replacement	The proposed project is to remove the existing storage F tank and replace it with a new poly tank meeting Title 22 and seismic requirements, and applicable codes.	Ŧ	0	N	The existing 20,000 gallon storage tank is leaking, very dilapidated, and needs replacing. It is also believed to be a source of TCR Coliform MCL exceedance resulting in Violations from LAC0H.	40,000	20	25 16	Los Angeles	IV	2012
314 1907036	1907036-001	NEW APOSTOLIC CHURCH BOUQUET CAN	YO Well water treatment system	Water treatment system to be installed where water F enters building which will also require security cage to deter tampering. System will require regular maintainence and filter/tank replacement.	-	0	Ν	Water treatment system is required to treat well water bringing nitrate and arsenic levels to accepted levels for drinking. Currently, "Do not Drink" placards are placed at kitchen and two bathroom faucets, and have been in place for over 14 years. During this time drinking water has been supplied at two internal locations by Sparkletts bottle monthly service. A complete water analysis was completed in June 2009 and submitted for review to LA. county dept. of public health. Quarterly bacterial sampling is also required.	10,000	1	40 16	Los Angeles	IV	2009
315 3600768	3600768-001P	Inst of Mentalphysics	POE Water Treatment for Joshua Tree Retreat Center	We are located in a rural area that has not been serviced by public water, and which the city has no plan to service, as it would be prohibitively expensive for the city to run the requisite miles of pipes. We will need to complete the research study we are currently involved in to determine the best solution, and then would need funding to implement that solution. Options under consideration involve:1) a reverse osmosis system that would be installed at the well. This would involve also installing much larger storage tanks than the ones we currently have, as the tanks would need to hold 2-3 thousand gallons. This system creates a lot of waste, so we would also need a stronger pump at each of our two pump stations, to pump more water through the system at peak times. The water would be pumped through a reverse osmosis membrane, and then a carbon filter, and would then need a second pump to re-pressurize it from the tank, especially important given that as a large residential facility we often have many people using water simultaneously. We would need to purchase and install of this under this scenario.2) An ion exchange system involving plumbing in a water-softening unit at the well before the holding tank. This would involve a potassium chloride brine solution, a filter that would have to be rebedded on an annual basis, an enclosure that would have to be built around the unit, a way to run power to the unit, and a 5' x 5' drywell to dispose of	-	0	Ν	This project refers to the Joshua Tree Retreat Center. This is a large non-profit Center in Joshua Tree, which is very important to the local economy. The water on our facility comes from a well, which supplies all the water we use. It would be prohibitively expensive for the city to connect us to the local city water supply due to our distance from the main lines; furthermore, that supply has its own difficulties. Our water was found to be in excess of limits for nitrates as regulated by CCR, Title 22, Chapter 15 - the level here is 88 MCL, and we need to get it down to 45 MCL, as shown in table 64431-A. Research has shown that the most reliable way to do so is with Point of Entry water systems. This has been suggested by the Inspector for San Bernardino County Health Dept. who has placed us in violation. We have until June 2013 to get the nitrate level to code. We have 28 buildings that use water on the site, and have up to 5,000 people on the site for special events. Our current monthly usage averages 29,000 gallons.We are currently required to provide public notification of our Exceedance of Nitrate MCL.	50,000	1	70 13	San Bernardino	V	2012
316 5400548	5400548-001	KINGS INN MOTEL	Kings Inn New Water System	This system provides water for hotel and restaurant. For the provides free bottled water to guest, but when they see the Nitrates Water Warning sign they get adward feelings. Guest always shows concern (feeling) about the water to our employess. Many travelers come to hotel to rent the room as the get tired of driving on freeway, but when they see the posted Nitratres Water sign, they get turned away. Hotel and restaurant serves about 30,000 people annually. This funding would be use for installing new well, change new storage tank, and installing clorinzer.	-	0	Ν	This system has nitrates and contamantion (bactria) problems. We were able to solve bactria contamination problem, but we are not able to solve nitrates problem. Nitrates have constantly been exceeding the minimum level for past several years. We don't have any permanent solution to solve the problem with the existing well. The system is quite old (at least 20+ years). We have to drill new well to solve the problem.	16,334	1	130 12	Tulare	Ш	2007

317 0000541	0000541-001P	Monson Area Water Supply Study	Monson Safe Drinking Water Feasibility Study	The community of Monson currently obtains its potable water from private, domestic wells. Voluntary testing of twelve wells within the community was recently completed. All of the twelve wells tested showed nitrate levels in excess of the State MCL of 45 ppm. Several were as high as 130ppm. The average nitrate level detected was 105 ppm. No public water system is currently in place. The feasibility study would analyze a variety of potential solutions to the nitrate problem in Monson, including (but not limited to) consolidation or intertie with the nearby town of Sultana, formation of community water system serving only the residents of Monson, or no action at all. The goals of the feasibility study include evaluating the alternatives so that the community may be equipped with the power of knowing what their choices are, and the County may help facilitate a solution. The feasibility study would also provide some preliminary design and cost estimates as well as environmental review, and would likely include the drilling of a water test well.	e F a a	0	U	The unincorporated Tulare County community of Monson is not currently served by a public water system. Residents of approximately 25 homes obtain their drinking water from private domestic water wells, many of which are shared between multiple households. Nitrate levels in the area's groundwater have long been known to be high. Recent testing of a dozen domestic wells in the community revealed nitrate levels between 46 and 130 ppm, well over the MCL of 45 ppm. The average level of nitrate contamination among the wells tested was 105 ppm. All of the wells tested exceeded the MCL. Some of the wells also had coliform bacteria and low levels of DBCP are present. Monson is a low-income community, comprised mainly of farmworkers and their families. While the community is concerned about the safety of their water (indeed, most families spend scarce resources on buying bottled water), it is hard to know how to proceed. The County of Tulare wishes to pursue a feasibility study to examine alternative solutions to assist the community in obtaining a safe source of drinking water.	0	15	25 12	Tulare		2008
318 1600048	1600048-001	KETTLEMAN CITY ELEMENTARY	Kettleman City Elementan Water System Consolidation with KCCSD	/ It is the school's intention to connect to the Kettleman City Services District water system. The project will consist of a lateral, backflow prevention, and associate piping. The school wishes to maintain the current onsite well for irrigation of landscape and playing fields	G d s.	45	Ρ	Kettleman City Elementary School has exceeded the arsenic MCL of 0.010 mg/L or 10 µg/L. As of the third quarter of 2008, the running annual average for arsenic in the school's well is 22.8 µg/L. Kettleman City Elementary School failed to comply with the National Revised Primary Drinking Water Regulations, Section 141.62(b)(16), Title 40, Code of Federal Regulations. The LPA has required the school to connect to the Kettleman City Service District as soon as practical so that the water provided by the school will meet current standards. The intent of the Kettleman City Service District is to construct a surface water treatment plant to solve the community's water quality problems. In addition, a consolidation with the school would solve the current provided to the school from the school's well.	5,000,000	12	350 12	Kings	11	2008
319 1502231	1502231-001	ROSAMOND SCHOOL WATER SYSTEM	Consolidation for possible arsenic problem	Develop intertie with Rosamond CSD.	G	45	Ρ	Source water marginally in compliance with the new EPA arsenic MCL.	1,236,351	3	1,600 19	Kern	Ш	2007

320 3400364	3400364-001	HARVEY,JEAN SCHOOL	Connect Jean Harvie Community Center water system to existing SCWA system	Sacramento County Water Agency (SCWA) has provided a preliminary review of the Jean Harvie Community Center's water system and finds that the existing well is non compliant with State standards. SCWA recommends connecting Jean Harvie to the nearest township's water system, Walnut Grove. Installing a new well is not an option because of high Arsenic levels in the ground water. The option that Sacramento County Department of Regional Parks is pursuing is connecting Jean Harvie to Walnut Grove's water system. This water system is owned, operated and maintained by SCWA. The preliminary components of this project includes installing approximately 1,200 feet of 10-inch water main, one fire hydrant assembly, zone- 41 water connection permit, and other associated development fees and water easements.	G	45	Ν	According to the Sacramento County Environmental Management Department, the Jean Harvie Community Center is in violation of CCR, SECTION 64431. The average arsenic concentration of the well water based upon consecutive quarterly samples completed during August 2008 through May 2009 exceeds the arsenic maximum contaminant level of 0.010 mg/l (10 ug/l).Sacramento County, Department of Regional Parks owns and operates the Jean Harvie Community Center and the Caretaker House. The Jean Harvie Community Center, an early 1900's schoolhouse located in the heart of the Delta, offers a variety of opportunities for holding both large and small events. Well water is the only water source of potable water for this water system.Head Start, a non-profit and national program, uses two of the classrooms to provide comprehensive education, health, nutrition and parent involvement services to low-income children and their families. The Jean Harvey Community Center is also used to provide the community with health and wellness classes such as yoga, Pilates, senior exercise and children's gymnastics. The Community Center also houses historical records for the Sacramento River Delta Historical Society and serves as a U.S. Corp of Engineers disaster relief site for the California Delta.The water system is classified as a Non-Transient Non-Community water system and is subject to the arsenic maximum contaminant level of	143,000	2	25 09	Sacramento	Ι	2009
321 5110002	5110002-040	City of Yuba City	S. Walton Road Grace Baptist Church Water System	The requested funds would enable the City to purchase and install 1100 feet of 10-inch pipe, fittings and meter. The church serves a large number of residents each week and is concerned about the quality of the drinking water.	G	40	С	The Grace Baptist Church is experiencing deteriorating ground water quality and failure to meet regulatory requirements for arsenic and/or nitrates, iron and manganese is imminent. The system is located in the south western section of Yuba City and lies within the City's Sphere of Influence and Water Rights Place of Use. The Church leaders have expressed and interest in joining the City's clean drinking water municipal system. The connection would include installation of a water meter to meet the State's requirement. Yuba City has been declared a disadvantaged community by CDPH.	161,700	13,550	51,504 21	Sutter	I	2009
322 1600504	1600504-001	HAMBLIN MUTUAL WATER CO	Interconnection to the City	Interconnect to the City of Hanford	G	35	с	Arsenic above the Federal MCL of 10 ppb	500,000	39	80 12	Kings	Ш	2007
323 1600031	1600031-005	LEMOORE MOBILE HOME PARK	Water distribution system consolidation to City of Lemoore	Consolidate failing system with City of Lemoore.Extend city line to project propertyNew distribution system or upgrade system to accomodate for city's water pressure and current standardsMaster meter and individual meters for 82 connectionsDestruction of abandoned wellsCity required impact fees or improvementsTherefore improving water quality, system delivery provided to affordablehousing community.	G	35	С	Received NOTICE OF VIOLATION from County of Kings Department of Public Health - Environmental Health Sevices on August 1, 2008 from Raymond Cooke. Failure of Gross Alpha Maximum Contaminant Level (MCL) for the well serving Lemoore Mobile Home Park. The analytical results for the water quality monitoring of four consecutive quarterly sampling for gross alpha and uranium exceeds the MCL of 15 pCi/L. Compliance with the MCL in Gross Alpha is based on the running annual average (RAA) of quarterly sampling. RUNNING ANNUAL AVERAGE 18.3 pCi/L4th 2007 12/5/2007 27.9 pCi/L1st 2008 1/25/2008 18.4 pCi/L2nd 2008 4/11/2008 13.5 pCi/L3rd 2008 7/11/2008 13.4 pCi/LCurrently notify public on a quarterly basis that Lemoore MHP has levels of Gross Alpha Above the Drinking Water Standard7/21/2010 BSK labs There is an MCL exceed for	300,000	82	180 12	Kings	Ш	2011

Gross Alpha on Well 1 at 23.9 pCi/L.

324 4900798	4900798-001	Mountain View Mobile Estates, LLC	Consolidation with the City of Santa Rosa	y The project will involve consolidation / intertie with the City of Santa Rosa. The City has segments of its water distribution system in close proximity to Mountain View Mobile Estates.	e G v	35	с	Well number 1 produces water that exceeds the TCE maximum contaminant level and has detectible amounts of CIS-1,2-Dichloroethylene. Well number 2 exceeds the mcl for 1,1-Dichloroethylene.	300,000	111	200 18	Sonoma	Ι	2008
325 1500442	1500442-001	DUNES APARTMENTS WATER SYSTEM	Consolidation with North Edwards WD	Consolidate with North Edwards WD.	G	30	с	Arsenic in source water about 40 ug/L.	116,000	20	37 19	Kern	ш	2007
326 1502569	1502569-001	FIRST MUTUAL WATER SYSTEM	Consolidation for high arsenic	Consolidate with Rosamond CSD.	G	30	С	Arsenic in source is above MCL.	616,009	15	40 19	Kern	Ш	2007
327 1502744	1502744-002C	60TH STREET ASSOC. WATER SYSTEM	60th Street Water System Consolidation with Rosamond Community Services District	Consolidation with Rosamond Community Services District:Construction of a Rosamond CSD approved distribution system to serve the 60th Street water system area with clean water. Consolidation would also include water services, meters, valves, hydrants, annexation and capacity fees, legal, engineering and environmental expenses.	G	30	С	This small community water system serves 44 people in 10 homes west of Rosamond. The single well has water that exceeds the State Title 22 drinking water standards for Arsenic (10 ppb). Public notification will be in effect upon completion of the quarterly sampling and issuance of a CDPH Compliance Order.Prior public notification has been a conserve water notice due to the loss of water supply from a pump failure in April 2010.	350,000	9	44 19	Kern	111	2011
328 1502232	1502232-001	ROSAMOND MOBILEHOME PARK	Rosamond MHP- Rosamond	Contract with local water district to supply water to site location which is approximately 250 yards from main source. Engage local contractor to connect sytem and install individual sub meters. Upgrade underground water distribution system as needed. Use exisiting water well system for irrigation purposes only.	⊇ G	30	C	The exisiting well system supplies 79 mobile home/RV spaces. Recently the pump failed and was replaced at a cost of approximately \$8000. It took several days to locate and repair the system and tenants were compelled to use bottled water supplied by park ownership. Due to many of the tenants being senior citizens this created a significant hardship as they were unable to locate transportion to the shower facilites that were offered at a nearby motel. In additon, a water supply truck loaded 8,000 gallons of potable water into the storage tank that the tenants depleted within 4 hours even though they had been warned that the water needed to last for approximately 3 days until the system was repaired. Select tenants had complete disregard for the notice asking them to conserve and in certain instances were seen watering their lawns or washing sdown their patios even though the water supply was limited. A call was placed to the local water district to inquire about establishing service. It was communicated at that time it would cost a minimium of \$250,000 to hook up the the exisiting system along Rosamond Blvd. Even though the pump is new, connecting to the local water district is highly desirable to avoid any disruption	250,000	78	50 19	Kern	Π	2007
329 5201137	5201137-001	MILLSTREAM MOBILE HOME PAPY	Water line extension and	Water Line extension to adjacent public water system	6	30	c	of service going forward. More importantly, the current	10.000	23	53 21	Tehama		2009
523 320113/	5201157-001		connection to public system.	water time extension to aujacent public water system	J	50	L	me water system consolidation	10,000	25	JJ 21	renama	I	2009
330 5200550	5200550-002P	NEW ORCHARD MOBILE HOME PARK	Consolidation with Los Molinos CSD	Los Molinos CSD is currently seeking funding for Construction of a water well that is to be completed in a zone where arsenic is below the MCL for that contaminant. The management of Los Molinos is open to the idea of consolidating not only the Orchard Mobile Home Park, but also the Mill Stream Mobile Home Park. The Los Molinos CSD and the Mill Stream Mobile Home Park. The Los Molinos CSD and the Mill Stream Mobile Home Park are submitting Universal Pre-applications for this consolidation project. The project to consolidate the Orchard Mobile Home Park with Los Molinos CSD will necessarily include the construction of approximately 2,200 feet of 10-inch water main to connect to the existing 10-inch water main to connect to the existing 10-inch water main out cost estimates. The results of the preliminary engineering ard cost estimates. The results of the preliminary engineering are summarized below:2,200 feet of 10-inch water main § 30,000Meters and connection \$ \$ 30,000Meters and connection \$ \$ 30,000Meters and connection for cost sharing if all the potential users of the pipeline can come to an agreement. The Mill Stream Mobile Home Park aw will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park and Mobile Home Park will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park will benefit from this project. Consolidation of Orchard Mobile Home Park and Mill Stream Mobile Home Park will benefit from this project. Consolidation of Orchard M	3	30	c	Orchard Mobile Home Park is a senior park located in rural Tehama County. The park was established in 1974 under the current ownership. There are a total of 43 mobile home spaces of which 35 are occupied by seniors 55 years of age and older. The water system consists of two wells, one being 192 feet deep and the other 45 feet deep. Results for a series of quarterly samples in 2008 for arsenic are: North Well 22.5 ug/I and South Well 16.75 ug/I. Tehama County Environmental Health has issued a compliance order and directive that the water system must be in compliance with the arsenic standard no later than December 2010. The users of the water system have received notices of the violation with the arsenic standard.	500,000	43	56 21	Tehama	1	2009
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331 1500485	1500485-001	ANTELOPE VALLEY MOBILE ESTATES	Antelope Valley Mobile Estates-Consolidation Project with Rosamond CSD to Correct Arsenic Problem	As part of the project, Antelope Valley Mobile Estates water system will consolidate with Rosamond CSD. Main components of the project would be a pipeline about 1 mile long to connect to Rosamond CSD, valving, backflow prevention assembly and a master meter.	G	30	С	Antelope Valley Mobile Estates' main well has arsenic above the new EPA MCL of 10 ug/L. Plus, with only one well as a source of water supply, this public water system is deemed to have unreliable source capacity.	600,000	28	84 19	Kern	III	2008
332 1500585	1500585-005	OASIS PROPERTY OWNERS ASSOCIATION	Consolidation with East Niles CSD	Consolidate with neighboring large water system. Run Co pipeline approximately 6000 feet. Replace distribution system piping, meters, and appurtenances to meet standards of East Niles CSD.	G	30	C	Standby well has high nitrate and arsenic in excess of MCL. Main well is not reliable. No other sources of water available.	1,500,000	36	100 19	Kern	III	2007
333 1502744	1502744-002C	60TH STREET ASSOC. WATER SYSTEM	60th Street Water System Consolidation with Rosamond Community Services District	Consolidation with Rosamond Community Services District:Construction of a Rosamond CSD approved distribution system to serve the 60th Street water system area with clean water. Consolidation would also include water services, meters, valves, hydrants, annexation and capacity fees, legal, engineering and environmental expenses.	3	30	с	This small community water system serves 44 people in 10 homes west of Rosamond. The single well has water that exceeds the State Title 22 drinking water standards for Arsenic (10 ppb). Public notification will be in effect upon completion of the quarterly sampling and issuance of a CDPH Compliance Order. Prior public notification has been a conserve water notice due to the loss of water supply from a pump failure in April 2010.	350,000	9	10,633 19	Kern	III	2011

334 1510018	1510018-006	ROSAMOND CSD	Northwest Rosamond Are Improvements	Ba Lands of Promise will be connected initially with 3.2 G miles of 12" PVC and DIP pipeline from an existing RCSD pipeline on Sweetser Road. Connecting to that pipeline at Tropico-Mojave Road and going north and then west to Fisher will be 5.3 miles of 12" DIP and PVC pipeline. Pump Station on south end exists but will need electrical upgrade for SCADA control. Pressure relief valves and controls will be needed at Fisher as the north terminus. Area north of Lands on Sweetser is primarily rock and hocation. Engineering and design costs included in this estimate but acquisition of easements costs have not been. Most of the pipe route is in Kern County R-O-Way. Additional chlorination stations will be needed at both terminations. Additional booster pump station for Fisher will be needed north of Sweetser.	30	c	Fisher Memorial sits on foothill rock north of Rosamond Proper, with small single production well (24 gpm) & high arsenic. There are only individual private low production domestic wells in the area. Lands of Promise, also sits on rocky area, has 5 wells, 2 are down, all show high arsenic (max well production =250 gpm), & also is surrounded by domestic wells. Lands can be connected with 3.2 miles of 12" piping. Adding another 5.3 miles connects Fisher. Both systems will have higher pressure with RCSD connection, water meeting MCLs & alternate supplies from an established State Certified Operator controlled CSD. There are approximately 18 connections in Fisher and 50 connections at Lands. Neither system has resident Operators. Neither system can afford to improve their wells.	5,300,000	4,593	10,633 19	Kern		2007
335 5010028	5010028-006	Ceres, City of	City of Ceres Water System Consolidation Project	The construction of a water main line to ecxtend the current city service from Crow's landing Road and Hatch Avenue to Foy Avenue and West Monte Vista Road with resultant consolidation of distributed unconnected communities along this route is the primary thrust of theis project. The length of the proposed water main is approximatedly six miles, requiring all concurrent construction costs and associated management requirements to be purchased by the city. This includes the trench and back filling, a twelve inch main and assoculated valves, monitoring equipment, pump station and booster pumps, storage tanks and metering. Also needed are the connections to some one hundred residences in the areas desribed in the project.	30	c	Several small communities within the south east side of the city of Ceres are currently utilizing unbsafe well water for private household consumption, and it is the hope that these communities can be connected to the main city system through a water main extending down Crow's Landing Road to West Monte Vista Road. The community of homes bordered by Crow's Landing Road to the east, San Joaquin Street to the north and Lathrop Street tot the south is the first unconnected community on the route. These homes are currently using well water for private household consumption. As the water main is extended south down Crow's Landing Road, it is hoped that these low-income homes can be consolidated into the Ceres system. Further down down Crow's Landing Road, and east on West Monte Vista, Monterey Tract Community Development comprises about thirty homes located off of Foy Avenue and West Monte Vista Road in the south east section of the city of Ceres. The Community is essentially a low-income group of homes. The City of Ceres is seeking funding to connect the Monterey Tract Community Development with the city water system in order to ensure safe water for this small community. The Monterey Tract Community Development currently use drinking water from two wells located within the confines of the development. The water from these sources has been found in violation of safe levels of arsenic and nitrates.	10,000,000	10,617	40,943 10	Stanislaus	II	2008
336 1310008	1310008-003P	Westmorland, City of	Feasibility study to addre: SWTP and DBP issues.	ss The project will require a preliminary engineering G report, final design and right of way acquisitions and construction of a 4 mile 12 inch water pipe line from the City of Brawley to Westmorland's water treatment plant's water main connection.	25	c	The City of Westmorland has been cited by CDPH several times for exceeding the MCL for TTHM, most recently in the second quarter of 2011. Currently, Westmorland uses free chlorine as the primary disinfectant. The existing water treatment plant (WTP) has raw water that is settled within a raw water pond system with inadequate coagulation mixing and no mechanical sedimentation removal process. This decreases the effectiveness of coagulant chemicals and their ability to reduce organics from passing through the treatment process and reacting with the free chlorine. Westmorland's WTP is currently averaging Total Organic Carbon removal levels that are 30% of the required removal goals. This has contributed to the TTHM MCL exceedance.	8,000,000	601	2,444 14	Imperial	v	2012

337 5100172	5100172-001	Encinal Elementary School	Well water arsenic treatment system	This project will be the planning, purchase and installation of an arsenic treatment system.	G	25	Ρ	This project is intended to address California Department of Public Health Compliance Order No. 01- 21-10(0)51002. This is a Compliance Order for excessive arsenic in the well water serving the students and staff at Encinal Elementary School. Public notification is in effect and required at approximately 00 dou: interande	31,320	1	60 21	Sutter	I	2012
338 2800840	2800840-002	NAPA COUNTY SCHOOLS: POPE VALLEY	Pope Valley School DBP Project	Install monitoring instrumentation to measure changes in treatment process for effectiveness in reducing TTHP and HAA-5 levels that are exceeding MCL limits. Additional instrumentation (SCADA) will better monitor plant performance and replace limited monitoring-only system allowing timely adjustments and corrections to varing water conditions at this remote, rural school.	s G M /	25	Ρ	High disinfection by-products present in surface water tratment resulting in exceeding HAA-5 and TTHM limits resulting in multiple violations.	80,000	1	100 03	Napa	II	2008
339 2701227	2701227-004	SAN BENANCIO SCHOOL WS	San Benancio School Filtration Plant for Arsenic removal	The San Benancio Middle School/A.B. Ingham schools propose to install equipment to remove Arsenic and Lead & Copper from their water system using processe of co-precipitation, filtration, and pH control. Liquid ferric chloride and liquid sodium hypochlorite (chlorine are injected into the water and the Arsenic is oxidized and adsorbed on the precipitated iron hydroxides. The precipitated hydroxides including Arsenic are removed from the water through a pressure filter containing a catalyzing agent - sand coated with manganese dioxide The filter is periodically backwashed to remove the precipitated solids resulting in sludge which is accumulated in disposable cartridges which are stored for disposal in accordance with county and state regulations. After filtration pH control will be used to prevent Lead and Copper leaching from the water lines and fixtures into the drinking water. This will allow the schools to finally use water that meets all health standards for drinking and food preparation.	G 25 2) 2.	25	Ρ	The San Benancio Middle School, 43 San Benancio Rd. Salinas, CA 93908, water system serves 2 schools, San Benancio and A.B. Ingham schools and a common campus with water from a single groundwater well. San Benancio M.S. is part of the Washington Union School District and A.B. Ingham School is operated by the County of Monterey for special needs students. The 2 schools serve over 500 students and staff. The water is currently chlorinated but there is no filtration. Recent raw water monitoring indicates that Arsenic exceeds the MCL of 10 ug/I ranging from 27 to 37 ug/I. The Monterey County Health Department has indicated that all systems exceeding the Arsenic MCL must reduce this contaminant to less than 10ug/I. In addition Lead & Copper have been found at unacceptable levels in the water system serving classrooms. These schools have been mandated to use bottled water for all students and staff for an extended period of time. They are in compliance with this mandate at a considerable annual cost.	200,000	2	100 05	Monterey	Π	2009
340 5000273	5000273-001	GRATTON SCHOOL	Filtration Water System	To put in place a filtration system that will remove the arsenic from our water.	G	25	Ρ	The Gratton School Water System exceeds the arsenic maximum contaminant level. California Code of Regulations, Section 644531(a). This problem requires public notification of an exceedance of the chemical arsenic. A drinking water notification has been hand delivered to each consumer and a proof of notification has been faxed to the Department of Environmental Resources. This notification is currently in effect and will continue on a quarterly basis until it is resolved.	80,000	2	110 10	Stanislaus	III	2009
341 1000182	1000182-001	BURREL UNION SCHOOL	Lead and Copper Improvement Plan	Funding is needed to initiate a water quaility study and implement any identified appropriate solutions.	IG	25	Ρ	Lead testing since 1999 shows exceedences of the Pb action level of 0.015 in 5 of 7 rounds of testing. School operations prohibit more accurate lead and copper sampling. Ageing fixtures are suspected to be major source of contamination.	250,000	1	120 23	Fresno	Ш	2011
342 1502607	1502607-002	PIUTE MOUNTAIN SCHOOL WATER	Piute Mountain School Well	To date we have explored options and contacted an engineer. One option would be to purify the water. This would require training, engineering, construction and monitoring in addition to purchasing the purification equipment. Option two is to abandon the current well and try to drill a new well.	G	25	Ρ	Currently our well exceeds Flouride levels, and when levels change the end of this year our Arsenic levels will be too high, also. In addition to MCL failures, we have issues with lack of water. We have mailed out notices and posted them throughout the school.	50,000	3	200 19	Kern	Ш	2009

343 5100139	5100139-002	Franklin Elementary School	Elevated arsenic levels Franklin School - Planning Study	The Franklin Elementary School District is requesting G funding to conduct a planning study in an effort to determine the most effective method to reduce the levels of arsenic in the well serving the students of Franklin School. Currently the arsenic levels are averaging around 13 ug/L and steps need to be taken to determine the most cost effective method to eliminate the presence of arsenic in the drinking water. Franklin School is a single K-8 school district located on the outskirts of Yuba City, CA. Currently Franklin School serves a student population of around 470 students, with approximately 40 additional employees on site during the school day. Franklin School has approximately 25 drinking fountains located inside the buildings with an additional 5 drinking fountains outdoors. All of the water that comes out of these fountains originates from a relatively new well that was installed in 2006.	25	Ρ	On November 3, 2009, the Franklin Elementary School District had an arsenic concentrion of 13.9 ug/l. Since this was in excess of the 10 ug/L allowed by the U.S. Environmental Protection Agency, the District was required to monitor for arsenic on a quarterly basis beginning with the first calendar quarter of 2010. The District has monitored the arsenic levels since November of 2009 and all results indicate an arsenic level of around 13 ug/L. Since it is obvious that the District will need to take the appropriate steps to ensure that the water is safe for the students of Franklin School, a planning study is necessary to determine the lowest cost alternative.	10,000	1	468 21	Sutter	I	2011
344 5400519	5400519-001	PALO VERDE SCHOOL	Palo Verde School Safe Drinking Water Project	<ul> <li>G</li> <li>Palo Verde School's water well has shown varying results in levels of contamination, and this project would allow the school to determine what level of contamination is present and what level of remediation needs to be undertaken. The school will proceed with quarterly water testing.</li> <li>If funded, this project would include the drilling of a test well that will determine if there is an adequate supply of potable water to meet the school water system's demand. The test well would identify aquifers that produce safe drinking water and those that should be excluded from the design of a succeeding production test well.</li> <li>If the test well is successful, the project would include the drilling of a new production well with installation of a pump and storage facilities. The water well facilities would then be tied in with the existing school water distribution system.</li> </ul>	25	Ρ	Palo Verde School's well has historically tested high in arsenic levels. Recent tests in 2005 and 2007 have shown arsenic levels at 10ug/L, and the school has been advised to start doing quarterly testing, and it is anticipated that quarterly testing will reveal arsenic levels above the MCL of 10ug/L. In 2002, arsenic levels of 20ug/L were detected; in 2000 and 1997, levels of 12ug/L were detected. Wells at other schools in the area also have high arsenic levels. There is also a concern regarding a nearby sewage treatment plant. Local farmers are spreading sludge on fields, which may eventually result in elevated nitrate levels in drinking water for Palo Verde's well.	900,000	26	500 12	Tulare	Ш	2007
345 5100149	5100149-001	Barry Elementary School	Barry Elementary School well arsenic treatment project	This water system serves a rural public school at some distance from any other water system so consolidation is not appropriate. The system is currently working with a qualified engineer to develop an appropriate treatment plant for a system of this size. This will include absorptive treatment equipment, with media tanks, storage tanks, pumps, and new distribution piping to modify and connect to the exising system.	25	Ρ	This public school water system is in violation of CH&SC Section 64432(a) relating to exceeding the arsenic MCL. This water system is temporarily providing bottled water due to a DOH compliance order for exceedance of the arsenic MCL. Notification is required. The compliance order requires the system to develop and implement a plan to bring the system into compliance no later than December 31, 2010.	500,000	1	560 21	Sutter	I	2009

346 0706028	0706028-001	KNIGHTSEN ELEMENTARY SCHOOL	Treatment for Arsenic Removal	The water system serves a public school with approximately 600 students. The primary water source (Well # 3) was installed in March 2005 to replace the North Well (elevated Gross Alpha levels) and the South Well (fluctuating nitrate levels). The North Well and South Well are currently used for irrigation only. The proposed project would include installation of treatment facilities would include pre-chlorination, minimum of 2 pressure vessls with selective media, flow meters, and distribution piping. Security housing/structure to be installed around the treatment system. Alternatively, Well #3 could potentially be blended with the North Well or South Well depending upon the current monitoring results for the two irrigation wells which were at one time the primary water sources (s), flow meters, blending valve and finished water storage tank.	5 2	25	Ρ	The water source for the system has exceeded the Arsenic MCL based on a Running Annual Average of 12.5 ppb. The system is in violation of CCR, Title 22, Section 64431 for delivering water above the MCL for Arsenic - 10 ppb.Public Notification - Exceedance of a Chemical MCL was required and is currently in effect.	90,000	3	600 04	Contra Costa	Π	2009
347 3901169	3901169-001	MUSD-NILE GARDEN SCHOOL	Manteca USD - Nile Garden	The Manteca USD - Nile Garden School Water System G has exceeded the Federal MCL for arsenic. The school is exploring treatment as the option to bring the water system back into compilance because there are no municipal water available in the area for consolidation, and the school is apprehensive about drilling a new well which water may still fail regulatory standards. If the school chooses treatment, there will be the cost of on- going monitoring of the treatment system, regular replacement of the filters, disposal of the filters which may be considered hazardous waste, in addition to the start up cost of the treatment equipments such as pipings and tanks. If treatment is not cost-effective, drilling of new source well may be the only reminding option.	5 2	25	Ρ	The average of 4 sample results of the well in 2006 and 2007 was 23.75 ug/L for arsenic, and exceeds the new MCL for arsenic of 10 ug/L, National Revised Primary Drinking Water Regulations, Federal Arsenic Rule, Section 141.62(b), 40 Code of Federal Regulations.	500,000	3	804 10	San Joaquin	Ш	2008
348 1900961	1900961-003	WINTERHAVEN MOBILE ESTATES	Winterhaven Mobile Estates	The Water system is in need of an additional water G source to meet the demands of the community, and to reduce arsenic concentrations. i.e. new ground water well.	5 2	20	с	Water Quality from Well #1 has ARSENIC concentrations that exceed the 0.050 milligrams per liter (mg/L) National Primary Drinking Water Standard Maximum Contaminated Level. The water system has insufficient water storage for fire protection.	500,000	20	27 16	Los Angeles	IV	2008
349 2100579	2100579-001	NICASIO VALLEY RANCH MUTUAL	Nicasio Valley Ranch / Arsenic Mitigation	The goal of the project is to identify a new source for domestic water or for treatment of the exisiting source for arsenic removal. The project will include engineering, design, installation of treatment systems, or conveyance of new source water. The project may include consolidation of two or more nearby non- compliant systems.	5 2	20	С	Current post-treatment arsenic levels exceed the Primary MCL. Secondary standards for iron, manganese, and color are exceeded as well. The complex water treatment system includes centralized, point-of-use, and point-of-entry components. Consequently, the system has not been able to comply with all monitoring directives including Section 64432 (b) (2) and (d), Federal requirements for POE, LPA requirements for POU. The system has yet to obtain a wastewater discharge permit for disposing of byproduct water from the MTM/Greensand backwash cycle. The Nicasio Valley area is characterized by the LPA as one of the three most problematic areas in the county for water availability and quality.	500,000	17	51 18	Marin	Ι	2007
350 4900643	4900643-002	Mount Weske Estates Mutual Water Con	npa Consolidation With Adjacent Water District	Interconnect the distribution system with a supply pipe G & a booster pump from the Town of Windsor Water District. The installation woul be very similar to that which Windsor already provides to the Shiloh system.	6 2	20	С	The Arsenic content exceeds the MCL of 50 ug/L & has done so ever since the water system was approved by the regulating authorities in 1974	765,000	21	62 18	Sonoma	II	2007

351 4901195	4901195-003	Moorland Avenue Apartments	Regional Consolidation with City of Santa Rosa (Arsenic)	Regional consolidation of the Moorland Avenues Apartments with the City of Santa Rosa. Other systems involved in the consolidation include Sequoia Gardens MHP, Lancelot MHP, Rancho Santa Rosa MHP. *Note as of 6/29/2012: this Regional project has been issued a Prop 84 Feasibility Funding Agreement to design the P&S, CEQA, etc for the project. The FA is with the City's legal staff for review and acceptance.	G	20	с	Arsenic levels in well exceed the MCL.	161,337	16	64 18	Sonoma	II	2012
352 4900855	4900855-001	Lancelot Mobile Home Park	Lancelot Mobile Home Park	CONNECT TO THE CITY OF SANTA ROSA AND MAKE NECESSARY DISTRIBUTION SYSTEM IMPROVEMENTS	G	20	С	WATER EXCEEDS FEDERAL MCL FOR ARSNIC. NO TREATMENT AT PARK.	276,000	29	75 18	Sonoma	II	2007
353 4900786	4900786-001	Rancho Santa Rosa MHP	RSR Well	The project will result in abandoning the current ground water source in favor of connecting to the City of Santa Rosa water distribution system. This will require construction of approximately 5,000 feet of 6-inch water line to connect the Rancho Santa Rosa MHP to the City's system. In addition to pipeline construction, the project will include appropriate backflow prevention, fire protection, metering, and destruction of the contaminated well.	G	20	С	The arsenic concentration of the finished water exceeds the Federal Maximum Contaminant Level. Consequently, the system is in non-compliance for the primary arsenic standard. The system serves 82 residential connections and no commercial connections. The total number of service connections severely limits the system's treatment options with respect to overall cost of treatment and limited revenue from water sales.	775,000	80	175 18	Sonoma	II	2007
354 0600011	0600011-002P	Del Oro Water CoWalnut Ranch	Del Oro - Walnut Ranch Construct Intertie and/or Construct Water Treatment Facility	To construct a system intertie with an adjacent water utility (Colusa Industrial Park) or construct a water treatment facility, including a new well.	G	20	С	Arsenic level in drinking water exceeds the MCLNotices (Exceedance of a Chemical MCL) to the customers have been mailed directly the the customer and posted on Del Oro Water Company's website.	0	78	182 21	Colusa	I	2012
355 1500378	1500378-001	MAHER MUTUAL WATER COMPANY	Consolidation with Vaughr Water Company to resolve issue with high arsenic in Well 01	The Maher Mutual Water Company wants to resolve the issue of arsenic in well water by connecting to Vaughn Water Company which is located less than 1/2 mile away from the Maher Mutual Water Company. The project will need upgrading of the Maher MWC's distribution system if required by Vaughn Water Company as part of the consolidation.	G	20	с	Our system well produces water exceeding the new federal arsenic MCL of 10 ug/L.	213,380	50	192 19	Kern	III	2007
356 5410034	5410034-003	Pine Flat Water Company	Pine Mountain/Flat Water Treatment Blending Facility	The proposed project include construction of water distribution piping to route water from each of the three wells to a common manifold. The blended water will then be treated by a uranium treatment system which has been designed to treat the observed uranium and gross alpha contaminant levels for all the wells. Chemical injection of sodium hypochlorite will be included. The currently designed blending facility configuration will allow for 95% removal of uranium and gross alpha regardless of individual well stream concentrations and will meet CDPH water quality requirements.	G	20	С	The groundwater wells in the Pine Mountain / Pine Flat service area are currently affected by high levels of Radiological contaminants - specifically uranium and gross alpha. The District has recently drilled a new well with the hope of blending non-contaminated water from the new well with MCL contaminant water from two existing wells. The new well, however, also contains radiological contaminants above the MCL. For this reason the CDPH has required the District to issue public notification of the uranium/radiological levels.	500,000	223	200 12	Tulare	Ш	2009
357 2400108	2400108-001	MCHA LOS BANOS CENTER	Los Banos Migrant Center Water Supply Replacement	The Housing Authority has contacted the City of Los Banos for a water service connection to the Migrant Center and the City has agreed to provide service. The project will include installing water distribution system improvements and a storage tank.	G	20	С	The Los Banos Migrant Center has an existing well that has high levels of uranium, arsenic, iron and manganese which exceed the MCL's. Other wells have been drilled in this area by the City of Los Banos but acceptable water could not be found.	1,200,000	80	270 11	Merced	Ш	2007
358 4900676	4900676-001	Sequoia Gardens Mobile Home Park	Regional Consolidation with City of Santa Rosa (Arsenic)	Regional consolidation of Sequoia Gardens MHP with the City of Santa Rosa. Other systems involved in the consolidation include Moorland Ave. Apts, Lancelot MHP i.e. Westfield Community, and Rancho Santa Rosa MHP.	G	20	С	Arsenic levels in well greater than the MCL.	500,000	191	300 18	Sonoma	II	2012

359 5101009	5101009-002	Wildwood East Mutual	Consolidation of Wildwoo East water system with Franklin School District	d I am assuming that all of the above is covered by the overall grant. The project will include each addition to the Franklin grant. All of the additions including Wildwood East are located north off Franklin blvd. The plan is to run a water line from the main feeder water line on Franklin down each street in each area to which the individual homes will be connected. The connection to each home will be part of the grant. The connection from the well that currently provides water will be disconnected. However, the well water will continue to be used for landscaping by hooking into the outside water lines already established.	G	20	C	The Wildwood Water District would like to be included in the Franklin School District grant along with the three other small private water systems already included in the grant. We have been informed that our water purity is no longer in compliance with the EPA standards for the amount of arsinec allowed in the water which is 10pbb. We have been notified that our present test results for arsinec is 13ppb. We understand that future tests are requried to average 10.4 or above. This score is no surprise as we have been aware of the gradual increas in the arsinec contamination over the past years. When tested for arsenic the Wildwood East Water district has tested: Sppb in year 2000, 5 ppb in 2001, 12 ppb in 2002, 8.8 ppb in 2003 and 2006. 9.7 ppb in 2008 and 2009, 10.0 ppb in 2010 and 13 ppb in2011 which puts our District out of compliance like the other water districts (trailer park, El Margarita Water District, and Wildewood Water District). Now all of those areas exceed the State standard for contaminent and, because of this, fall under a grant for the Franklin Elementary School District. We are geographicly located in the middle of the other applicants, our kids attend Franklin Elementary. Moreover, since the group that is most likely to be affected the most by arsenic are	1,000,000	49	350 21	Sutter	Ι	2012
360 1500409	1500409-004	BROCK MUTUAL WATER COMPANY	Brock Mutual Water Company-Consolidation with Vaughn WC	The consolidation Project will connect to Vaughn Water Company's pipeline which is less that 1000 ft. from Brock Mutual Water Co. As part of the project, new distribution system, meters and service line will be installed.	G	20	С	Brock Mutual Water Companys well produces Arsenic above the MCL of 10 Mg/L and is in violation.	1,600,000	155	500 19	Kern	Ш	2012
361 2410002	2410002-003	DOS PALOS-CITY	Water treatment plant replacement project	City of Dos PalosWater Treatment Plant Replacement ProjectThe existing water treatment facility is over 60 years old and has fulfilled the expected life of the facility. The community needs to replace the facility to come into compliance with directions from the California State Department of Public Health – Drinking Water Division and provide a new reliable treatment facility for the service area. The existing facility has had two violations due to the inability of the facility to operate effectively during high demand periods of the year. These peak usage periods during the hotter months of the year cause the treatment facility to become out of compliance with required regulations in the state's guidelines for the treatment process. The production quantity of the facility has also dropped by nearly 25% from the original design and operation of the facility. The facility was original designed for a daily treatment flow of 3 million gallons and presently the operator is only able to produce 2.2 million gallons per day and this high production level can usually only be maintained for a short period during the peak period of a couple of weeks. The new project site is at the southern end of the service area and would be adjacent to the transmission pipeline from the California Aqueduct, this is the water source for the community. The new plant would treat the surface water at this location and use the existing transmission pipeline from	6	20	c	City of Dos PalosWater Treatment Plant Replacement ProjectThe existing water treatment facility is over 60 years old and has fulfilled the expected life of the facility. The community needs to replace the facility to come into compliance with directions from the California State Department of Public Health – Drinking Water Division and provide a new reliable treatment facility for the service area. The existing facility has had two violations due to the inability of the facility to operate effectively during high demand periods of the year. These peak usage periods during the hotter months of the year cause the treatment facility to become out of compliance with required regulations in the state's guidelines for the treatment process, violations discussed below. The production quantity of the facility has also dropped by nearly 25% from the original design and operation of the facility. The facility was original designed for a daily treatment flow of 3 million gallons and presently the operator is only able to produce 2.2 million gallons per day and this high production level can usually only be maintained for a short period during the peak period of a couple of weeks. The new project site is at the southern end of the service area and would be adjacent to the transmission pipeline from the California Aqueduct, this is the water source for the community. The placement of the new water treatment facility at the southern	6,203,000	2,566	4,417 11	Merced	11	2009

362 5410006	5410006-007P	Lindsay, City of	Lindsay - 14 Dibromochloropropane (DBCP) Mitigation Project	The City has developed a cost estimate for granular activated carbon (GAC) treatment for Well 14. While the GAC treatment process is a historically proven method of filtration, part of the planning process would be to explore other potential forms of DBCP removal. The final desired outcome of the planning process would be identification of the most effective, long term remedy of DBCP removal.	G	20	c	In the last 2 quarters of 2011, City of Lindsay Well 14 has experienced levels of DBCP that exceed the State maximum contaminant level (MCL). On March 16, 2012, the City was issued a "Compliance Order for Violation of the Dibromochloropropane (DBCP) MCL; Order No. 03- 12-120-003". The Order states that the City is to cease and desist from failing to comply with CHSC Section 116555 (q)(1) and (3) and CCR Section 644431; that the City must submit plan and time schedule for improvements to the water system to correct the DBCP problem; that the City submit quarterly progress reports to the CDPH commencing April, 2012; that the City provide Tier 2 public notification for its inability to meet DBCP MCL and continue public notification each quarter Well 14 is in violation.The City of Lindsay has limited access to water supply. We rely on a long term contract with the United States Bureau of Reclamation (USBR), Wells 14, 15 and 11 and provide the water supply for the City and surrounding areas that are connected to our domestic water system.Our long term USBR contract amount is capable of sustaining City demands but is constantly in flux. Recent allocations to San Joaquin River Restoration, unpredictable drought patterns which have reduced the City contract allotment are immense impacts to a constant, reliable water supply. The USBR contract water is delivered to the City via the Friant Kern Canal (FKC). The FKC	0	2,335	11,450 12	Tulare	111	2012
363 1910070	1910070-055	LOS ANGELES CO WW DIST 4 & 34-LANCAS	STI NE Lancaster Small Water System Consolidation	Public Works proposes to interconnect three small mobile home park water systems (there is a fourth small system that could also be connected) and the Los Angeles County Waterworks District No. 40's (District) existing Beverly Martin small water system with the District's Region large water system, which serves the City of Lancaster. The water delivered to the Lancaster area is supplied by imported water from Antelope Valley East Kern Water Agency and from groundwater wells. This system meets all drinking water standards. The proposed project includes the installation of approximately 56,000 linear feet of 12-inch diameter water mains designed as a looped system. The proposed looped pipeline network will mitigate potential water quality issues such as low chlorine residual and trihalomethane formation. Interconnecting all of the systems will also: 1) reduce long-term maintenance costs, 2) provide system reliability, and 3) enhance fire protection. The new system will have additional capacity to support future interconnections from other small water systems within this region. In addition to the water main loop, Public Works proposes to construct a new groundwater well, situated and designed to produce water that meets all State and Federal drinking water standards. This new well will provide a backup source of supply to all of the interconnected systems. The well will be located	G	20	c	California Department of Public Health officials have indicated to the County of Los Angeles Department of Public Works (Public Works) staff that several small water systems serving mobile home parks located northeast of the City of Lancaster, California have reported high levels of arsenic concentrations in their source groundwater wells. Some of these small systems have reported arsenic concentration levels that exceed the 10 parts per billion (ppb) maximum contaminant level (MCL). Furthermore, all of these small systems lack adequate flow for fire-fighting purposes (fire flow) and do not have access to a reliable water supply source. 2010 census data shows that this census block group has a median household income of \$22,804.	16,335,000	46,878	144,215 16	Los Angeles	IV	2012
364 4901267	4901267-001	True to Life	Arsenic	Our Arsnic labe results have been going up steadily over the last 8 years. As of 3/26/07, our results are 9.90ug/l. The MCL for Arsenic is 10. We are concerned about this. We would also like to mitigate the noticeable sulphur smell in our well water.	G	20	Ρ	Over the last 8 years we have noticed that our Arsenic lab tests results have been going up. As of 3/26/07, our lab results came in at 9.90 ug/l. The MCL for Arsenic is 10ug/l. We are concerned about this. We would also like to mitigate noticeable sulphur smell from the well.	50,000	4	35 18	Sonoma	II	2012

365 1000577	1000577-001P	Dunlap Academy	Dunlap Leadership Academy water project	Kings Canyon unified school district needs to conduct a planning and feasibility study on Dunlap leadership Academy (System No.1000577-001) and Dunlap elementary school (System No. 1000184-002) to see if it's feasible to combine the two facilities to one water source. Currently they are about 1 mile apart and their current water well which is providing good drinking water is disinfected with chlorine. The well construction was approximately 40 to 50 years ago and may not provide an adequate source of water for both facilities therefore it may need to be reconditioned. The project should also look to providing back up power generation for the drinking water well for both facilities in this case because the facilities are used in emergency situations.	3	20	Ρ	Dunlap leadership Academy (System No.1000577-001) is a school that is proposed to grow this project is intended to fix the drinking water capabilities of the school. It is currently dealing with uranium and gross alpha issues that have exceeded the MCL set by both state and federal regulations (Section 64442.64432(h)(3), And have prompted the California department of public health to issue a citation (Compliance Order No.03-23-110-005). The school is currently providing bottled water for students and staff and requires quarterly exceedance of chemical MCL notification.	750,000	3	75 23	Fresno	III	2012
366 5100180	5100180-001P	Grace Baptist Church	GBC Water Project	The city of Yuba City is planning to extend their water system past our property. Our plan is to connect to their system and use surface water instead of our well for domestic use. The city is expecting approval of a grant which will allow a majority of the costs to be covered. Our anticipated costs include a tap fee and necessary plumbing to connect our facilities to the main line run by the city.	5	20	Ρ	Arsenic concentration exceeded maximum contaminant level. CH&SC, Section 64431 (a): The average arsenic concentration at Well No. 1, based upon four consecutive quarterly samples completed during the third calendar quarter of 2008, exceeds the arsenic maximum contaminant level of 0.010 mg/l (10 ug/l).Public notification required was quarterly notices stating that we had levels of arsenic above the drinking water standard. These notices were issued from May of 2007 through July of 2008. At that time a point of use device was installed on the one location where we have water for public human consumption. We are currently operating on a permit that allows us to use this one POU device with bottled water available for human consumption.	0	1	200 21	Sutter	I	2011
367 2000828	2000828-001	SHADY OAKS MOBILE HOME PARK	Shady Oak Mobile Home Park Water Treatment	Installation of treatment, filtration, and monitoring c equipment capable of handling a 60 gpm facility.	G	15	С	Contaminants have been discovered during routine testing. Laboratory testing showed higher than normal levels of Uranium putting water system out of local compliance	35,000	21	40 11	Madera	Ш	2007
368 2000501	2000501-001	BASS LAKE ANNEX #3	Removal of Uranium/Gros Alpha	s The water company is currently investigating the procedures and equipment to complete treatment required and determine the cost thereof.	G	15	с	Elimination of uranium and gross alpha from water per Title 22, California Code of Regulations, Section 64442	75,000	23	42 11	Madera	Ш	2007
369 1009172	1009172-001	VAQUERO FARMS	Vaquero Farms - TTHM Compliance	installing 40,000 gallon storage tank	G	15	С	will not meet contact time	90,000	18	70 23	Fresno	Ш	2009
370 3900711	3900711-001	SIDHU MOBILE PARK WATER SYSTEM	Sidhu Mobile Park Water System	If possible and preferably (unknown at this time), Sidhu G Mobile Park Water System should connect to City of Stockton. If extension of city water to the facility is not possible, drilling for a new source or treatment will be the remaining options. The water system also has a history of bacterial monitoring violations and non- compliance, and cross-connection issues due to existing structural limitations and sewer / water line layout. Connection to city water would eliminate that.	3	15	C	The average of 4 sample results from the water system is 12 ug/L, exceeding the new MCL for arsenic of 10 ug/L, National Revised Primary Drinking Water Regulations, Federal Arsenic Rule, Section 141.62(b), 40 Code of Federal Regulations.	500,000	23	75 10	San Joaquin	Ш	2008
371 1900520	1900520-002	SMITH'S VILLAGE MOBILE HOME PARK	Arsenic Treatment	The system proposes two options, depending on most cost effective and feasible solution;1) drill a new well, install a storage pressure tank and arsenic treatment and monitoring equipment, and enclose the perimiter with security fencing; or2) consolidate with a nearby water system. Lancaster is a possibility, but the distance to a connection point is not known at this time.Either option would supply a safe reliable water source that is not in exceedance of the federal Arsenic MCL.	3	15	С	This water system has one well and no backup water supply source. The only well is ~30 years old, does not have a backup power source, and exceeds the Federal Arsenic MCL. If the well fails, the system will be without drinking water. The current supply is not a safe reliable source. The LPA has issued a Notice of Violation for federal Arsenic MCL exceedance.	850,000	34	75 16	Los Angeles	IV	2008

372 1000248	1000248-002	DOUBLE L MOBILE RANCH PARK	Uranium MCL Feasibility Study	The anticipated project includes the evaluation of alternatives and development of plans and specifications for the selected alternative. Currently, a new source, treatment, or a combination of the two, are being considered. The City of Kerman is approximately 3 miles away; consolidation is not expected to be economically feasible. The Water System imagines any project would provide additionally reliability in the case of source of supply failure, through either a secondary source (through the replacement of current primary source) or added source capacity.	G	15	C	This public water system is a community system that serves approximately 80 individuals through 37 service connections. The water system is believed to be a disadvantaged community located in rural Fresno County, east of the City of Kerman. The Water System completed initial radiological monitoring in the first quarter of 2011; gross alpha ranged between 18.5 and 33.0 pCi/L and uranium ranged between 18.5 and 33.0 pCi/L, from the sole source of supply. Following the initial monitoring, running annual averages for gross alpha and uranium exceed primary drinking water standards. CDPH issued Compliance Order No. 03-23- 100-004 to the Water System on 8/1/2011 for violations of the uranium MCL. The Water System currently operates with the single source of supply; should the well fail or water quality further deteriorate, the Water System would be left without a water source.	500,000	37	80 23	Fresno	11	2012
373 2000538	2000538-001	CEDAR VALLEY MUTUAL WATER CO	Cedar Valley Mutual- Arsenic removal from single groundwater source	Hire consultants and/or engineers to find the best fit solution for arsenic either by drilling a new well, treatment or consolidation. Project for single source is to drill a new well or consolidate with another water system, if feasible.	G	15	с	Water system is located in the mountain areas of Madera County. Water system is served by a single spring source that is out of compliance for the Federal arsenic rule. The running annual average noted on the Notice of Violation is 0.01525 ppm. This water system is also vulnerable to water outages caused by drought because it is served by a single source.	100,000	80	137 11	Madera	Ш	2008
374 5400544	5400544-003	ALLENSWORTH C.S.D.	Allensworth Arsenic Compliance Project	If funded, the proposed project would design a method to use Allensworth's existing wells and a new storage/blending tank to achieve a finished water product that consistently meets the MCL for arsenic. The project would require planning funding, to hire an engineer and hydrogeologist to design the blending system and tank site. It would also include environmental review. Once designed, the project could progress to a construction phase, where a tank site would be acquired, the tank constructed, and a remote SCADA system installed (anticipated) that would help ACSD more precisely control their remote wells, which are located three miles outside of town.	G	15	с	Allensworth Community Services District is equipped with two drinking water wells and a 42,000-gallon storage tank at the ACSD yard. Both wells are periodically in violation of the EPA arsenic standard, varying above and below the MCL of 10 parts per billion. The newer well, Well #2, was constructed to allow future isolation of water strata. It is believed that changing the casing in this well, combined with a precise blending strategy, would enable the Allensworth CSD to deliver water which consistently meets the Arsenic MCL.	1,000,000	110	400 12	Tulare	11	2011

375 3600036	3600036-001	Calico Ghost Town	Calico Ghost Town Water System Improvements	The project aims to seek the consultation with a hydro- geologist to evaluate the current wells in order to diagnose production issue and advice of adaptation to exist well or the possible addition of a new well location as needed to improve production and reduce contaminant input levels. The project will construct the new well and/or all other recommendation to rehabilitate the existing wells. Additionally the project with consult with engineers to provide design plans, specification and recommendation to construct a new treatment facility for the water system in order to remove the minerals and metal deposits as noted in recent testing of the current system and likely to be present in any new well. The project shall then construct the treatment facility based the plans via a pubic bid and shall be constructed with new and efficient technology to remove the current noted minerals and metals as well as remove any new deposits that may be found in the future and ensure a healthy viable source of water to supply the Park Site for many years. The project shall also construct modification to the existing system to tie the new well and treatment facility to the system as well as to improve flow dynamics and for fire purposes, this shall include improvement to the old water system and service including replacement and adding piping, isolation valves and looping for pressure and service	5	15	Ρ	The water system at the park site is over 40 years old and although newer wells been installed recently as the system has expanded and newer connections have been made the system still relies upon the original design and equipment. In addition, current wells that service the system, including a new well of approximately five years old, have experienced production problems and although planned in a location intended to remove chances of contamination all contain contaminants based upon the composition of the local aquifer. Minerals and contaminants from years of prior mining operations and possibly more recent distance industrial uses have resulted in the entire local aquifer containing contaminants as it percolates down from those mine and industrial sites. The current discovered contaminants nay be additionally leached into the system. The project aims to evaluate the current wells, possibly locate a new well as needed to improve production and reduce contaminant input levels, provide engineering and installation of new treatment facility for the water system in order to remove the minerals and metal deposits as noted in recent testing of the current system and likely to be present in any new well. The treatment facility will be designed with new and efficient technology to remove the current noted minerals and metals as well as remove any new	809,200	75	10 13	San Bernardino	v	2009
376 2000614	2000614-001	OAK CREEK INTERMEDIATE SCHOOL	Oak Creek Intermediate School-Uranium Removal	Hire consultants and/or engineers to find best fit solution for Uranium either by drilling a new well, treatment or consolidation.	6	15	Ρ	Water system is served by two wells. One well is used as a "standby" source. Uranium levels in the wells are over the MCL. Water system has a water softner connected to the system.	100,000	3	213 11	Madera	ш	2008
377 5400713	5400713-001	OAK VALLEY SCHOOL	Oak Valley Union School District Safe Drinking Water Project	The proposed project will include the drilling of a test well, which would determine if there is an adequate supply of potable water to meet the demands of our school's water system. Following the test well, if it is determined that a successful production well can be drilled on site, then that production well would be drilled and adequate storage facilities would be constructed, and a new pump installed. The new well facilities would then be tied into the existing school water distribution system.	5	15	Ρ	The average arsenic levels from the last five tests is approximately 18. Because the MCL was lowered from 50 ppb to 10 ppb, our water is now above the prescribed MCL. We have looked into treatment possibilities, but we have been told that this would be difficult because our water is too soft. In addition, on- going operational costs and disposal requirements would also negate the feasibility of treatment.	850,000	7	300 12	Tulare	III	2007
378 2000592	2000592-002	TWO TWENTY FOUR MOBILE HOME PK	Main replacement and uranium removal	We need to remove 3000 feet of old water line . A G shorter rerouting of the new water lines would reduce the amount of new lines, possibly by 1000 feet.As for the uranium flitration system, I have no knowledge of reguirements or cost for that. Lourdes Mertens of Madera County Env. Heathh @559-675-7823has been working with us about the uranium and she may be able to answer questions you may have.	3	10	С	It is time to replace the old water lines for the park. At the same time we would like to have a uranium flitration system installed in the park since we do have a uranium problem with our main well. The water lines are at least 30 years old. There are currently only 15 spaces in use at the park. expansion is not possible until we can address the current issues.	100,000	15	30 11	Madera	III	2009
379 2000592	2000592-001P	TWO TWENTY FOUR MOBILE HOME PK	New Well	Hire consultants and engineers to evaulate best fit G solution to remove Uranium contamination of the water supply either through a treatment, construction of a new well or consolidation with nearby water system.	5	10	с	The water system is served by two hardrock wells, both exceed MCL for Uranium. The water system serves a low-income community and increase in water rates will be a hardship.	100,000	15	30 11	Madera	ш	2008

380 0400058	0400058-001	RANCHO VILLA MOBILE ACRES	Rancho Villa Mobile Acres- Preapp	The existing well system will be updated with a new above ground filtration and monitoring system to keep the levels of Arsenic to conform with the new regulations. The installation would include new cement slab , new electrical wiring, and the new plumbing to accommodate the new filtration system . It would have to have adequate housing to protect the filtration system as well and the tenants of the trailer park and meet all county codes. The trailer park houses low income families. This job is imperative to be accomplished soon since most of these families do not have the means for other housing or could not bear the expense of moving if we do not get in compliance soon.	G	10	с	The State of California Department of Public Works has changed the level of contamination from 50 parts per billion down to 10 parts per billion.Rancho Villa Mobile Acres current level of Arsenic is 10.75 thus with the lower levels of contamination in affect we are now out of compliance.Rancho Villa now has approximately one month till we have to send out notifications to our tennants that the water is sub-standard and to boil drinking water an or use bottled water. Rancho Villa will also have to submit to the county a plan of recourse to correct this situation with a new filtration system.	37,000	21	32 21	Butte	I	2009
381 1900038	1900038-001	LANCASTER PARK MOBILE HOME PARK	Lancaster Park Mobile Home Park	The Water system is in need of an additional water source to meet the demands of the community, and to reduce arsenic concentrations. i.e. new ground water well.	G	10	с	Water Quality from Well #1 has ARSENIC concentrations that exceed the 0.50 milligrams per liter (mg/L) National Primary Drinking Water Standard Maximum Contaminated Level. The water system has insufficient water storage for fire protection.	500,000	21	53 16	Los Angeles	IV	2008
382 1500571	1500571-001	LUCKY 18 ON ROSAMOND, LLC	Kern Mobile Estates- Consolidation with Rosamond CSD to Solve High Arsenic Problem	Rosamond CSD is a large water system that has a water of main running in front of the Kern Mobile Estates. Kern Mobile Estates will connect to Rosamond CSD through a master meter.	G	10	С	Kern Mobile Estates has one active well and one standby well. Both wells produce water having arsenic at levels exceeding MCL.	500,000	60	58 19	Kern	Ш	2008
383 0900102	0900102-003	GOLD BEACH PARK	Adding treatment plant for arsenic and lead	r We plan to install treatment works that will maintain the arsenic at a safe level. We need assistance from CRWA to determine the best treatment system to install. For lead, we want to replace piping in the park that may be causing the elevation of leadfollowed by treatment if necessary.	G	10	С	Our drilled well exceeds the MCL for arsenic, public notification is being done quarterly to our users and in our CCR.We have also exceeded the action level for lead. Lead notification is in the process to be issued.	100,000	50	100 09	El Dorado	I	2009
384 1500405	1500405-003	AERIAL ACRES WATER SYSTEM	Arsenic removal & waterline replacement	Installation of a water treatment system to remove Arsenic from the systems two wells. A building will be installed to protect the treatment system from the heat and freezing temperature extremes of the desert. The The Mutual also plans to install about 3,300 feet of 6 inch water line, 6-inch gate valves and 3 hydrants that will replace the old leaking line and loop the distribution system.	G	10	с	Failure to meet the Arsenic Safe Drinking Water Standard of 10 PPM. Well #1 has an arsenic level of 24 ppm and well #2 has an arsenic level of 27 ppm. These water supplies violate State and Federal safe drinking water standards. The Mutual has no other supply of water.	600,000	62	114 19	Kern	Ш	2007
				The rural community of Aerial Acres is located in the Mojave Desert about six miles north of North Edwards, in Kern County. In 2002 a special income survey was										

conducted by Self-Help Enterprises documenting a 2001 community Median Household income of \$18,400.

385 3601055	3601055-001	Roadrunner Mobile Home Pk	Roadrunner MHP- Morongo Valley	Installation of a water filteration system located at the well pump and storage tank area. Due to the inability to secure an estimate prior to the application deadline the details of installing the filters is not available. However it was mentioned that it would most likley consist of a series of filter cartridges placed on some type rack stystem that would be serviced on amonthly basis.	G	10	c	The water system for Roadrunner MHP currently services 59 mobile home spaces and 2 cottages. During the past 12+ months the uranium count contiuned to increase and has remained above recommended guidelines for the past several months. According to correspondance dated March 2, 2007 from Environmental Health Services the average quarterly samples were 26pCi/l vs the recommended level of 20 pCi/l. This is in violation of California Civil Code Section 64441. Contact has been made with a "water filtration company" to provide an estimate for the installation of a water filtration system. As of this date the estimate has not been received. An alternative is to intergrate with the "standby system" however the monthly cost to the tenants will be significant therfore the lower cost of adding a filteration system to the existing well is preferred. In additon, if an agreement is reached with the local water company to access the stand by system then each space would need individual sub meters and the underground water distribution system would need to be upgraded to handle the increase in water pressure. The estimate of \$35,000 for installation of the filtration system has not been confirmed and does not include the monthly service cost which could range between \$1200-\$1500 per month. The funding request is strictly for the installation of the system such the first year of monthly service costs. After such time, and with	50,000	59	150 13	San Bernardino	v	2007
386 4000512	4000512-002P	BELLA VISTA MOBILE LODGE	Wells 1 & 2 arsenic treatment project	Installation of treatment equipment to bring arsenic level to within California Department of Public Health guidelines.	G	10	С	Exceedance of a Chemical MCL and public notification is currently in effect.	0	84	200 06	San Luis Obispo	IV	2009
387 2410012	2410012-003	HILMAR COUNTY WATER DISTRICT	Hilmar County Water District Arsenic Treatment	The District intends to install an above ground storage tank and arsenic removal equipment.	G	10	С	The District presently has two wells (which provide 100% of their water) with arsenic concentrations that exceed 10 ppb.	3,500,000	1,566	5,000 11	Merced	Ш	2007
388 1510006	1510006-010	East Niles CSD	Kern Citrus 600,000 Gallor Water Tank	This project involves the construction a 600,000-gallon welded steel tank with ringwall foundation, including valves and yard piping within the tank site. The project includes engineering work - design, construction inspection and administration. The intent is to use this location for blending of five groundwater sources ( of which three are currently exceeding the MCL for Arsenic) to meet the arsenic MCL.	G	10	С	The District has two 210,000-gallon water storage tanks that were erected in the late 1950's that have exceeded their useful life. Multiple leak repairs and structural repairs have been made in the last 10 years. The District at this time is unable to coat the interior of these two tanks because of the structural integrity of the two tanks. These two tanks receive water from 5 groundwater wells and the aging pump station at this location is the entry point to the distribution system for all five wells. Three of the five groundwater wells that pump to this location are above the MCL for Arsenic. The intent is to use this location for blending of sources to meet the arsenic MCL.	800,000	7,338	25,500 12	Kern	Ш	2009
389 5010028	5010028-003	Ceres, City of	City of Ceres Replacement Wells Project	Costs included in this project include:Geological analysis, Well drilling costs, Wellhead construction and infrastructure, Connective pipe runs to the city system, Valves, MonitoringTreatment if necessary, andProject and construction management costs	G	10	с	The City of Ceres needs two new wells to replace the currently active wells numbers 19 and 22. These wells are located at:Number 19 - 1511 Giddings @ Paramount Ave. Currently operating at approximately 1000 gallons per minuteNumber 22 - Arthur Way behind 1904 Hollister Street. Currently operating at approximately 1300 GPM.Both wells have been found to be in violation of maximum contaminent levels for uranium and nitrates. The production output of these two wells when combined is equivalent to roughly one quarter of all well water production available to the City of Ceres, and the replacement and allocation of a commensurate amount of water is vital to the continuing operation of the City of Ceres water system.	500,000	10,617	40,943 10	Stanislaus	Ш	2008

390 5010028	5010028-012	Ceres, City of	Well Replacement - Smyrna	This project is designed to install a new closed bottom, G gravel packed well to mitigate the uranium and nitrate contaminant problem and replace the existing well in order to provide much needed potable water without treatment in an ideal location—in a large park in the center of town. The project includes: $e$ design specifications for new test hole, monitoring well and production well $e$ specification of new screen and gravel pack $e$ new wedge wire screen, pack and drilled well $e$ new well head and annualar seal to water well standards $e$ new well motor $& pumpe disinfection,$ flushing and testing of new well new pump to waste drain (to comply with water well standards) $e$ conversion of old well to a monitoring well $e$ security fencing, controls and ancillary infrastructure for a well site $e$ standby power generator $e$ online water quality analyzers to monitor water quality and SCADA system	i	10	c	Smyrna well exceeds uranium and nitrate maximum contaminant levels (MCL). Arsenic and manganese are also high. This well is very important to the City's ability to meet peak water demands. In 2006 and 2007, this well was used to meet peak water demands (with public notification), although it exceeded the uranium MCL.During the summer of 2008, the city designed and constructed a blending station to blend Smyrna well with higher quality water from the distribution system and meet contaminant levels. This was successful but in the fall of 2008, this old open bottom well began producting unacceptable amounts of sand. We have now overdeveloped the well and reduced the sand production to almost undetectable amounts. The city can now reintroduce the water into the system but will need to be blended at lower production levels in order to maintain water quality and stay well below the MCL. A downhole video shows that the casing is failing. The hydrologist recommended that this well be replaced immediately.	1,000,000	10,617	40,943 10	Stanislaus	111	2009
391 5010028	5010028-009	Ceres, City of	Repairs to Arsenic and Manganese Treatment Plant	funding for a building will significantly extend the operational life and reliability of this million dollar treatment facility. Improved controls and analyzers will improve the quality of the effluent and reduce operator workload. this project includes: a buildingsecurity systemsafer offloading facilities for chemical deliveryonline SCADA systemBack up controlturbidity, chlorine and effluent analyzers to better monitor plant effluent.	i	10	С	The City Arsenic and Manganese Well Head treatment plant requires upgrades to improve reliability, online avalability and reduce staff work load while improving safety to the public drinking water effluent. Currently the plant is exposed to the elements and experiences shutdowns due to high temperature (control system overheating), heavy rain (motor bearing rusting) and sunlight degradation of pipes (plastic) and computer screens. The SCADA system has only six channels and needs to be upgraded to allow remote monitoring. Instrumentation to monitor the effluent will provide an improved monitoring and or sample rate to take the system offline in the event of a plant malfuntion or upset.	200,000	10,617	40,943 10	Stanislaus	111	2009
392 2210924	2210924-002	Yosemite West Water System	Copper compliance	CONDUCT A STUDY, DESIGN AND CONSTRUCT G TREATMENT FACILITIES TO ELIMINATE THE HIGH COPPER LEVELS IN THE SYSTEM.	i	5	с	EXCEED THE COPPER ACTION LEVEL IN THE DISTRIBUTION SYSTEM.	100,000	128	300 11	Mariposa	Ш	1998

393 3410011	3410011-005	Galt, City of	Golden Heights Water Treatment Facility Phase 3 Project	The Monterey Bay Well along with its raw water 3 pipeline to the Golden Heights WTP has recently been constructed and needs additional treatment equipment in order to meet current and new drinking water regulations before it is put into service. The City plans to construct the third phase of the Golden Heights Water Treatment Plant project which will consist of arsenic treatment for the existing on-site well, and groundwater treatment including iron, manganese, and arsenic for the off site Monterey Bay Well. The project also includes the addition of a permanent stand-by generator and booster pump station upgrade. The project will provide reliable water supplies to City of Galt water users and brings the water treatment site into compliance with the new arsenic regulations.	G	5	C	The project will address arsenic treatment for the existing Golden Heights water treatent facility and the newly constructed Monterey Bay well. Both wells exceed the new federal arsenic rule that has been recently adopted by the State of California which has been changed from a maximum contaminent level of 50 to 10 ug/l. The CDPH directive to the City of Galt is to provide modifications to the existing water wells within the City that are out of compliance with the new arsenic MCL limits. The City has been issued a notice of vilolation by CDPH and must provide public notification until the arsenic problem is resolved. The City of Galt is currently in design phase of the project and anticipates construction to begin in late 2009. The project will address arsenic treatment for Golden Heights facility that will include treatment for Golden Heights well and the newly constructed Monterey Bay well. The current treatment system at Golden Heights is to treat raw water from the Golden Heights site to treat raw water from the Monterey Bay well. To maintain reliability, the project also includes a new generator to supply power for the the existing system as well as for the future improvements.	1,600,000	7,872	22,982 09	Sacramento	I	2009
394 1910087	1910087-017	Metropolitian Dist. of So. Cal.	Enhanced Bromate Contro Program	I Implementation of the Enhanced Bromate Control Program will require engineering design, construction, as well as equipment purchase. This includes modification of existing chemical feed systems, chemical storage tanks and other facilities.	G	0	с	Metropolitan's current treatment process utilizes ozone to comply with disinfection by-product regulaiton. During certain source water conditions, the current treatment process may elevate bromate to undesirable levels. In some cases, the bromate levels have approaches CDPH compliance levels. Metropolitan Staff, working with CDPH Field Office, have successfully piloted a modified treatment process resulting in less chemical feed and compliance with the Enhanced Surface Water Treatment Rule. This treatment process is referred to as the Enhanced Bromate Control Program. Metropolitan is hoping to install these facilities at each of its 5 surface water treatment plants.	20,000,000	647	0 16	Los Angeles	IV	2012
395 5403103	5403103-001	TRACT 327 MUTUAL WATER CO.	Tract 327 Mutual Water Company New Well Proposal	Tract 327 Mutual Water Company currently has two wells. The main well (well number 1) which supplies the needed volume of water has always testes high for Uranium and therefore has never been below the State's maximum allowed number. Our second well does not produce much of a volume of water and we do not have the storage available at that location to make it a viable contributor, we only use it in emergencies if well #1 is being worked on. With this grant we would be able to drill another well near where the main well resides and hopefully therefore not have the Uranium problem to which we currently have. We would also be able to add the needed storage to well #2 and be able to utilize it for water delivery at all times within the system.	G	0	С	Tract 327 Mutual Water Company, since mandatory monitoring has been initiated has experienced high levels of Uranium. The well is of a "wagon wheel" type that was developed further and made for use in 1959 when the housing tract was built. The levels of Uranium vary from different times of year but the levels have never been close to being below the State Standards. In the 1980's another well was drilled but only delivered a very small volume of water and was abandoned until 2006 when it was reopened and a pump was installed. It was found that the well produced good quality water but only delivered about 12 gallons per minute, not near enough for the needed quantity. The well has been used in emergencies only to supply low volume of water if the main well was inoperative.	20,000	15	24 12	Tulare	Ш	2008

396 1009039	1009039-002	PAPPAS & COMPANY (MENDOTA)	Mendota TTHM compliance	Study to determine and construction of best improvement plan from among identified options:1) GAC treatment2) Minimizing water age in the distribution system and maximizng reservior turnover3) Treatment optimization and increased DBP precurser removal through enhanced coagulation4) Disinfection dosage and CT ratio optimization5) Alternative disinfectant injection points6) Alternative disinfectants.	G	0	C	Non-compliance with maximum contaminant level (MCL) for Total Trihalomethanes and/or Haloacetic Acids. Subject to quarterly testing and notification of exceedance of a Chemical MCL.	250,000	11	25 23	Fresno	Ш	2009
397 1009035	1009035-003	PILIBOS BROTHERS RANCH (SIMONIAN FA	RN TTHM Planning Study	Funding is needed to initiate a Planning Study to identify appropriate solutions to resolve the TTHM CO.	G	0	С	The Water System has received Compliance Order No. 03-12-080-033, issued October 31, 2008. The Water System began quarterly monitoring in the 4th quarter of 2007. The Water System's TTHM sample in third quarter of 2008 (sample: 09/08/2008) resulted in a TTHM RAA of 0.104 mg/L, which exceedes the MCL of 0.080 mg/L.	250,000	16	25 23	Fresno	III	2011
398 1009039	1009039-003	PAPPAS & COMPANY (MENDOTA)	Mendota Disinfection compliance	Study to determine and construction of best improvement plan from among identified options:1) Add baffles to storage tanks2) New , larger storage tanks with baffles3) Improved filter media for better removal of contaminents	G	0	с	Did not meet treatment requirement (disinfection)	250,000	11	25 23	Fresno	Ш	2011
399 1500458	1500458-002	R.S. MUTUAL WATER COMPANY	Consolidation with CWS Kernville	The proposed project is to consolidate with CalWater- Kernville; Replace approximately 800 ft of 6-inch PVC distribution lines and install 2 master meters, 4 hydrants and 23 meters and services. The existing well will be abandoned.	G	0	С	The system distributes water exceeding the primary MCL of 20 pc/L for uranium and the new federal and state Arsenic MCL of 10 ug/L. Nitrate is marginallly below the MCL of 45 mg/L. Compliance orders have been issued. The existing distribution system is more than 40 year old galvanized 1.5 to 2 inch pipe, and has frequent leaks.	327,800	22	25 19	Kern	III	2009
400 1500458	1500458-001	R.S. MUTUAL WATER COMPANY	Consolidation Project with CWS-Kernville System	As part of this project, we will consolidate with nearby CalWater's Kernville System. The project would consist of 50' of 6-inch pipe to connect with Cal Water, replacing 2000' of old galvanized pipe with new 6-inch water mains, and meters for each service connection. The project will also include destruction of our existing well in accordance with the Kern County Standards.	G	0	С	Our system well produces water exceeding the primary MCL of 20 pci/L for uranium and the new federal arsenic MCL of 10 ug/L. Nitrate is marginally below the MCL of 45 mg/L. Our distribution system has 40 years old galvanized steel pipe which is also undersized with diameter ranging from 1.5 to 2-inch.	115,000	22	25 19	Kern	III	2007
401 3400433	3400433-002	EDGEWATER MOBILE HOME PARK	Edgewater MHP Arsenic Correction	We are exploring filtering to remove arsenic, or drilling a new well.	G	0	с	The well has been identified as having a level of arsenic in excess of the 10 ppm as defined by the EPA.	100,000	35	29 09	Sacramento	I	2009
402 1500436	1500436-001	HUNGRY GULCH WATER SYSTEM		All groundwater wells will be pumped into a storage tank and then filtered to remove arsenic	G	0	С	Arsenic level in the systems wells exceed the current	925,000	17	30 19	Kern	ш	2006
403 1500436	1500436-002	HUNGRY GULCH WATER SYSTEM	Consolidation with Boulder Canyon	The proposed project is to construct approximately 1000 feet of 4 inch schedule 80 PVC pipeline connecting the two systems with a booster pump, appropriate appurtenances, and replacement 10,000 gallon storage tank. Line would be along Hungry Gulch Rd and the tank would be on an existing site once the failing tank is removed. Once the connection is made the assuming system, Hungry Gulch, will begin efforts to seek funding to install a treatment system addressing arsenic issues. Boulder Canyon has administratively consolidated with Hungry Gulch and the new system name is Hungry Gulch Mutual Water Company Inc. They are retaining their original water system numbers 1500521 & 1500436 respectively until the physical interconnection line is installed. At that time they will be a single water system and will apply for a single	G	0	c	The system frequently runs short of water and needs to consolidate Hungry Gulch and Boulder Canyon. Both systems have arsenic exceedances and are currently using POU treatment, but they need funding to install a POE system. System has already administratively consolidated with Hungry Gulch Inc and share Boards, Bookkeeping, and Rate Structure. The installation of a connecting line resulting in elimination of the Boulder system will finalize the consolidation.CDPH Violations and Compliance orders have been issued for both systems.	25,000	17	30 19	Kern	111	2009

404 5000218	5000218-003	COUNTRY VILLA APTS	North Well Arsenic Treatment Facility	This project provides for the design/ installation of a permanent Arsenic Treatment facility for the North Well. The North Well currently has an Arsenic level of 22 ppb. Built in 2007, the North Well was constructed with a 10 HP pump, 2500 gallon hydropneumatic tank and designed in a layout to accomodate easy installation of a future Arsenic Treatment facility. Although the Owners privately funded the design and construction of the North Well, pump, and hydropneumatic tank, there is insufficient funding available to complete the remaining necessary improvements to the water system including the installation of a permanent Arsenic Treatment facility.Project participants include the Owner of Country Villa Apartments, Robyn Dorius, a licensed California Professional Engineer and a Certified Water Distribution Operator.	G	0	C	Country Villa Apartments, built in 1950 in an unincorporated area of Stanislaus County, has a single well (North Well) that serves 23 service connections (approximately 75 residents). The 400 foot deep North Well, 10 HP pump, 2500 gallon hydropneumatic tank, and related piping were all installed in 2007 to replace an older well that repeatedly violated the Total Coliform MCL. The North Well is in violation of the State of California Drinking Water Regulation for Arsenic (allowable MCL is 10 ppb). The North Well currently has an Arsenic level of 22 ppb that requires public notification to all residents every 90 days.Due to lack of adequate funds, the Owners must seek outside funding to complete the following water system upgrades: 1) Arsenic Treatment Study, 2) Arsenic Treatment Filter, 3) Wellhead Protection Improvements, 4) Emergency Back- Up Electrical Generator, 5) Underground Distribution Piping Replacement, and 6) Renovation of Out-of- Service Back-Up Well.To correct the Arsenic problem, a permanent Arsenic Treatment facility will need to be installed on the North Well. This project proposes to fund the design/ installation of permanent Arsenic Treatment facility for our North Well.	120,000	23	30 10	Stanislaus	11	2009
405 1500521	1500521-002	BOULDER CANYON WATER ASSOCIATION	Consolidation with Hungry Gulch	The proposed project is to construct approximately 1000 feet of 4 inch schedule 80 PVC pipeline connecting the two systems with a booster pump, appropriate appurtenances, and replacement 10,000 gallon storage tank. Line would be along Hungry Gulch Rd and the tank would be on an existing site once the failing tank is removed. They are retaining their original water system numbers 1500521 & 1500436 respectively until the physical interconnection line is installed. At that time they will be a single water system and will apply for a single system number with the state.	G	0	C	The system runs short of water frequently and needs to consolidate Hungry Gulch and Boulder Canyon. Both systems have arsenic exceedances and are currently using POU treatment, but they need funding to install a POE system. System has already administratively consolidated with Hungry Gulch Inc and share Boards, Bookkeeping, and Rate Structure. The installation of a connecting line resulting in elimination of the Boulder system will finalize the consolidation.CDPH Violations and Compliance Orders have been issued for both systems.	25,000	19	30 19	Kern	11	2009
406 1500521	1500521-001	BOULDER CANYON WATER ASSOCIATION	Arsenic Treatment and Consolidation	Add arsenic removal treatment, consolidate with	G	0	С	Arsenic exceeds MCL in source water.	150,000	19	30 19	Kern	Ш	2007

407 5000218	5000218-001	COUNTRY VILLA APTS	North Well Arsenic Treatment Pilot Study	The proposed Pilot Study consists of the design/installation of a small scale Arsenic treatment facility which will be installed on the North Well. For the purpose of the Pilot Study, the treatment facility wic consist of a series of 3 Arsenic filters which will be installed in 3 parallel lines. Each filter will have a production volume of approximately 5 gpm. Each filter will have a unique type of Arsenic filter media. A portion of the water produced by the North Well will be diverted to the series of filters and then blended back into the distribution system after filtering. A separate sample tap will be installed following each filter so that unique water samples can be taken from each filter. By monitoring the water quality (each month) after each filter out a 18 month period, the data collected will allow us to determine the most effective, as well as the greater Central Valley area that currently exceed the allowable mcl for Arsenic. The project participants consist of the Owner of Country Villa Apartments, Robyn Dorius, a licensed California Professional Engineer and a Certified Water Distributio Operator (Grade D1). (By the time the Pilot Study is started, Robyn Dorius will have D2 and T2 operator	G 111 e : :	0	c	The North Well is the sole source of drinking water for the Country Villa Apartments community (80 residents). It was built in 2007 to replace an older, failing drinking water well. The North Well is in violation of the State of California Drinking Water Regulation for Arsenic. The allowable mcl for Arsenic is 10. The North Well has an Arsenic level of 21. The North Well has a production volume of 80 gpm.To correct the problem, an Arsenic treatment facility will need to be installed on the North Well. By completing this proposed Pilot Study program, we will be better able to design the most effective and economical Arsenic treatment facility.	25,000	23	30 10	Stanislaus		2008
408 1500449	1500449-002	FOURTH STREET WATER SYSTEM	Arsenic Treatment System	Install arsenic treatment faciliuty.	G	0	С	Arsenic in source exceeds MCL.	100,000	24	35 19	Kern	111	2007
409 1500449	1500449-004	FOURTH STREET WATER SYSTEM	New water source	The selected alternative is to drill an additional well to provide an adequate quantity of water to meet dry cycles and to locate the well in an area that will produce water meeting the arsenic MCL. With primary use of a new well meeting the arsenic MCL and blending from the existing wells as needed to meet peak demands, the water system may be able to meet the water quality standards without treatment. The nature of the groundwater in the adjacent area is typically higher arsenic levels in the lower elevation areas due to natural materials. The FSWC wells have much lower arsenic levels than other water systems in the area at lower elevations. Therefore, a new well at a different location or higher elevation may likely have water quality meeting the arsenic maximum contaminant leve (MCL).	G e e	0	c	The water supply wells have an arsenic level of 12-20 µg/L which is not in compliance with the new drinking water standards. Only Well No. 2 and the storage tank are currently in use. Well No. 1 production has declined in this dry period until it is now off-line and the water system is without a backup well as required by the Waterworks Standards. A new well is needed to provide the system an adequate water supply. Violations have been issued.	250,000	24	35 19	Kern	Ш	2009
410 1900785	1900785-003	MITCHELL'S AVENUE E MOBILE HOME PAI	RK Mitchell's Avenue MHP	The Water system is in need of an additional water source to meet the demands of the community, and to reduce arsenic concentrations. i.e new ground water well.	G	0	с	Water Quality from Well #1 has ARSENIC concentrations that exceed the 0.50 milligrams per liter (mg/L) National Primary Drinking Water Standard Maximum Contaminated Level. The water system has insufficient water storage for fire protection.	500,000	24	35 16	Los Angeles	IV	2008
411 3900732	3900732-001	V & P TRAILER COURT	V & P Trailer Court (Arsenic Compliance)	The Water System is seeking to install a new water source or treatment. City water probably not available due to location. A new well may be more cost-effective than treatment, but there is no guarantee if the water of a new well will may standards. Treatment would include initial equipment such as tanks and filter materials and piping, but will also include monitoring cost and filter replacement and disposal of used filter materials.	G 2	0	С	The average of 4 sample results of the well in 2006 and 2007 was 12.5 ug/L for arsenic, and exceeds the new MCL for arsenic of 10 ug/L, National Revised Primary Drinking Water Regulations, Federal Arsenic Rule, Section 141.62(b), 40 Code of Federal Regulations.	500,000	15	35 10	Sən Joaquin	Ш	2008
412 1502383	1502383-001	NORD ROAD WATER ASSOCIATION	Consolidation with Vaugh water company	n Consolidation with the Vaughn water company	G	0	с	Arsenic above the new EPA MCL	1,000,000	16	39 19	Kern	ш	2007

413 1000445	1000445-001	LINDA VISTA FARMS	Uranium Violation	Planning study to identify the solution- potential solution drilling a new well that meets all primary drinking water standards.	G	0	С	The Water System has one groundwater source that has exceeded the uranium MCL concentration since 2006. In addition, the well also exceeds secondary MCL for sulfate, specific conductance, TDS and manganese.A Compliance Order NO. 03-23-100-010 was issued to the Water System On November 29, 2010 for non- compliance with uranium MCL. It requires the water system to provide quarterly notification to all users of the vilaton until the problem is corrected and submti proof of notification to CDPH Fresno district office.	500,000	26	40 23	Fresno	111	2012
414 1009258	1009258-002	SAN ANDREAS FARMS	TTHM Planning Study	Funding is needed to initiate a Planning Study to identify appropriate alternatives to resolve the TTHM CO.	G	0	с	The Water System has received Compliance Order No. 03-12-080-034, issued November 3, 2008. The Water System began quarterly monitoring in the 1st quarter of 2008. The Water System's TTHM sample in third quarter of 2008 (sample: 09/11/2008) resulted in a TTHM RAA of 0.082mg/L, which exceedes the MCL of 0.080 mg/L.	250,000	10	40 23	Fresno	Ш	2011
415 1009222	1009222-001	TERRA LINDA FARMS	TTHM Planning Study	Funding is needed to initiate a Planning Study to identify appropriate solutions to resolve the TTHM CO	G	0	с	The Water System has received Compliance Order No. 03-12-080-028, issued October 30, 2008 for noncompliance of Total Trihalomethane MCL. The Water System began quarterly monitoring for TTHM when CDPH took over regulatory jurisdiction from Fresno County (3rd quarter 2007). The Water System's TTHM sample in the second quarter of 2008 sample (sample: 06/18/2008) resulted in a TTHM RAA of 0.127 mg/L, which exceedes the MCL of 0.080 mg/L.	250,000	10	40 23	Fresno	Ш	2011
416 1600507	1600507-001	HARDWICK WATER GROUP	Drill new well	Drill a new well and upgrade distribution system	G	0	С	Uranium above MCL. The existing water well was drilled in the 1960's on a small residential parcel owned by the water Company. Original well had a 12 inch casing which in later years was refitted with an interior 10 inch casing due to a break on the original casing. Depth of exisiting well is estimated at between 160 to 170 feet. A 7.5 hp submersible pump installed in 1978 burned out and was replaced in 2007.Water System Pressure is kept at a lower level due to concern of leakage in the old distribution system.Water quality from the well exceeds the MCL of 20 pc/l for uranium with test results in the past few years ranging from 42 to 49 pc/l. Results from 16 individual private water wells serving homes in the community tested for uranium indicated that 13 of the 16 exceeded MCL of 30 ppb (ranging anywhere from 36 to 260 ppb). (description from 2009 preapp)	10,000	16	40 12	Kings	111	2007
417 1502597	1502597-002	DEL SOL WATER CO-OP	Del Sol Water - High Uranium - Treatment, Consolidation, or New Well	Construct a pipeline Inyokern CSD. If that is not feasible, consolidate with another small water system. that is not feasible, provide treatment or construct another well	G If	0	С	Del Sol Water Coop has a single well that produces water that contains uranium at a level exceeding the primary MCL.	1,000,000	12	40 19	Kern	Ш	2008
418 1009232	1009232-001	SUMNER PECK RANCH	Peck Ranch Water System	To increase storage size to meet CT.	G	0	с	To small of storage for CT.	120,000	21	42 23	Fresno	Ш	2009
419 2000534	2000534-001P	LEISURE ACRES MUTUAL WATER COMPANY	Y Leisure Acres Mutual- single arsenic in single source	Drill a new well or consolidate with another water system for single source problem. Hire consultants and/or engineers to find best fit solution for arsenic either by drilling a new well, treatment or consolidatio	G n.	0	С	Mountain community is served by a single groundwater source. Availability of only one source make water system vulnerable to water outages caused by drought. Also, arsenic level in this groundwater source is over the Federal Arsenic MCL of 10 ppb. Water system is currently monitoring quarterly to determine running annual average and compliance with Federal Arsenic Rule.	0	23	45 11	Madera	III	2008

420 0707602	0707602-001C	BEACON WEST	Beacon West M-26 Well Project	The most cost effective solution at this time is to develope a monitoring well 180' deep and test for arsenic and water quality samples for three months. If the arsenic and water quality test are below standards we will convert the monitoring Well into a production Well for Beacon West customers. If the arsenic and water quality levels are above the MCL'S DWD will not convert the monitoring well. DWD will use the well for continued monitoring. DWD has tested the nearest well approximently 1 mile away for Arsenic levels and the results was non-detection. A every important fact is Beacon West Well is 260' deep and the non-detected well is 180' deep indicating that a well depths of 180' could have lower Arsenic levels. The cost to maintain a new production well will remain the same verses a new water arsenic removal treatment system which will add and additional cost of \$19,000- \$40,000 annually.DWD would like to have two phases for this project. Phase 1:Develope a monitoring well and test the arsenic and Title 22 contituents stanards for 3 months. Monitoring Well cost: \$70,000.Phase 2: DWD/CCC Environently Health Dept. will evaluate the monitoring well. If both agencies agree that the arsenic and other constituents are within acceptability limits this phase will be to convert the monitoring well into a production well for Beacon West water system. If the arsenic and constituents are not acceptable DWD will not convert Abandon and close the auxiliary well.	G	0	c	Contra Costa County (CCC) was original owners of Beacon West water system. In 2002 CCC gave ownership to to Diablo Water District (DWD) of Beacon West Water System, to maintain and over see the small water system. DWD recieves billing from CCC Tax Assesment and operates it's budget through the Tax Assesment and operates it's budget through the Tax Assesment is 2008 Beacon West Well water had been tested for a Arsenic level of 29ppb (CDPH MCL for Arsenic is 10ppb or below). Also a Arsenic Advisory Notice was issued to Beacon West Customers through CCC Enviromental Health Dept. Since 2008 DWD has researched treatment systems, well development and ran pilot systems to evaluate a cost effective plan to comply with the Arsenic Standards of 10ppb. This has been a chellenge to justify the capital and annual cost with a small water system. DWD will be asking 100% Funding for this disadvantage community of the 2010 cenus.	2,500	17	45 04	Contra Costa	Π	2012
421 2700536	2700536-001	CORRAL DE HERRA ESTATES WC		Abandon and close the auxiliary well.	G	0	L	Arsenic levels above oug/L.	2,500	10	45 05	wonterey	п	1998
422 0707615	0707615-001	DOUBLETREE RANCH WATER SYSTEM	Doubletree Ranch HOA Water System Arsenic Mitigation Project	The best solution for reducing our Arsenic levels has been identified as the Adsorption technology. We will be operating a pilot plant to determine the best media include, iron, alumina, titanium, and resins. We will also need to implement an acidification system to reduce the Ph of our water from 9.0 to 7.0 for the adsorption media to be optimally effective. Once the optimal media has been determined we will scale up the pilot plant to an operational 20 gpm Arsenic removal system. The 20 gpm system will be located in our primary tank house. The final configuration is envisioned to consist of an array of tanks containing the active media an a 20 gpm pump that will pump the raw water from storage tank #1 (7500 gal.) through the Arsenic Removal System. The Arsenic free water will be collected in storage tank #2 (7500 gal.) and distributed from there via gravity feed to our communities water users. The total cost of the system to reduce the Arsenic levels in our water from 25ppb to below 10ppb has been estimated at \$80,000. This includes the 20 gpm pump, the media and media tanks and associated pumping and valving. The monitoring will be perform off site by a chemical analysis lab. The storage tanks and distribution system are already in place and will not need to be modified.Consolidation is not an option because the nearest public water system is over 5 miles	G o d	0	c	water production and water quality of the auxiliary well are poor. The Doubletree Water system is currently operating under a Compliance Order from Contra Costa Health Services to reduce the levels of Arsenic in our drinking water to below 10 pb). The Arsenic levels are currently at around 25ppb. We are required to post a quarterly public notification of our Arsenic levels and a recommendation that all water users drink bottled water.	60,000	18	49 04	Contra Costa	Π	2009
423 1502724	1502724-001	Quail Valley Water Dist-Eastside System	Arsenic Problem Solution	Drill new well or install treatment to remove arseinc.	G	0	С	Source water exceeds MCL for arsenic.	10,000	30	50 19	Kern	ш	2007
424 2000800	2000800-001P	MAHAL APARTMENTS	Mahal Apts New well construction	Hire consultants and engineers to find best fit solution - either to drill a new well, consolidate with another water system or provide treatment.	G	0	с	This water system serves a low income community , dependent on a single source that exceeds the MCL for Gross Alpha. There is also no storage capacity on site. The water system consists of 20 apartment units.	100,000	20	50 11	Madera	Ш	2008

425 5000033	5000033-001P	COBLES CORNER	Cobles Corner Arsenic We replacement and addition	Il At present we feel it would be cost effective to drill a second well and blend the water. We expect to get nitrates from the deeper well with no arsenic contamination. If we blend the two we may be able to lower the arsenic contamination level and remain below the Nitrate mcl. 1 believe this will require a new well, a holding tank to mix and circulate the water from both wells, a small pump station, monitoring equipment and test ports, as well as the removal of some of the older equipment. The distribution line to the main supply for the Park and the corner market, (Mo's Oasis), will need to be removed and replaced also, (about 100 ft).	G	0	C	Coble's Corner MHP is currently contaminated above the mcl of 10 ug/l. Our four-quarter average is 12.3 ug/l with samples taken from September 2008 to June 2009. As yet we are not required to supply bottled water but Stanislaus County Dept. of Environmental Resources has made a "strong recommendation" that we do so. Sampling is done every quarter as instructed and notifications are sent to the tenants every quarter also. We have been doing this faithfully for almost three years now. When we filed our previous pre-app we expected to be consolidated with Hughson City Water System. They have informed us that at present they have no plans to supply water to the outlying county communities. This statement was made after we submitted the original pre-app. Therefore we are presently looking at either drilling a new, deeper well and blending the water to lower the arsenic contamination, or installing an arsenic removal system. We do not have the means to do either one on our own. We are not able to decide which way to go because we don't have the resources to pay for a contractor for consultation on construction costs, or an engineer to draw up the plans and take care of all the environmental documentation, etc., etc. We feel that the best way to handle this issue is to drill a second well and blend the water.	62,440	20	50 10	Stanislaus	II	2009
426 2000785	2000785-001P	VALLEY TEEN RANCH	Valley Teen Ranch - new well	Dril a new well and/or provide "point of entry" Arsenic treatment.	G	0	С	Single source water system serving a juvenile half-way housing facilities. The one and only source of water exceeds MCL for Arsenic and at the same time had issues with Iron and Manganese.	0	4	50 11	Madera	Ш	2008
427 1500561	1500561-001P	ROUND MOUNTAIN WATER COMPANY	Study and Design for	Study/design/construct treatment/blending.	G	0	С	Uranium in source exceeds MCL	10,000	17	50 19	Kern	ш	2007
428 1500561	1500561-002	ROUND MOUNTAIN WATER COMPANY	MWC New Well - Number 3; Uranium Mitigation	Round Mountain Water Company proposes to drill a new well to replace Well 001. A new well site has been selected and site control secured from the landowner. The new well is 1,900 feet from the existing well. Planned total depth is 240 feet and flow expected to be 125 gpm. A 4 <sup>+</sup> , 1,900 foot PVC pipeline is to be installed from the new well to the existing storage tanks and distribution system. The water from the new well will meet Title 22 Standards.Consolidation with other systems was considered, but cost are prohibitive.	G	0	С	Round Mountain Water Company is currently in violation of the MCL for uranium in Well 001. CDPH has directed the Company to mitigate the violation and the Company's members are notified quarterely of the MCL violation. Public notification has been effect since June 2006. CDPH has also prohibited the Company from adding any new members until the MCL violation has been mitigated.	125,000	17	50 19	Kern	III	2009
429 1009006	1009006-003	PAPPAS & CO (COALINGA)	Coalinga Disinfection compliance	Study to determine and construction of best improvement plan from among identified options:1) Add baffles to storage tanks2) New, bigger storage tanks with baffles3) Improved filter media for better removal of contaminents	G	0	С	Did not meet treatment requirements (disinfection)	250,000	13	50 23	Fresno	Ш	2011
430 1500364	1500364-001	KRVWC - KERNVALE MUTUAL WATER CO	arsenic and uranium contamination - annex to Erskine Creek Water Co.	Connect to Erskine Creek Water Company and consolidation	G	0	С	Arsenic in the system well is above EPA's revised MCL of 10 ug/L. Also uranium is above the state MCL of 20 pCi/L.	4,400,000	20	50 19	Kern	Ш	2007
431 1009281	1009281-001	HAMMONDS RANCH	Bring water treatment system up to state standards	We need to install a carbon filter to solve the compliance problem we have with THMS, we wanted to install a flocculation mixer and replace a 35+ years old pressure tank.	G	0	с	Install carbon filter for THM removal and new pressure tank system	150,000	17	50 23	Fresno	Ш	2009

432 4900575	4900575-002	Loch Haven Mutual Water Company	Loch Haven Mutual Water Company - Arsenic Treatment Project	Loch Haven Mutaul Water Company has 19 water connections to residences on the system. Currently the Loch Haven Mutual Water Company has been evaluating the best long term solution and has been working with an engineering firm, water treatment companies and venndors to scope out the appropriate treatment options. POE is a feasible option or the construction of a whole small water company treatment system. A Whole System solution is exteemely costly as it would give cause to upgrade the existing main size from 4" to 6" and install C900 water main pipeing material and aquire right of way for an area sized appropriatly to construct the whole system treatment facility.Currently POE is the least costly planned route for treatment for the removal of Arsenic and Manganese to the required MCL's. Flowmeters are required to be installed for the primary and reserve wells and a disinfection treatment must also be implemented. The disinfection treatment proposed would intruduce chorine into the entry of the water system at the source in the pump house and therfore be a primary disenfection treatment and an arsenic pretreatment binder. There would be a total of 19 POE systems required, one for each residence or metered service. The POE system consists of the chlorination which occurs previously as a disinfectant and binds to one species of arsenic, a pre-filter for silica, a water	G	0	C	The Loch Haven Mutual Water Company is currently out of compliance with the State of California Arsenic Maximum Contaminant Level (MCL) which was recently adopted in December of 2008 and has subsequently received a compliance order 02-18-08CO-006 from the State of California Department of Public Heath. The Loch HAve Mutual Water Company's Running Annual Average for arsenic is 0.019 mg/L which exceeds the newly adopted MCL for the State of California of 0.010mg/L.THe Loch HAven Mutual Water Company has been and is current on sending quarterly public notifications to all the residents. A subsequent Inspection Report dated August 28, 2009 has been submitted to the Loch Haven Mutual Water Company which has additional requirements to be in compliance with the California Health and Safety Code and California Code of Regulations whiche requires;1) flow meters be installed on Well 01 and Well 02 with monthly production recording. 2) Lead,Copper and Asbestos Monitoring. 3) Construct 4.5'x4.5' Well Surface seals by September, 30 2009. 4) Have Backflow detection devices tested annualy and a cross connection control survey performed by December 31, 2009. 5) Investigate Manganese Removal Treatment and incorporate with Arsenic removal to below respctive MCL's. 6) Investigate an install a disinfection treatment for the water system by December 31, 2009. 7) Hire a	250,000	19	50 18	Sonoma	Ι	2009
433 1500455	1500455-001	WILLIAM FISHER MEMORIAL WATER COM	IPA Cartridge Type Arsenic Removal	Install cartridge type arsenic removal system.	G	0	С	Arsenic in source water at 16 ug/L.	187,000	18	51 19	Kern	ш	2007
434 2702148	2702148-003	ASOLEADO MWC	Fluoride Contamination Solution/New Well	Project Description:PROJECT 1. Resolving Fluoride Contaminant Problem:Various water treatment options to correct excessive fluoride problem in newest well were explored and ultimately ruled out because of the long term maintenance costs beyond what Asoleado community budget could sustain. It was therefore determined that drilling a new well (600 - 1000 feet down) on the Asoleado ridge at approximately 2000 feet elevation was the most likely successful and cost effective solution as recommended by Granite Drilling Company, who identified two potential drilling sites. In addition to the expense of drilling a new well, the project would involve additional telemetry and pipes to connect the well to the existing system of distribution. There are two possible connection sites for cost effectiveness. We favor the site that would allow for maximum use of gravity feed which, in the long term, would reduce energy consumption and cost as well as extend the lifespan of the water system pumping components. PROJECT 2: Increased Water Storage Capacity: Increase storage capacity with additional underground tank to maintain necessary fire protection while facilitating adequate water distribution to all households. PROJECT 3: Emergency Back Up Power Source: During the recent Basin Complex Fires and Indians fires, the Fire Department and Fire fighting agencies who uses AMWC water system to refill their	G	0	C	Asoleado Mutual Water Company (AMWC) is a small rural non- profit community water system located in Carmel Valley, California. Asoleado community, its complex water system and the Asoleado Mutual Water Company was established in 1984. In the last 10 years with a board of directors' volunteer support, dedication and careful management of our limited budget, we have worked closely and successfully with all government agencies to achieve exemplary compliance with water quality standards. In 2002, following water distribution concerns expressed by the county regarding new construction in Asoleado, we applied and qualified for a 10 year State loan to drill a new well in proximity to our existing wells at 950 feet elevation. However the new well has fluoride levels that vary from 3.42mg/L to 8.7mg/L, which causes Asoleado to be in violation of water quality standards as dictated by state agencies. In a continued diligent effort to comply with water quality standards and requirements, and protect the health of our residents, the AMWC has adopted the practice of "blending" the output of our wells with strict monitoring, in order to reduce the fluoride levels to safe levels. Even before the increased population (human and livestock) experienced in the last couple of years, not to mention the projected new construction on currently vacant lots, the fact that this well can only be used about three months a year, this only under	350,000	35	52 05	Monterey	Π	2008
435 2700547	2700547-001	DESMOND RD WS #03	Chromium and Cadmium Compliance	Replace well. This would involve study, design, and construction.	G	0	С	Well exceeds chromium and cadmium MCL.	50,000	19	55 05	Monterey	II	2006

436 2701959	2701959-003	TIERRA VISTA MWC	Tierra Vista Mutual Water Company Arsenic Treatment Plan	<ol> <li>Planning/feasibility study to determine viable/cost effective arsenic treatment options.2. Develop engineering design, preliminary engineering and spec documents for treatment plan.3. Purchase and install treatment equipment.</li> </ol>	5 C	)	С	Tierra Vista Mutual Water Company currently has 17 active hook-ups with no plans for increasing the number of sites. The arsenic reading on average exceeds 10 ppb, hovering around 11 ppb. We would like to apply for funds to investigate viable/affordable treatment options and then proceed with construction to establish well treatment for removal of arsenic using approved, cost effective technology.	120,000	19	57 05	Monterey	II	2012
437 2702439	2702439-001	WOODLAND HEIGHTS MWC	Arsenic removal for compliance with new MCL level.	The project proposed would consist of two tanks with a G selective resin option to remove the arsenic. A two tank system is more advantageous so one tank can be serviced while the other remains on-line. The system will be operated as an upflow configuration with no external discharge.	6 C	)	С	We have an arsenic quality standard failure. We are required to issue a quarterly notice to all water consumers due to the fact that the arsenic content in the water supply exceeds the maximum permissible level set by the State and Federal Drinking Water Regulations. Health Regulations are being violated under Title 22, CA Code of Regulations. MCHD and EHD is requiring the use of bottled water or water from an approved source for drinking, cooking, or oral hygience purposes for all persons on the system and is currently in effect.	50,000	19	57 05	Monterey	Ι	2009
438 1503226	1503226-001	Quail Valley Water Dist-Westside System	Arsenic Problem Solution	Drill new well or install treatment.	6 C	)	С	Source water exceeds arsenic MCL.	500,000	39	60 19	Kern	Ш	2007
439 1500096	1500096-001P	OLD RIVER MUTUAL WATER COMPANY	Old River MWC Uranium Compliance (planning)	Construct a new well or develop an intertie with City of G Bakersfield	5 C	ס	С	Old River Mutual Water Company is a community water system and has only one well (Alluvial) for water supply. Due to this, the water system is unreliable.System may be in violation of the uranium MCL by the end of 2008. District has two quarters of data above the MCL. Should include pre-app in Prop 84 database. J. Alarcon 9/11/08.	500,000	20	60 19	Kern	III	2008
440 5000086	5000086-002P	COUNTRYSIDE MOBILEHOME ESTATES - A	DU Internal Water System an Arsnic Treatment Project	Countryside Mobile Estates is located at 4042 W. G Barnhart Road, Turlock, CA. Stanislaus County. We are a 44 space SENIOR facility with a house in front of the park. The seniors in our facility are disadvantage low income with less than 35,000.00a year income.Our water system has been out of compliance since the 10ug/L was adopted. Notification has routinely been sent to residences with regards to this matter. Arsenic levels range from 10.5-16.ug/l from 10/12/2006 to today.With a new well,well head (with a filtration system if needed) tanks to hold approximately 1,800 gallons of water ( we are in a rural fire dept district) to supply tenants an 2 fire hydrants.Also water distribution systems and risers thru out the facility. Our single source system is lacking water meters to help promote conservation an meet the governors 2020 act'. Asphalt an Concrete will need repaired or replaced .Lines moved or replaced as needed.Additional cost's for Engineering,Plan's, Contractor's, equipement rental, Permit's,Local water Operation firm, WATER an services for tentants	5 C	2	c	Countryside exceeds MCL for ARSNIC see attached out of compliance letter.Letter of 11/21/2007 from Stanislaus County signed by Tom Wolfe,Sr.REHS followed up in 2008,2009,2010 by j. Mein ,SR.REHS. I have continually sent notices to residences regarding this. We are still currently out of compliance ranging from 10.05 to 16 ug/L. Life expediency of storage an internal distribution system has rapidly been approaching. Our single source system is lacking service connection for water meters to help promote conservation an meet the governor's 2020 Act. We have approximately 44 connections at our facility. Water is currently included in rent. We supply housing for disadvantage& low income seniors who's income is vastly below \$35,000.00 a year.I am hoping to obtain a grant to allow the senior to remain in their homes. Our single source system which has exceeded the mcl for arsenic and is rapidly approaching it's life expectancy is home to many seniors who have no place to go. I understand that if I get a grant I will have to employ an engineering firm get permits, hire Contractors , equipment and local water operations firm. While still seeking advice for the state.Without a grant I feel that I can not financially do this project.I have approached the city's of Turlock an Keyes's for water an sewer and been turned down being not cost effective.	0	44	60 10	Stanislaus	Ш	2011
441 4000637	4000637-001P	COUNTRY HILLS ESTATES	Country Hills Estates Arsenic	This system has two wells, both of which have arsenic G levels of about 24 parts per billion. The piping system would require installation of two separate treatment units for arsenic OR major reconstruction of the distribution system. Connection to the city of Arroyo Grande water system is a much more reasonable and permanent solution.	5 C	ט	С	This system has two wells, both of which have arsenic levels of about 24 parts per billion. The system piping layout would require installation of two separate treatment systems OR connection to the city of Arroyo Grande water system.	0	28	60 06	San Luis Obispo	IV	2008

442 3400138	3400138-001P	LOCKE WATER WORKS CO (SWS)	Locke Community (blue water project)	Locke Water company currently has 55 connections serving the town of locke with a well and storage tank. Specifications: 1) Gallons per minute - 150 gallons 2) Pressure from the well - 40 lbs 3) Kind of pump - Submersive 4) Water table depth - 10 ft. Our project wi entail treating the water as it leaves the storage tank in order to bring the levels of arsenic to an acceptable level of 10ppb or less. Our tank will also be evaluated for possible repair/replacement. We have met with a broker who will assist us in choosing the right system based on the chemistry of our water and our usage. Ou estimate of costs is based on our initial meetings with a system analyst.	G	0	c	Our current level of arsenic is approximately 32ppb , the new regulation requires that the water not exceed levels of 10 ppb. We have an existing pump and holding tank, but will need to improve the system to lower the current level of arsenic in the water.	0	44	65 09	Sacramento	I	2008
443 1600010	1600010-001C	LACEY COURTS MHP	Inconnection to the City of Hanford	Interconnection to the City of Hanford	G	0	с	Arsenic exceeds Federal MCL of 10 ppb	250,000	21	66 12	Kings	Ш	2007
444 1500461	1500461-001	FOUNTAIN TRAILER PARK WATER	Arsenic compliance	Connection to North Edwards Water District (System no. 1510052)	G	0	С	Arsenic above MCL	187,000	32	68 19	Kern	Ш	1999
445 2000526	2000526-001	PIKE RANCH MUTUAL WATER CO	Gross Alpha compliance	DRILL NEW WELLS OR CONNECT TO A NEARBY WATER SYSTEM, INSTALL A NEW STORAGE TANK AND DISTRIBUTION LINES.	G	0	с	WELL WATER CONTAINS GROSS ALPHA THAT EXCEEDS THE MCL. SUBSURFACE STORAGE TANK IS INADEQUATELY SEALED, AND THE WATER LINES ARE DETERIORATED.	450,000	25	75 11	Madera	ш	1998
446 1500540	1500540-004	PINON HILL WATER COMPANY	Arsenic Removal/Consolidation	Install treatment or consolidate with neighboring utility if possible.	, G	0	С	High arsenic in source water, exceeds MCL.	200,000	38	75 19	Kern	Ш	2007
447 3400149	3400149-005	RANCHO MARINA	Rancho Marina Water Treatment System and Water Pipe Infrastructure Replacement	The project will consist of replacement of the treatment facility to produce treated water to comply with State/County giudlines. The delivery system infrastructure will be replaced from the treatment facility to each homesite to provide reliable water service.	G	0	с	Water source is well system. The raw water exceeds contamiment levels for arsenic, nitrate, nitrite and other secondary contaminents. The pipe delivery system to the mobilehome lots is failing and the system experiences service interruptions more than 15 times in a calendar year. The system outages have created excessive boil orders, required water testing and tenant discomfort. Because of the frequent system outages, the mobilehome park provides 5 gallon bottled water service to each household on a monthly basis.	125,000	35	75 09	Sacramento	Ι	2011
448 2702003	2702003-002P	VIERRA MEADOWS MWC	Design & Construct Source Water Arsenic Treatment Facility Replace this text with the title of you	Due to the geographical location of Vierra Meadows Mutual Water Co., consolidation is not feasible. We have chosen an adsorbtion method of removing Arsenii since disposal of Co-precipitated Arsenic is too expensive. We propose to install a greensand Iron and Manganese per-filter and an Isolux adsorbtion Arsenic Cartridge filtration system. The resulting spent cartridges can be disposed of in a local landfill. The project will also require a small enclosure for the filtration equipment, controls, and monitoring devices. A new 15,000 gal. filtered water storage tank will also be required.	G	0	c	Vierra Meadows Mutual Water Co. has 2 ground water wells. They are both contaminated with Arsenic, a primary constituent. They are also over the secondary MCL for Iron and Manganese. The Arsenic levels range up to 84 ug/l and fluctuate by the season. Iron ranges from 607 to 5530 ug/l. Manganese ranges from 137 to 138 ug/l. Other parameters are within normal range and do not exceed MCL's. Arsenic, Iron, and Manganese all violate the current Maximum Contaminate Levels mandated by the California Department of Health Services.	10,000	25	75 05	Monterey	Π	2007
449 2701670	2701670-002	LANGLEY/VALLE PACIFICO WS	Langley/Valle Pacifico Wel Replacement/Pipeline Project	I The proposed project will include the drilling and development of an offsite well and a delivery pipeline to provide an alternative source of water for the Langley/Valle Pacifico system. The project will include additional storage tanks and not more than two pump stations.	G	0	с	The wells that provide water to the Langley/Valle Pacifico system all contain arsenic. The largest and primary well has arsenic levels that exceed "action levels". These levels constitute a clear threat to the health and safety of the residents of the area. Additionally, due to the proliferation of septic tanks in the area, nitrate levels in groundwater are beginning to rise. These contaminate levels have been recognized and identified by both the Monterey County Department of Environmental Health and the California Department of Public Health.	480,000	27	81 05	Monterey	ΙΙ	2007
450 2700799	2700799-002P	VISTA DEL TORO WS	Arsenic/Cadmium Treatment	treatment for Arsenic and cadmium removal	G	0	С	Arsenic and cadmium over MCL	175,000	29	87 05	Monterey	Ш	2007

451 2000524	2000524-002	SKY ACRES MUTUAL WATER CORP	Well Replacement and Arsenic Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, POU/POE, centralized treatment, and replacement source(s).	G	0	С	Water System currently violates the Arsenic MCL.	500,000	50	90 11	Madera	III	2012
452 1000238	1000238-002	CAMDEN TRAILER PARK	Arsenic treatment facility	Arsenic compliance - treatment	G	0	C	The parks well that provides water is now over the mcl for arsenic and must be lowered to a 10 and the park needs this money to complete this task	500,000	25	90 23	Fresno	Ш	2009
453 1000238	1000238-001	CAMDEN TRAILER PARK	New well to augment single well	Drill a new well or interconnect if possible.	G	0	С	System supplied by one well. If it goes out due to drought the system will be out of water.	200,000	25	90 23	Fresno	Ш	2008
454 2000524	2000524-001	SKY ACRES MUTUAL WATER CORP	Research replacement water well	Planning to drill a replacement well. Feasibility studies with the Board of Directors will be considered. Consolidation is not an option as there are no other water Co. nearby. Possibility of another storage tank which would include purchasing land from National Forest Service.	G	0	С	Deep water well #3 exceeds the drinking water MCL standards because of arsenic contamination. This well was in violation of arsenic level standards. Al customers were notified via General Meeting & postings throughout subdivision. Temporary solution has been to blend all water sources together until County of Madera comes up with solid plan to address tghis problem.	100,000	50	90 11	Madera	111	2012
455 2701503	2701503-002P	MESA DEL TORO MWC	Mesa del Toro MWCArsenic Compliance Project	Complete installation at two well sights of arsenic removal system. This would remove the arsenic in the drinking water to adhere to state standards.	G	0	с	There are two wells that provide water to thirty five homes. From the wells, the water is sent to three storage tanks and then distributed to homeowners. Both wells contain arsenic. Of the two, both are over the state regulated levels. Funds are needed to install an arsenic removal system for both wells. Estimated cost is about \$150,000 per well. Being a small water company, the water company and/or homeowners do not have the funds to adhere to the new state regulations of arsenic levels in the drinking water.	500,000	35	90 05	Monterey	II	2011
456 1907014	1907014-001	NORTH TRAILS MUTUAL WATER CO	North Trails Mutual Water Co	The project is a community water system consisting of 60-100 connections and a ground water source. The water system is in need of upgrades to their treatment equipment for nitrate.	G	0	с	Water Quality from 7 wells exceeds the maximum contaminant level for nitrate, uranium, gross alpha. The project consists of acquiring new well site, drilling a test well, design and construction of a new well, connection to the water distribution system.	500,000	54	100 16	Los Angeles	IV	2008
457 1009147	1009147-001	FARMING D	TTHM Planning Study	Funding is needed to initiate a Planning Study to identify appropriate solutions to resolve the TTHM CO.	G	0	С	The Water System has received Compliance Order No. 03-23-090-023, dated October, 2009. The Water System began quarterly monitoring in the 4th quarter of 2008. The Water System's TTHM RAA in 2nd quarter of 2009 (sample: 06/25/2009) was 0.105 mg/L which exceeds the TTHM MCL of 0.080 mg/L.	250,000	43	100 23	Fresno	Ш	2011
458 5000085	5000085-001	GREEN RUN MOBILE ESTATES	Connection to City of Keyes water system for Arsenic compliance	The scope of the project will include connection to a proposed water system expansion for the City of Keyes and elimination of the on-site private water wells for consumption purposes.	G	0	С	The water system problem involves high levels of arsenic in both on-site service wells. The water system serves water to residents of a 44 site mobilehome park. All residents are on notice of the on-going presence of arsenic. The scope of the project is to connect to the proposed expansion of the City of Keyes water system and eliminate the water wells for consumption purposes.	200,000	46	100 10	Stanislaus	Ш	2009
459 3700962	3700962-004	OAKVALE PARK	Replace storage tank another water source for radioactive water	the water tanks are old and need to be replaced that hold the water.the water has a high radioactive and needs either a new well or a treatment.	G	0	C	after an inspection by peter newbaum, we need a new holding tank and storage tank, also either a new well or treatment for raidoactive water	100,000	125	100 14	San Diego	v	2009
460 3400169	3400169-003	SPINDRIFT MARINA	water treatment funding	Seeking professional reccomendations on re-working or re-building our water treatement plant, so as to comply with removal of chemical contamination.	G	0	С	Arsenic water sampling exceeds the MCL. Current count is between 20 - 23. Iron and Manganese counts exceed the MCL. Received county notice of Arsenic, Iron, & Manganese MCL Violations.	25,000	25	100 09	Sacramento	I	2012

461 1500426	1500426-001	ROSE VILLA APARTMENTS	Tie-in to Rosamond CSD due to Arsenic in Water Supply	Construct a 1000-foot 4" pipeline to connect water G system to Rosamond CSD. Install a 2" master meter for apartment complex. Install two fire hydrants. Connect apartment complex to Rosamond CSD sewer main (requirement for water service).	Ĵ	0	с	Water system has only one source. The sole source source is a well that produces water with arsenic in excess of the MCL.	590,500	32	100 19	Kern	III	2007
462 2000737	2000737-001	MD#42 STILL MEADOW	Construct Arsenic Treatment Plant	Construct a water treatment plant to remove arsenic. G	6	0	с	Well exceeds the revised arsenic MCL of 10 ppb.	10,000	34	100 11	Madera	ш	2007
463 1009023	1009023-001	Britz/Colusa	Britz Colusa TIC Water Treatment System	A new surface water treatment plant will be required to G be constructed. An enhanced coagulation filtration plant will be used with pressure filters and a 50,000 gallon baffled storage tank to meet the chlorine contact time required to comply with current regulations. The new plant will also require site piping and a control building.	5	0	С	The source of water for the Britz Colusa system is surface water delivered by Westland's Water District from the California Aqueduct. The existing surface water treatment plant is not able to meet the maximum contaminate level for Disinfection by Products formation and needs to be replaced.	600,000	32	106 23	Fresno	Ш	2009
464 1500405	1500405-001	AERIAL ACRES WATER SYSTEM	Arsenic Treatment	Provide treatment to meet the new federal arsenic G	à	0	С	The system will not meet the new 10 ug/L federal arsenic standard	665,446	62	114 19	Kern	Ш	2003
465 3100033	3100033-003	TAHOMA MEADOWS MUTUAL WATER CO	IM Tahoma Meadows Mutual Water Company Arsenic Reduction	Installation of an arsenic filtration system with capacity G for 40 GPM:Product Description/Equipment SpecificationsEF Series Arsenic Reduction FiltersModel EFASGeneral Description:Siemens Water Technologies EF Series arsenic reduction filters reduce the amount of arsenic(both AsIII and AsV) in the feedwater by passing the water through a specific media to adsorbarsenic. EF Series arsenic reduction filter performance for arsenic removal depends on the flowrate and the chemistry of the water. Adsorption is dependent upon pH, arsenic silica,phosphate and vanadium concentrations as well as empty bed contact time (EBCT). The filters contain a layer of adsorptive media on a gravel subfill. Media specific gravity andsize gradations account for the natural layering, which occurs within the filter followingbackwashing. The selection of media is chemistry and site constraint specific. Mechanical Description: The EF Series vessel is a corrosion resistant composite, constructed of a polyethylene shellwound with continuous fiberglass fibers. The shell height is designed to allow for expansion of the media during the backwash cycle. The top vessel opening is used for media loading andconnection for the multi-port control valve. The filter is supplied with high quality adsorptive media and underdrain support media. Thesupport media ensures even flow distribution. The inlet diffuser evenly distributes influent waterand collects backwash	3	0	c	Our current arsenic levels are approximately 20-25 ppb and we need to reduce that to below the EPA MCL for Arsenic which is 10 ppb.Placer County LPA directive is to do public notification, seek alternative sources of supply and/or evaluate treatment options.	50,000	43	120 02	Placer	I	2008
466 1500525	1500525-001	LAKEVIEW RANCHOS MUTUAL WATER	Lakeview Ranchos First App	The project includes the instalation of monitoring and G treatment equipment and the construction of an additional pipe distribution system to existing storeage tanks.	5	0	С	As a result of Prop 84 our water quality no longer complies to newly enforced standards with regard to arsenic content.	400,000	73	120 19	Kern	Ш	2007
467 3600025	3600025-001P	Bar-Len MWC	Arsenic Treatment Construction	Project includes planning/feasibility/engineering and construction of treatment facility to meet CDPH MCL requirements for Arsenic. Project includes funding for maximum daily usage of water and to meet required fire flow. Project includes funding for meters for water accountability and conservation at each connection. System is considered low income and in need of funding assistance.	5	0	с	Bar-Len MWC is experiencing a water quality violation exceeding the MCL for Arsenic. The public notice has been issued as required by CDPH. Unable to calculate water usage due to lack of meters at each connection. Need meters installed.	0	39	124 13	San Bernardino	V	2012

468 5000051	5000051-001P	MOBILE PLAZA PARK	Mobile Plaza Mobile Hom Park Planning Study	e Engineering design and county approval of design plan: for a water treatment system for the reduction of arsenic. Consolidation to another municipal source is not an option because of either cost or lack of availability.	is G	0	С	Source water well exceeds the new Arsenic Maximum Containment Level MCL. From information gathered by water distribution operator, other public water systems have tried to construct a new well to meet the Arsenic MCL, but have had limited luck. Connection to a municipal water connections is either not currently available or cost effective. Exceedance of a chemical MCL, the notice went into effect Sept. 2010	0	50	125 10	Stanislaus	111	2012
469 1000369	1000369-001	ZONNEVELD DAIRY	Zonneveld Dairies Community Water System	Zonneveld Dairies has consulted with Provost & Prichard (P&P) engineering group to lower the arsenic level. P&P has recomended three solutions. The three solutions are; the installation of a water mixing system construction of a designed well, or a water filtering system. The mixing system will mix water from existin wells that test for little to no arsenic with the existing system source. The designed well will produce water that complies to all federal and California water drinkin standards, and the filtering system will filter out any arsenic found in the drinking water.	G , g ng	0	С	Zonneveld Dairy water exceeded Arsenic MCL. Project intends to lower arsenic level to California Standards. Zonneveld Dairies is in violation of the USEPA MCL for arsenic of .010 mg/L, which was adopted by the California Code of Regulations. The problem required public notification of an exceedance of a chemical MCL, and is currently in effect as of 9/02/09.	150,000	34	141 23	Fresno	11	2009
470 3500904	3500904-001	Hollister Ranch Estates	Radioactivity Compliance	drill a new well or install treatment	G	0	с	Well water has high radioactivity.	200,000	34	150 05	San Benito	II	2001
471 2000552	2000552-001P	MD#24 TEAFORD MEADOW LAKES	New Well	Construct a new well and storage tank.	G	0	С	Well No. 2 does not meet the revised arsenic MCL of 10 ppb.	10,000	47	150 11	Madera	ш	2007
472 3400164	3400164-002P	VIEIRA'S RESORT INC	Arsenic Treatment System	n Arsenic treatment	G	0	c	The system received a Notice of Non-Compliance for Federal Arsenic MCL Violation from the County of Sacramento Environmental Management Department. Vieira's Resort was directed to provide public notification of the arsenic violation as a Tier 2 violation. Vieira's was required to provide notice to their customers no later than December 3, 2008 and repeat every three months as long as the violation exists. Vieira's was required to submit to the EMD a plan to provide water that meets the Federal Arsenic Rule by one of the following options by December 3, 2008.a. Pursue a connection to a permitted water source; b. Provide a new water well source that will meet the water quality and construction standards of a public water system supply water well; or c. Treat the source to meet the Public water system water quality standards. Vieira's has chosen option c and is working with Burleson Consulting, Inc. to complete a Technical Report for a designed Arsenic Treatment System and associated plans, specifications, permits, and environmental documents.	162,570	107	150 09	Sacramento	I	2009

473 5400629	5400629-001	TRAILER ISLE PARK	Trailer Isle MHP Safe Drinking Water Feasibility Study	The proposed Feasibility study would include an analysis of options to provide a reliable source of potable water for the Trailer Isle MHP. In order to determine if a sufficient supply of potable water can be found, at least one test well would be drilled. Sampling at various levels would determine the availability of water by depth and its quality. The analysis of these test well results would result in the design of a future production well that meets Title 22 standards. The study would also include the preliminary engineering and environmental assessment necessary to evaluate the costs and other considerations of drilling a new water well versus other available options. Assuming the results of the test well are favorable, the preliminary design of the production well and storage would be prepared by a licensed engineer.	: G	0	C	The Trailer Isle Mobile Home Park provides water to its residents near the unincorporated Tulare County community of Three Rivers in the Sierra Nevada foothills. The water system has one well which exceeds the Maximum Contaminant Level (MCL) for arsenic of 10 ppb. The most recent test result from the well has an arsenic concentration of 11 ppb.	100,000	57	150 12	Tulare	Ш	2007
474 1009179	1009179-001	BRITZ/FIVE POINT SYSTEM	TTHM Planning Study	Funding is needed to initiate a Planning Study to identify appropriate solutions to resolve the TTHM CO.	G	0	c	The Water System has received Compliance Order No. 03-23-090-022 in October 2009 The Water System began quarterly TTHM monitoring in the 1st quarter of 2009. The Water System's TTHM RAA in 3rd quarter of 2009 (sample: 09/17/2009) was 0.096 mg/L which exceeds the TTHM MCL of 0.080 mg/L.	250,000	25	150 23	Fresno	Ш	2011
475 3700041	3700041-002	BARRETT LAKE MH AND RV LLC	Treatment of water source for removal of radionuclides	Propose to install radionuclide treatment on the well with the highest level of radionuclides and highest water well yield. Once treated, the source water wells will be blended to bring the system water below the EPA MCL. Proposed treatment is an inline filtration system consisting of a "filter resin" to reduce the levels of radionuclide contaminants below the MCL. Currently the two wells are connected to pump directly to the storage tanks and no water service connections lie between the wells and storage tanks. Project will incude the treatment filter vessel with media/piping, housing structure and slab, plumbing and related electrical controls and well head upgrade.	G	0	с	Both water wells exceed the EPA MCL for Gross Alpha and Uranium of 15 pCi/l and 20 pCi/l, respectively. A Tier 2 Public Notification was issued on March 25, 2009 and remains in effect.	80,000	94	160 14	San Diego	v	2009
476 5000077	5000077-001P	CERES WEST MHP	Well Replacement and Arsenic Treatment	Water System is requesting funds to evaluate alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, centralized treatment, and replacement source(s).	G	0	с	Water System currently violates the Arsenic MCL.	500,000	46	161 10	Stanislaus	Ш	2012
477 2700612	2700612-001	LAGUNA SECA WC		Install disinfection equipment. Upgrade storage and distribution lines.	G	0	С	Primary and standby wells are both above the arsenic MCL.	55,000	56	162 05	Monterey	II	2006
								Disinfection and pumping equipment is needed for improved system reliability.						

478 1000042	1000042-002P	FCWWD #40/SHAVER SPRINGS	Assess alternate water sources for WWD 40	As mentioned on the previous question, the funds will be use to conduct hydrogeological tests on each of the identified wells from a prior feasibility study and on any new well that we identify that may be located closer to the District. The hydrogeological study would then be used as part of the application packet to obtain a water permit through CDPH.	G	0	с	All 5 wells that served WWD 40 have been contaminated with uranium, nitrates, or run dry. As a result, the District no longer possesses drinking water. Currently, bottled water is being consumed by the residents of the District. A feasibility study indicated that there are some privately owned wells in the area with adequate production. WWD 37 is located 2 miles away from the District. Hydrogeological tests must be conducted on each of the identified wells to ensure that they can be used for public consumption. We are seeking funding to conduct the hydrogeological tests on each of the wells identified within the feasibility study. Additionally, we seek funding to evaluate other alternatives.	0	51	172 23	Fresno	ш	2008
479 1600031	1600031-001	LEMOORE MOBILE HOME PARK	Lemoore Mobile Home Park Water Distribution System Consolidation to the City of Lemoore	Consolidate failing system with City of Lemoore.Extend city line to project propertyNew distribution systemMaster meter and individual meters for 59 mobile home unit sitesDestruction of abandoned wellsCity required impact fees or improvementSTherefore improving water quality, system delivery provided to affordable housing option.	G	0	С	Received NOTICE OF VIOLATION from County of Kings Department of Public Health - Environmental Health Sevices on August 1, 2008 from Raymond Cooke. Failure of Gross Alpha Maximum Contaminant Level (MCL) for the well serving Lemoore Mobile Home Park. The analytical results for the water quality monitoring of four consecutive quarterly sampling for gross alpha and uranium exceeds the MCL of 15 pci/L. Compliance with the MCL in Gross Alpha is based on the running annual average (RAA) of quarterly sampling. RUNNING ANNUAL AVERAGE 18.3 pci/L4th 2007 12/5/2007 27.9 pci/L1st 2008 1/25/2008 18.4 pci/L2nd 2008 4/11/2008 13.5 pci/L3rd 2008 7/11/2008 13.4 pci/L	10,000	82	180 12	Kings	III	2008
480 1600031	1600031-003	LEMOORE MOBILE HOME PARK	Water system consolidation to city	Consolidate failing system with City of Lemoore.Extend City line to project propertyNew distribution systemMaster meter and individual meters for 82 connectionaDestruction of abandoned wellsCity required impact fees or improvementsTherefore improving water quality, system delivery provided to affordablehousing community.	G	0	С	Received NOTICE OF VIOLATION from County of Kings Department of Public Health - Environmental Health Sevices on August 1, 2008 from Raymond Cooke. Failure of Gross Alpha Maximum Contaminant Level (MCL) for the well serving Lemoore Mobile Home Park. The analytical results for the water quality monitoring of four consecutive quarterly sampling for gross alpha and uranium exceeds the MCL of 15 pCi/L. Compliance with the MCL in Gross Alpha is based on the running annual average (RAA) of quarterly sampling. RUNNING ANNUAL AVERAGE 18.3 pCi/L4th 2007 12/5/2007 27.9 pCi/L1st 2008 1/25/2008 18.4 pCi/L2nd 2008 4/11/2008 13.5 pCi/L3rd 2008 7/11/2008 13.4 pCi/LCurrently notify public on a quarterly basis that Lemoore MHP has levels of Gross Alpha Above the Drinking Water Standard	700,000	82	180 12	Kings	Ш	2009
481 1400036	1400036-006P	Keeler CSD	New well or Water source or treatment (planning)	Construct a new well or water source or treatment that is affordable	G	0	С	Average arsenic level in the Keeler Well Water for the years of 2002/2003 is 68 ppb, which exceeds the current MCL of 50 ppb	0	88	180 13	Inyo	V	2004
482 2000506	2000506-001	SIERRA LINDA MUTUAL WATER CO	New Well	Drill a new well.	G	0	с	Main well exceeds the uranium MCL. Also, the system	30,000	75	180 11	Madera	ш	2002
483 1500393	1500393-001	RAINBIRD VALLEY MUTUAL WATER COMPA	N Rainbird Valley MWC Uranium Compliance	Add one more well or upgrade back-up well (later been our priority). Other - Design/Construction	G	0	с	Uranium exceeds MCL in Well 2, lack of back-up source.	30,000	80	188 19	Kern	Ш	2006
484 1500424	1500424-003	Lands of Promise Mutual Water Associatio	Lands of Promise Consolidation with Rosamond CSD Water System	To consolidate with the Roasamond CSD water system the Mutual will have to annex to the District, build a +/- 1.5 mile water supply transmission line from the RCSD to the Lands of Promise community, replace about 8,000 feet of leaky 2 inch metal distribition lines with 6 and/or 8 inch water lines, install 62 meters, hydrants, valves and build a water storage tank.	G	0	с	The Lands of Promise water system is a rural water system supplied by six small wells. The community is located about 3 miles west of Rosamond in southern Kern County. All six of the community wells exceed the Arsenic Maximum Contaminant Level of 10 ppb.	2,000,000	65	190 19	Kern	III	2007

485 1500424	1500424-002C	Lands of Promise Mutual Water Associatio	Arsenic Treatment Facility	Install arsenic removal facility.	G	0	С	Arsenic in source water at 13 ug/L.	2,000,000	65	190 19	Kern	ш	2007
486 2800516	2800516-003	TUCKER ACRES MUTUAL WATER CO.	Tucker Acres Mutual Water Arsenic and Chromium	This system is a community system serving approximately 40 homes, that does not have access to another public water system for consolidation. To bring the system into compliance, treatment would be needed to remove aresenic, chromium, iron and manganese. New storage to store treated drinking water is also needed. The system currently has 55,000 gallons, but most of the water is for fire protection. Old infrastructure may also need to be replaced.	G	0	с	The primary well exceeds the standards for arsenic, chromium, color, iron, manganese, odor and turbidity. The back-up well exceeds the standards for arsenic, iron and manganese. Water storage: The system can only provide maximum daily demand from its storage, as required in the Waterworks Standards, if almost all of the water for fire storage is used.	100,000	23	200 03	Napa	II	2008
487 1500493	1500493-001	EL ADOBE POA, INC.	Arsenic Treatment for Wells	Blending or treatment	G	0	с	Arsenic levels above MCL	2,500,000	77	200 19	Kern	ш	2007
488 3600012	3600012-001	Apple Valley View MWC	Install fluoride treatment and associated distribution lines	Install a fluoride treatment plant to improve water quality and associated distribution lines to connect the treatment plant to the holding tank.	G	0	с	The problem is we currently exceed the MCL for fluoride and we were directed by the county EHS to provide treatment for fluoride removal. Distribution lines will need to be changed to support the treatment plant. The public notice has been given on the Bi- monthy water bills and yearly CCR. We also announced it at the Annual Stockholders meeting on June 10th, 2012	500,000	81	200 13	San Bernardino	V	2012
489 2000551	2000551-002	MD#07 MARINA VIEW HEIGHTS	Uranium and Arsenic exceedance	CONSTRUCT A SURFACE WATER TREATMENT PLANT TO TREAT WATER FROM BASS LAKE.	G	0	с	SYSTEM WELLS EXCEED THE URANIUM MCL.	50,000	74	200 11	Madera	Ш	1998
490 3400332	3400332-002P	OXBOW MARINA	Oxbow Marina Mutual Water Co Treated Water Transmission Main	The Oxbow Marina Mutual Water Company (OMMWCo) is proposing to purchase treated water from California American Water at Isleton, CA. This would require the construction of an 8" transmission main approximately 1.1 miles long to connect the Isleton water system to the OMMWCo local distribution system. The 8" transmission main would parallel Isleton's existing 10 inch sewer force main, beginning with a connection to the Isleton distribution system, with a master meter, and end with a connection to the OMMWCo's existing distribution system. The Isleton system would also need to be upgraded, in the form of a new storage facility (350,000 Gal) and a booster pumping station to provide adequate pressure at Ox- Bow Marina. This storage facility and booster pumping station twill serve both Isleton and Ox-Bow Marina. The greatest benefit of this alternative, is that it would eliminate the need for the OMMWCo to construct and operate a complex arsenic removal treatment plant with its associated high maintenance costs. OMMWCo personnel would continue operate the distribution system consisting of 4 and 6 inch mains and services. The existing well system, consisting of two wells, two reservoir tanks and two pressure tanks would cease to provide drinking water and the system will be converted to provide water for the extensive landscaping on Marina property.	G	0	C	The EPA has set the Arsenic standards for drinking water at 10 parts per billion to protect consumers served by public water systems from long term, chronic exposure to Arsenic. The Oxbow Marina Mutual Water Company currently has water that tests at 20 to 35 parts per billion for Arsenic. An Arsenic MCL (Tier 2) violation was issued to OMMWCo on January 24, 2008. Public notification is in effect and has been since receipt of the violation notice. Notifications, in accordance with the California Department of Public Health, are continuing every three months while the violation exists.	1,000,000	95	200 09	Sacramento	Ι	2009
491 1900100	1900100-003P	METTLER VALLEY MUTUAL	Mettler Valley Mutual	The Water system is in need of an additional water source to meet the demands of the community, and to reduce arsenic concentrations. i.e. new ground water well.	G	0	С	Water Quality from Well #1 has ARSENIC concentrations that exceed the 0.50 milligrams per liter (mg/L) National Primary Drinking Water Standard Maximum Contaminated Level. The water system has insufficient water storage for fire protection.	0	98	200 16	Los Angeles	IV	2008

492 2701926	2701926-003	MORO RD WS #09	Nitrate Blending	Install a direct pipeline from the lower transfer tank to the upper storage tank at the top of the hill in which the water from well #3 is being pumped. It is estimated that the pipe will need to be six inches in diameter and the distance from the transfer tank to the storage tank is approximately 2600 feet. This will provide blending to decrease the nitrate and arsenic levels of the water being delivered to the consumers in the system.	G e t	0	c	Moro Road Water System #9 consists of 3 ground water wells, a 10,000 transfer tank, 2 transfer pumps, three 20,000 gallon and three 17,000 gallon storage tanks, and a hydropneumatic tank with 2 booster pumps. Water from wells #1 and #2 is pumped into the transfer tank. From here water is transferred to the upper 6 tanks (a distance up hill of approximately 2600 feet) using the transfer pumps which are activated by level sensors in one of the upper tanks. The transfer main also provides water to the distribution system. Well #3 is located next to the 6 upper storage tanks and water is delivered to the top of the 6th tank. This well was constructed in an attempt to develop a low nitrate source. Indeed, the nitrate level is lower in this well (average 8mg/L over past 3 years). The problem occurs when water in being pumped to the upper tanks & there is a demand in the system. At that point the consumer will receive water rom the 2 lower wells. The blended water from the 2 lower wells. The blended water dow 1 – 45 mg/L eleven other times in 2010 and four other times thru September in 2011. Additionally, there exists an elevated arsenic level in well #3, while wells #12 & #2 are low in arsenic. The water in well #3, is tested quarterly, exceeding the maximum contaminant level once in 2010	200,000	70	210 05	Monterey	IJ	2012
493 4600019	4600019-002	Sierra Co. W.W.D #1 Calpine	Water Source Improvement Project	Find a new source of water without the arsenic contamination. Treatment of current source possible but well pump tests show this source is not a dependable one.	G	0	С	We have arsenic at 22ppb in our primary water source.	500,000	142	225 02	Sierra	I	2007
494 2000512	2000512-001	EAST ACRES MUTUAL WATER COMPANY	East Acres Mutual - Arsenic MCL exceedance	Hire consultants and/or engineers to find best fit solution to Arsenic MCL exceedance and water system distribution improvements either through drilling a new well, consolidation with another water system or treatment.	G	0	с	The water system serves a low income community, consist of 2 wells with one well exceeding MCL of 10 ppb and other well with borderline Arsenic sample results. Both wells are conducting quarterly sampling for Arsenic. One of the wells had issues with iron and manganese. Pipelines are old and corooded and need to be repalced.	100,000	81	250 11	Madera	111	2008
495 3301380	3301380-001	Saint Anthony Trailer Park	St Anthony Trailer Park - Arsenic compliance	We will need treatment equipment and monitoring equipment will possible contruction of new distribution system to aid treatment equipment.	G	0	с	Violation of arsenic level standards-filtration device is needed to treat water and provide ongoing monorting. 50 MCL was the arsenic maximum, St Anthony tested at 20 MCL, the new level is 10 MCL. We have exceeded the maximum arsenic levels by 10 MCL.	80,000	60	250 20	Riverside	V	2007
496 5100109	5100109-002	Wildwood Mutual Water Company	Water system consolidation to meet groundwater regulatory compliance	Consolidate community drinking water system with near by City of Yuba City public water system to meet drinking water regulatory compliance.	G	0	с	Community water system currently exceeds arsenic MCL and has been issued a California Department of Public Health compliance order. Back up well currently exceeds regulatory limits for both nitrates and arsenic. The City of Yuba City has agreed to add this community to their public water system.	2,125,000	85	255 21	Sutter	I	2009
497 2000561	2000561-002P	MD#08 NORTH FORK WATE SYSTEM	Madera County Maintenance District No. 8 arsenic violation	Install oxidation with hypochlorite, co-precipitation with 8 ferric chloride followed by filtration for arsenic removal. Drill new high production well. Replace parts of distribution system and storage tank to meet fire flow requirements.	n G	0	с	System is currently exceeding MCL for arsenic of 10ppb with a current detection level is 12.43ppb. The system has significant infrastructure failure and does not meet fire flow and fire storage requirements.	318,750	80	264 11	Madera	Ш	2007
498 2000561	2000561-001	MD#08 NORTH FORK WATE SYSTEM	Construct Arsenic Treatment Plant	Construct a water treatment plant to remove arsenic.	G	0	С	Well exceeds the revised arsenic MCL of 10 ppb.	1,308,750	80	264 11	Madera	Ш	2007

499 1910066	1910066-002	LEISURE LAKE MOBILE HOME PARK	Arsenic Treatment	The final project will depend on best engineering G practices and the most cost effective method for providing water below the Arsenic MCL. The system proposes to construct an Arsenic treatment facility with monitoring, disinfection, and pressure boosting equipment at well 3; install approximately 4000 feet of 6" PVC pipeline to deliver untreated water from wells 1 and 2 to the treatment plant at well 3; construct a new additional 50,000 gallon storage tank for the treated water; and enclose the plant and tank perimeter with security fencing. Consolidation is not an option. This water system is 5-10 miles from the nearest water system.	0	c	The system has three wells. Wells 2 and 3 have Arsenic levels exceeding the federal MCL. The Arsenic concentration in Well 1 is increasing. Well 1 and 2 are currently blended to produce water with 9 ug/l Arsenic. Well 3 is not in use for the domestic water supply due to Arsenic exceedance.The CDPH has issued a Notice of Violation for Well 3. Well 1 and 2 are not in violation due to the temporary blending practice.	500,000	211	300 22	Los Angeles	IV	2008
500 2000509	2000509-005P	CASCADEL MUTUAL WATER SYSTEM	Well Replacement, Radionuclide Contamination ER	The Project would consist of drilling an 8" well G approximately 1,000 feet deep and installing a 10-15 hp pump capable of pumping 30 gpm. Costs of connecting the well to the distribution line and bringing power to the wellsite are included. The well would include automatic controls.	0	с	The project proposes to replace two wells contaminated with radionuclides. The two contaminated wells represent 50% of the system's supply. These sources exceed the MCL's for Gross Alpha and Uranium by three fold. These sources can not be blended with other sources because they do not have automatic controls.	0	137	300 11	Madera	Ш	2009
501 5400754	5400754-002	SO KAWEAH MUTUAL WATER CO	Arsenic Removal	There is sufficient space on the well easements to install G the ADI Media G2 treatment tanks (adsorbtion). The three wells will be piped to the treatment tanks (longest pipe run 170 feet), and the treated water piped back into the distribution system. Any well producing water will discharge through the treatment tanks without valve changes as the wells rotate operation automatically. Backwash from the treatment tanks is non-hazardous and will drain to an adjacent swale. Spent treatment media is non-hazardous for disposal. Given the low exceedance of the MCL, the media should be long-lasting before exchange. Sampling and testing to determine treatment efficiency will be conducted by the current contract laboratory, FGL.	0	с	South Kaweah Mutual water supply comes from three wells in the same vicinity. The long-term average arsenic content is 12 ppb. State and Federal MCL is 10 ppb. Up until now, there has been no economic treatment method identified. Quarterly public notification of the exceedance of the arsenic MCL has been on-going. Quarterly Notices of Violation are issued by the Tulare County Environmental Health Department. It now appears that the ADI Media G2 treatment technology can resolve the problem at an affordable operating cost. The water system has \$50,000 set aside for arsenic treatment capital. The installed cost of the treatment system is estimated at \$150,000. Water rates will be adjusted as necessary to cover operating cost of the treatment system.	100,000	105	300 12	Tulare	111	2009
502 2000293	2000293-002	MD#46 AHWAHNEE RESORTS	Well Replacement and Arsenic Treatment	Water System is requesting funds to evaluate G alternatives and to find the most cost effective solution to solving their water quality violation(s). The alternatives to be evaluated are as follows, and in no particular order: feasibility of consolidation with a nearby water system, POU/POE, centralized treatment, and replacement source(s).	0	с	Water System currently violates the Arsenic MCL.	500,000	90	300 11	Madera	Ш	2012

503 5100107	5100107-007	Sutter Co. WWD#1 (Robbins)	Construction of a New Robbins Water Treatment Plant and Arsenic Removal System	In order to achieve compliance with primary and secondary MCLs, the existing water treatment plant must be moved to the larger Sacramento Valley Boulevard site to accommodate new water treatment equipment. Water is distributed through a system of mains ranging from 3" to 12" in diameter. The current system is comprised of approximately 4 miles of water piping and valves, and 94 lateral connections. A new public water well will be drilled and developed at a new site. Currently, the County is leasing 0.06 acres from Wagner Aviation for the existing well site. The new well site is located on Sacramento Valley Boulevard. The land is owned by the County and is approximately 0.67 acres.Major equipment at the new water plant will include: a new drilled well, arsenic filtration system, iron and manganese removal equipment, a backwash tank, a water storage tank, well pump equipment, booster pump station, electrical supply equipment, chemical feed system and a hydro pneumatic tank. However, before construction of the new water treatment plant can begin, the existing water tower located at the Sacramento Valley site will be demolished.	G	0	C	The Sutter County – Water Works District No. 1 (WWD#1) is responsible for providing water service to the Community of Robbins. The water system currently operates one active ground water well (Wagner Well), one backup ground water well and one storage tank that provides the Community's residents with potable water. The active ground water well incorporates treatment for iron and manganese. The system provides municipal drinking water to approximately 336 year-round residents. The total system was designed to meet all health standards when constructed; however, due to a recent change in the Federal arsenic limit, the system does not meet the new primary Maximum Contaminate Level (MCL) for arsenic. The Wagner Well also exceeds secondary MCLs for chloride, specific conductance, and manganese. Currently, the one active ground water well is located on land leased to WWD#1 by Wagner Aviation. The "Maximum Contaminant Level" (MCL) for arsenic in drinking water was recently lowered from 50 parts per billion (ppb) to 10 ppb. The existing filter media at the water treatment plant was not designed to reach this level of arsenic removal, and is not meeting either State or Federal requirements for the removal of arsenic. Similarly, the existing filter media is not meeting secondary standards for manganese, chloride, and specific conductance for treated water. On January 2, 2009, the California	2,409,000	94	336 21	Sutter	1	2011
504 1510016	1510016-004	RAND COMMUNITIES CWD - RANDSBURG	Arsenic Treatment	We need to construct an arsenic treatment plant on our	G	0	С	Funding for arsenic treatment: Well #1.	10,000	295	344 19	Kern	ш	2007
505 5101009	5101009-001	Wildwood East Mutual	Water System Consolidation	Copnsolidate community drinking water system with near by City of Yuba City public water system to meet drinking water quality regulatory compliance.	G	0	С	High Priority - Water system is on the brink of exceeding allowable arsenic limits in drinking water. Nitrate levels in existing wells are increasing and could cause system to be out of GW regulatory compliance.	1,550,000	49	350 21	Sutter	I	2009
506 3610017	3610017-004	HAVASU WC	Treatment Plant Out Of Comliance And TTHM Violation Since 2006	1. A GAC system placed in front of th existing five filters and prechlorination point. This will eliminate TOCs that lead to high TTHM formation with chlorination. Monitoring equipment, new plumbing and electric. 2. To be in comliance with the LT1ESWTR, new turbidimeters and printers for the filter tanks are needed. New printers must be continuous and print out every fifteen minutes. New poylmar system, a new continuous chlorine monitor is needed. 3. A new backwash pond needs to be constructed to handle over flow with security fence. New pumps needed for ponds. 4. The chlorine room is to be replaced with a more secure building and the chlorine gas system upgraded to safer liquid chlorine. Safety equipment purchased.5. New housing with insulation and air conditioning for all filtration , monitoring equipment etc. with work area and storage space. Right now two bodys can't pass each other in the filter room without rubbing together. Engeners have been consulted. A local contractor is available for construction of a new building to house the system.	G	0	C	1. Since December 28, 2006 HWC has been in viotation of TTHMS. Have received Violation Notices. Cusomers are sent a notice every quarter warning them that some people who drink water containing TTHMs more than the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased rick of cancer. As of the fourth quarter of 2008 the annual running average is 94ppb. In 2008 the TTHMs ranged from 74.5ppb to 111.2ppb. MCL 80ppb. HWC consumers are very unhappy campers. 2. The treatment plant needs up grading. It is out of compliance with ITIESWLR monitoring requirements. The continuous chlorine monitor is not working. New turbidity meters and printers are needed for continuous monitoring and printing every fifteen minutes. 3. The Chemehuevi Indian Tribe has complained about the sump ponds over flowing, there is not adequate fencing around the ponds. The CDIS has advised additional backwash ponds and security fence. 4. The chlorination room is made of plywood and coming apart. It contains 150# gas chlorine tanks that are hard to handle and a hazard. Safety equipment is needed. 5. The housing for the existing filtration and monitoring system is a metal storage unit, looks like a box car. There is no insulation and can reach 120 degrees inside during the summer. Not good for equipment or people.	400,000	211	350 13	San Bernardino	V	2009
507 1600004	1600004-001	FOUR SEASONS MOBILE HOME PARK	Consolidation	CONSOLIDATE WITH THE CITY OF HANFORD	G	0	С	ARSENIC > MCL. NO BACK-UP SYSTEM. INADEQUATE PRESSURE FIRE CONTROL.	365,072	88	350 12	Kings	Ш	1998

508 1000053	1000053-004	LANARE COMMUNITY SERVICES DIST	Lanare Main Line Intertie to Riverdale Water Systen Project	The Proposed Project would intertie with the Riverdale G 1 Water System. There would be approximately three (3) miles of 8" or 10"main line required to connect the Lanare system to the Riverdale system. The Lanare Community could either pay for water provided by Riverdale and manage their own system, or they could consolidate with the Riverdale system and have Riverdale maintain the Lanare distribution system also. This last option has not been acceptable to the community Riverdale.	0	с	Water quality produced by 2 wells in Lanare exceed arsenic MCL. Treatment Plant operation is not affordable to the community. Treatment Plant is not being used.	1,500,000	120	400 23	Fresno	III	2009
509 1000053	1000053-002	LANARE COMMUNITY SERVICES DIST	Reactivate arsenic treatment plant	The existing Arsenic treatment plant designed by Boyle G Engineering and put into service in 2006 works. It is the water production and use that were out of control thus placing the cost of operation of the treatment plant out of control. A seperate USDA project to install meters, establish a tiered rate and guarantee sufficient income to run the arsenic treatment plant is currently in progress. Once the meter project is completed the next step is to re-establish the treatment plant. This project is to reactivate the existing arsenic treatment plant. Pumps, hoses, injectors, filters and tanks will need to be cleaned and or replaced as well as supplies testing and support.	0	c	Arsenic contamination at 30 ppb, naturally occurring in ground water. Two existing wells are tied to Arsenic treatment plant constructed in 2006, now bypassed. Cost of operation when brought on line unable to be paid for because water production and use were out of control, no meters. Existing treatment plant not currently functioning because of cost to operate. Current project underway to install meter and control production and use. Treatment plant now out of operation and sitting idle for 14 months. Project is to reactivate the existing plant.	125,000	120	400 23	Fresno	Ш	2008
510 1500588	1500588-001	SON SHINE PROPERTIES	Consolidation with Arvin CSD or Treatment for Nitrate and DBCP	As part of this project, we will either develop an intertie G with the Arvin CSD (about 3 miles away from us) or provide treatment.	0	С	Our standby Well 01 has nitrate above 45 mg/L MCL and also DBCP above the MCL of 0.2 ug/L. Our main well (Well 02) has also DBCP present below the MCL.	1,500,000	106	400 19	Kern	Ш	2007
511 1500475	1500475-002P	KRISTA MUTUAL WATER COMPANY	Krista Water Well Project	Purchase of a well site or easement, design and G construction of a test well/community well, installation of a pump, electrical system and water lines to connect the well to the existing water system. Other water systems in the area have high Flouride levels and cannot supply clean water via consolidation.	0	с	The Krista Mutual Water Company's only well has high levels of Fluoride (2 ppm = 3 month average) and is the community's sole source of water. A second well is needed that supplies clean water and that would provide adequate quantity of supply. Water from a second well could also be blended with the the existing water supply to reduce Fluoride levels below their current average of 2 ppm. The State Fluoride Maximum Contaminant Level is 2 ppm. Title 22 Section 64562, Quantity of Supply.	0	177	428 19	Kern	Ш	2008
512 3600226	3600226-002P	CSA 70F, Morongo Valley	Uranium compliance	Construct treatment system to remove uranium G	0	С	Well does not meet drinking water standard for uranium	300,000	90	450 13	San Bernardino	v	2000

(planning)

System

DBP precursor treatment The proposed project is the purchase and installation of G a packaged 50 gpm ion exchange filter plant to remove the DBP precursors after filtration of the water and before chlorination.Maximum day demand in the system is approximately 40 gpm, and maximum source capacity from the springs is 50-60 gpm at the times of maximum day demand. The funding request includes \$300,000 for the ion exchange filter unit purchase and \$50,000 for engineering, site preparation, piping and appurtenances.

0

0

C

С

The water system relies on surface water collected in a rewood forest which is treated with slow-sand filtration and sodium hypochlorite disinfection. The source water contains chemical precursors that, when combined with sodium hypochlorite, cause the formation of disinfection byproducts (DBPs) in the finished water. The slow-sand filter is thought to remove few, if any, of the precursors. The levels of DBPs found in the distribution system vary somewhat seasonally, with the levels of precursors being influenced by amounts of rainfall. Eleven consecutive quarters of distribution system sampling have shown DBPs in exceedance of the state MCL. Individual samples for Trihalomethanes (TTHM) have exceeded the state MCL, while the annual running average for TTHMs has not exceeded the MCL recently. Most of the samples for Haloacetic Acids (HAA5) have exceeded the MCL, and the current running annual average for HAA5s also exceeds the MCL. Sampling results are as follows - units are in ug/L:TTHMMCL-----80System Max-----110System Min------10System Avg.-----58R. Annual Avg.---59HAA5MCL-----------60System Max-----181System Min------12System Avg.-----80R. Annual Avg.---76

130.000

213

490 01

Humboldt

- 1

2009

514 0600008 0600008-001C Colusa Co. W.D. #1 - Grimes

CCWD #1 Arsenic Removal The Colusa County Water District #1, located in Grimes G CA, is ready to move forward with the construction of an arsenic treatment plant. Upon receipt of funding the District would first have a fully developed engineering design completed. This design will address the completion of 1) site preparation, 2) infrastructure, 3) arsenic treatment plant, 4) relocation of existing main and auxiliary production sites, and 5) a new storage tank.Site preparation will include 1) demolition and removal of the existing auxiliary well shed, 2) demolition and removal of the existing maintenance shed, 3) tree removal and 4) site grading. Infrastructure will include a new 20' x 20' 6" reinforced concrete pad , a 20' x 20' x 12'h steel building to house the new treatment plant, a 6' fence to enclose the new site, all piping, valve tie ins and electrical (single phase, 3 20 amp circuits). The treatment plant will consist of an absorptive media based technology capable of treating arsenic in the 26 ppb range at 60 gpm. The new plant will run on a programmable logic controller (PLC) based automation. A new storage tank will be constructed adjacent to the tratment plant. The new storage tank will be approximately 50,000 gallons which replaces the existing 6,000 gallon pressure tank. The new tank will be located on a reinforced concrete slab to specifications. Dual variable frequency pumps will be installed to control flow to the delivery system. The plan

Arsenic in the Grimes community water system well water exceeds the current federal standard of 10 ppm. The average concentration found in our well is approximatly 24 ppm. The community of Grimes volunteered to participate in an EPA funded demonstration project to use point-of-use filtration starting in 2002. The California Department of Public Health informed the District that this method of protection was not going to be a long term solution to treat arsenic, which neccesitates Grimes to install a central treatment facility. With the improvements and monitoring of the current pou system the CDPH will allow Grimes to continue with this form of treatment until December 31, 2010.

1.656.800	104	500 21	Colusa	1	2009

515 1510052	1510052-006	NORTH EDWARDS WD	NEWD, Trailer Park & Dunes Water System Consolidation and Arsenic Reduction	Our water system project will include the installation of an arsenic treatment plant, new water lines to the dunes apartments and fountain trailer park (about 1mile). The installation of additional water storage capacity for the additional services will also be included. North Edwards Water District will also need a new booster pumping station at wells one and two, due to the additional services, additional piping distances and systems flow reconfiguration. A third well will need to be drilled in order to provide supplemental water supply during high consumption and still be able to fully treat supply water through the arsenic treatment plant and have sufficient storage capacity. Several fire hydrants will be installed to the dunes apartments and fountain trailer park to meet fire flow requirements. A median Household Income (MHI) survey was completed by an independent agency with-in the last 6 months. The North Edwards Water District has been deemed a disadvantaged community.	G	0	c	North Edwards Water District "NEWD" (Public), Dunes Apartments and Fountain trailer park (Both private) exceed the EPA MCL of 10ppb for arsenic. Currently NEWD arsenic levels are 32 and 36ppb from our two wells. We are required to notify the public that we exceed the MCL for arsenic on a quarterly basis. We provide notification through the mail during the billing cycle of that quarter. The notification is currently in effect.	5,836,000	222	597 19	Kern	Π	2009
516 1510052	1510052-002	NORTH EDWARDS WD	Arsenic compliance	Lay approx. one mile of 8" PVC main and construct storage tank.	G	0	с	Interconnect Fountain Trailer Park to District to solve arsenic problem exceeding MCL.	250,000	222	597 19	Kern	Ш	1999
517 1510052	1510052-003	NORTH EDWARDS WD	North Edwards WD - Arsenic Compliance	Connect to Antelope Valley East Kern Water Agency (AVEK) or alternate arsenic water treatment	G	0	С	System will exceed the new federal arsenic standard of 10 ug/L.	1,100,000	222	597 19	Kern	Ш	2000
518 1510027	1510027-001P	DESERT LAKE COMM SERV DIST	Treatment for arsenic	Treatment for arsenic	G	0	с	Arsenic above the new EPA MCL	0	241	600 19	Kern	ш	2007
519 1500290	1500290-005P	EDGEMONT ACRES MUTUAL WATER COMP	A Planning	Install treatment to meet arsenic standard	G	0	С	Standby source unable to meet New EPA Arsenic and Uranium Standard of 10 ug/L	10,000	148	600 19	Kern	Ш	2002
520 3200104	3200104-005P	Grizzly Lake RID-Delleker	Fillippini Spring water line and booster station.	We would need to inspect (cctv) the entire pipe from spring to storage tank because it has been sitting idle for over ten years. We will need to upgrade the pipeline to current standars and rebuild the booster station with a back up generator. We would like to have a chlorination facility installed at the storage tank and telemetry to run the cycles and operate disinfection. We would need to secure the area around the spring with 5 or 6 foot chain link fencing and grade the access road with base rock for all season access. The primary ebngineering would be required to test flow from the spring to determine if production would be beneficial to the district. This would allow for growth, fire protection and eliminate the need for any outside water for the district.	G	0	с	We have had problems with uranium in the two existing wells. We believe the quality of water available from Fillippini springs is better and not surface influenced like other sources in the area. We have had uranium counts above 20 ppb in April 2010 and recently sampled, we are awaiting results.	120,000	199	657 02	Plumas	I	2011
521 3600114	3600114-003P	CSA 70 W-3 (Hacienda)	Gross Alpha compliance	Construct treatment system	G	0	с	Well does not meet primary standards for gross alpha	300,000	139	695 13	San Bernardino	v	2001
522 2110001	2110001-033	Inverness Public Utility Dist	Water Treatment Facilities Improvements: Control of Chlorine Disinfection By Products Pinon Pines MWC Water Treatment Plant Regulatory Required With System Improvements	The Inverness Public Utility District (IPUD) contracted with SPH Associates Consulting Engineers (SPH) of Cameron Park, CA to have SPH evaluate potential solutions to remove disinfection byproducts (DBPs) from IPUD treated drinking water and thereby gain compliance with State and Federal Maximum Contaminant Levels (MCLs) for DBPs. SPH's report recommends IPUD combine 1) granular activated carbon (GAC) to remove most organics from raw water, and 2) enhanced chemical coagulation further reduce organic load. The combination of these two methods is a successful practice that is widely used in the drinking water treatment industry used to meet State and Federal MCLs for DBPs. GAC is effective in removing organics through the process of adsorption, and enhanced chemical coagulation reacts with water to enable removal of soluble organics. The IPUD System is comprised of two separate water treatment plants, both in Inverness: one at Perth Way and one at Sir Francis Drake Boulevard. Implementation of the SPH recommendations requires modifications to these existing facilities requires modifications to these existing facilities requires modifications to these installing GAC contactors at each treatment facility, as well as chemical freed pumps. Cost estimates provided by SPH to implement improvements:Perth Way Water Treatment PlantEngineering/Design: \$10,000Granular Install a water treatment plant to correct excessive MCL of fluoride. Plant will be a stand alone package unit. Treatment system will require construction of evaporation ponds to allow disposal of treatment medium. Interconnecting pipelines between the treatment plant into the distribution system and to the evaporation ponds need to be constructed. One storage tank is deteriorated with approximately 30% of the interior lining missing. We propose to remove the deteriorated tank and an adjacent small tank and replace with one large tank to increase water system storage. Drill a new well to replace a well that has failed, to increase system capacity and allow add	G	0	c	The Inverness Public Utility District (IPUD) is in non- compliance with treated drinking-water maximum contaminant levels (MCLs) for disinfection byproducts (DBPs) set by both State and Federal Drinking Water Quality Standards. Total Trihalomethanes (TTHMs), a disinfection byproduct, in IPUD treated drinking water exceeds MCLs established by the EPA Stage 1 DBP Rule MCL for TTHMs. IPUD treated drinking water also exceeds TTHM MCLs established by Section 64533 of the California Code of Regulations. IPUD has been in violation of TTHM disinfection byproduct MCLs starting in April 2006. The IPUD raw water supply is obtained primarily from streams, with a small increment of water taken from wells during low stream flow periods. Water from the collection system is filtered (using Memcor Continuous Microfiltration) and is disinfected with chlorine. Naturally occurring organic matter in the raw water not removed during the filtration process reacts with the chlorine to form TTHMs that exceed State and Federally mandated MCLs for TTHMs. IPUD's entire water system income and budget is derived from metered water usage and a bimonthly basic charge. Due to the size of the IPUD water system, income derived from customer usage and basic charges do not allow for funding a capital project that will solve IPUD's non-compliance with State and Federally mandated DBP MCLs. Therefore, IPUD is requesting funding assistance Water provided by the system exceeds the allowable MCL of fluoride. Blending with another well does not bring fluoride into compliance with MCL. CDPH requires quarterly notification that will continue until exceedance of fluoride MCL is corrected. A storage tank is badly deteriorated and needs to be replaced.	279,000	247	702 18	Kern	II	2008
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				and assure maximum flow volume.										
524 1510054	1510054-001	PINUN PINES MWC		wells that have fluoride levels below the MCL.		U	L.	maintain increasing demand are above allowable MCL of 2 mg/L	120,000	247	740 19	kern		2004
525 4110012	4110012-003	Cuesta La Honda Guild, Inc.	Cuesta La Honda Guild - TTHM Mitigation	Install treatment system - Miex Anion Exchange system or chloramine treatment	G	0	С	High TTHM levels - Exceeds Running Annual Average MCL for TTHM	215,000	300	750 17	San Mateo	II	2007
526 1010030	1010030-002	Tranquillity Irrigation Dist	Arsenic Treatment	Installation of a treatment system to remove the arsenic from the drinking water .	G	0	С	Arsenic levels in excess of the MCL in the drinking water for Tranquillity Irrigation District.	1,250,000	326	820 23	Fresno	Ш	2004
527 4210009	4210009-002	Cuyama Community Services District	Cuyama Arsenic Compliance	Provide arsenic removal treatment.	G	0	С	Water supply will not comply with proposed MCL for Arsenic if below 20 ppb.	455,000	253	820 06	Santa Barbara	IV	2002
528 1510051	1510051-004C	LEBEC COUNTY WATER DISTRICT	Lebec - New Well	Construction of a new well with a capacity of 250 gpm to meet current and future demands.	G	0	с	Current wells are in marginal compliance with MCL's for uranium and fluoride, if an existing well exceeds a primary compliance it must be shut down, then there is	0	243	830 19	Kern	Ш	2009

not enough capacity for existing system.

529 5710011	5710011-001	Wild Wings Golf Community	Arsenic Treatment for the Wild Wings County Service Area Water System	This Project for Arsenic Removal within the Wild Wings G County Service Area for the 2,000 gpm system would incorporate the use of filter vessels. The AS Removal system utilitzes two 14 foot diameter vessels in parallel. They will utilize Bayoxide Pellets, and 946 cubit feet of media quantity. The backwash volume will be approximately 26,000 gals/vessel with a 2000gpm supplemental backwash rate. Average treatment would be approximately 1,840,000 gals/day. The media cycle life would be approximately 52.1 months.Essential from Well Pump water would go to Disinfection then to both Absorbers (media) and out to Storage or distribution as treated. This process would be one that would filter and remove As and allow the well in current danger to be placed off of standby and again as a usable domestic supply source which is essential to the Wild Wings Community. This could also potentially allow users in nearby areas to utilize the system in case of capacity and toxic issues in their own neighborhood should it be allowed by the water system authorities in the future. The areas surrounding the Wild Wings community are rural and are often using outdated and in some cases could be non-compliant wells. The could potentially be a benefit to more than these over 1,000 users currently incorporated into the system. This process would resolve the current violations according to both the Title 22 California Code of Regulations MCL requirement for	0	c	Wild Wings County Service Area Public Water System is experiencing a problem with Arsenic contamination in one of its 2 drinking water source wells. Currently this well is not in use and will need to be changed to a standby source. The problem with this is that this public water system can not have this well become a standby source because there is only one other drinking water well that is available for the supply of domestic water to over 1,000 users in the system. The facility is a 2 mgd water treatment facility and Arsenic would be treated on a large scale. According to CDPH this Category G project is one that would rectify the directive currently standing. This Arsenic Contamination is one that does not meet the Operational Requirements listed in Section 11655 of the Drinking water Statute stating"Any person who owns a public water system shall ensure that the system does all of the following: (1) Complies with primary and secondary drinking water standards" The Arsenic contamination is one that also exceeds California Code of Regulations Title 22. Domestic water quality and montioring regulations Article 4 primary standards inorganic chemicals maximum contaminant levels. The well source with the arsenic problem has been fluctuating over the MCL requirement for a running average standard. The well has hit over 10 ppb for this running average.	600,000	346	1,187 09	Yolo	I	2009
530 4710007	4710007-003	City of Montague	Filter and UV disinfection upgrade	The City of Montague recently undertook an G enginneering study to determine the best options for dealing with the problems outlined in the previous section. The following reflect recommendations outlined in that study. The existing pressure filters should be replaced with new granular media gravity filters. This will provide more effective filtration and will eliminate turbidity spikes presently occurring. This should provide treated water meeting the LTLESWTR. The construction of a new filtered water pump station, to deliver filtered water to the existing storage tank, will be required to allow for the change from pressure to gravity filtration. The installation of a UV disinfection system. This will provide an additional barrier to microbial contaminants. It provides affective control of cryptosporidium. Use of a UV system will decrease the use of chlorine and should, combined with more effective filtration, reduce the formation of disinfection byproducts. Installation of electrical and control system components associated with the above systems will be necessary. Monitoring equipment necessary to comply with CFR141 141.570 will be installed.Site grading and piping necessary to the project will be required.	0	c	The purpose of the project is to reliably meet current and future turbidity and glardia/cryptosporidium regulations dealing with Montague's surface water supply.The City of Montague Water Treatment Plant includes two pressure filters that are nearly 35 years old. These filters have visible evidence of corrosion damage to the pressure vessel walls and are expected to fail in the next few years. The existing filters produce water that meets the existing filtered water standards that apply to older water treatment facilities. However, these filters do not produce filtered water that meets all of the requirements included in the Long Tern 1 Enhanced Surface Water Treatment Rule that apply to newer water treatment plants serving fewer than 10,000 people, including producing filtered water with less than 0.3 NTU in at least 95 percent of the samples collected during each month of operation. The maximum filtered water turbidity has also exceeded the maximum filtered water turbidity has also exceeded the maximum turbidity level permitted by the LTESWTR of 1 NTU in past occasions. The filters operate in a start/stop mode based on the call for water from the storage tank. These cycles can occur several times daily. Each start-up causes short term turbidity spikes, providing an opportunity for pathogenic organisms to pass through the filters. Due to regulatory changes, there has been a significant reduction, from original	2,000,000	504	1,495 01	Siskiyou	I	2009

design, in the volume of water which the filters are

531 1910246	1910246-002P	LAND PROJECT MUTUAL WATER CO.	Wells 1,3,4 and 5 Arsenic treatment plan	The system has several options including: Installing transmission piping to interconnect old wells with potential new well(s) to provide blending; Installing new wells that are potentially in compliance with MCL's; Or installing arsenic treatment such as RO at each well site. The project scope will be determined by best engineering practices and fiscally responsible treatment.	G	0	с	The community water system has four groundwater wells that supply approximately 500 service connections. As of June 18, 2007, all four wells exceed the arsenic MCL, ranging from 8.6 ug/l to 20 ug/l, and have since 1998. There are no current arsenic violations. Well #4 is the only exception, with three of five samples below the MCL. Two samples on well #4 have results of 8.6 ug/l (5/18/04) and 9.7 ug/l (6/18/07). The system infrastructure is currently not conducive to blending.	1,190,536	520	1,500 07	Los Angeles	IV	2007
								Additionally, the system is unsure if they are within the MHI to be considered a disadvantaged community.						
532 5210003	5210003-001P	Los Molinos Comm. Services Dist.	Arsenic Compliance and Consolidation Project	District staff, with the assistance of Calif. Rural Water Association and the District's Engineer, performed a prliminary review of the alternatives for achieving compliance with the arsenic MCL requirement of the finished water from Well #4. LMCSD has chosen to develop an additional water source that can be used to blend down the arsenic concentration to required levels.LMCSD has two additional wells each with arsenic concentrations below 5 ppb, however, both wells woult require several miles of underground piping to be used Therefore, LMCSD will seek fuding for development of an additional water source for blending by drilling a new well within 100 feet of Well #4. Preliminary e-log evaluations from Well #4 indicates an adequate quantity of water above the confined quifer that contain water that can be used to blend with Well #4 water to achieve the desired results. The project would begin by hiring a geological consultant and a project engineer to provide expert consultation, recommendations, specifications, and to assure compliance with industry standards. The next step would be to drill a test well approximately 100 feet from Well #4. The test well approximately 100 feet from Well #4. The test well approximately to to take water samples to assure the new well would meet the Title 22 water quality requirements and provide a low	G ic d w	0	C	The California Department of Public Health has issued a Notice of Non-Compliance for the Districts Well #4 because it exceeds the MCL for Arsenic. Well #4 was drilled in 1996. The District is currently required to mailing a quarterly notification for the exceedance of a chemical MCL to each landowner. Well #4 was designed and developed to be the primary water source for the community of Los Molinos, which consists of 350 service connections. The well was drilled and sealed deep to avoid the potential nitrate contamination caused by the communities individual septic systems. The seal consists of 24" steel pipe to a depth of 101 feet. The well consists of 14" solid steel casing to a depth of 456 feet, and from 456 to 536 with 80 feet of gravel packed stainless steel Johnson well screen with .040 slots. All the water produced comes from depths between 456 feet and 536 feet. It appears that the water produced is pumped from a confined aquifer since the static water level is 2 feet below ground level; much higher than surrounding shallower wells. As the primary water source well #4 is equipped with a 212,000-gallon storage tank and a 100 hp booster pump to provide the communities fire protection flows of 1000 gpm's for two hours. This well also provides the Districts only backup power supply. LMCSD relies heavily on the produced from the confined aquifer contains higher levels of arsenic	63,091	358	1,500 21	Tehama	I	2009
533 2410011	2410011-005	LE GRAND COMM SERVICES DIST	Le Grand Community Services District Arsenic treatment	Le Grand Community Services DistrictArsenic TreatementThe proposed project would be to install aresnic removal and treatment equipment at the two well sites.	G	0	С	Le Grand Community Services DistrictAresenic treatmentThe district has three operational wells that serve the community for the required water distribution to the customers. All of these wells have a low yield as the aquifer in the area does not provide for large water removal. Two of the three wells have an arsenic level that exceeds the allowable 10 ppb MCL.	1,750,000	501	1,700 11	Merced	111	2009
534 3210011	3210011-004	Plumas Eureka CSD	Plumas Eureka CSD - Water System Improvement Project	New water well and arsenic treatment facility, installation of hypochlorite generators in place of existing chlorine gas units.	G	0	С	Plumas Eureka CSD is in violation of the Arsenic MCL drinking water standard.	5,000,000	547	1,785 02	Plumas	I	2012

535 2210001	2210001-006	MARIPOSA PUBLIC UTILITY DIST	Water Main Extension To Address MTBE Contamination	Mariposa County and MPUD propose to extend the public water main from the existing water distribution system in the town of Mariposa to the PW facility. This will include the installation of approx. 10,00 feet of 8" water main with appertanances and a pressure regulating station.Mariposa County has applied for funds through the CDPH Drinking Water and Research Fund (DWRF) for this project. CDPH staff has indicated that the DWRF program may provide partial funding for the project. SRF Stimulus funding may be reduced if DWRF funds are committed to the project. The extension of the MPUD public water system in the area of Mariposa Co. PW provides for the pontential of another public water supply to consolidate. The preliminary design places the proposed water main within 1000 Feet of the Mariposa County Fairs for currently considering the economic feasability, primarily monthly service charges, to determine if they will participate in the project.	0	C	The Mariposa County Public Works (PW) facilities are located within the Mariposa PUD LAFCO Sphere of influence. The water supply for the PW facility has been provided by an on-site well, CDPH system # 2210937. For more than three years the water supply well has been contaminated with MTBE. The source of the MTBE is alegedly from nearby underground gasoline tanks. The extent of the MTBE plume is unknown. Drilling of a new well is not considered a viable option. A new well may tap a water source already affected by the MTBE plume or the pumping of a new well in the area may draw the MTBE plume into the new well. Analysis results of the most recent well water samples indicate that the well water is still contaminated with MTBE. The owner of the underground tanks has provided a treatment system and paying for the pumping of the well and operation of the treatment system for at least three years. The treatment system is providing adequate removal of the MTBE for ultimate disposal of the pumped ground water to surface water. Drinking water is currently trucked from the MPUD water system to a temporary storage tank at the PW facility.	1,100,000	671	2,000 11	Mariposa		2009
536 5710007	5710007-006C	Esparto C.S.D.	Well Replacement	Drill a test well approximately 600' to sample for water G quality and quantity. If the test location proves viable, then: (1) drill and construct a new well, (2) develop well to maximize production and (3) tie into existing distribution and SCADA systems.	0	C	Our system has three (3) active groundwater wells. Running all three (3) wells 24 hrs/day, we have a maximum production capacity of 1.5 MGD. We have had 30 day periods with demand averages as high as 1.3 MGD. We are in desperate need of adding source capacity to create a reserve as well as prevent overdraft of the water table at existing wells. We originally had five (5) active groundwater wells. Well #3 was abandoned in 2000 when contaminants from an equipment maintenance yard were detected in the well water. Well #4 produces sand, despite several attempts at repair and has been out of service since 2003.	425,000	688	2,000 09	Yolo	I	2012
537 1010039	1010039-009C	Caruthers Comm Serv Dist	Well 05 Arsenic Treatmen	t Granular Ferric Hydroxide (GFH) is an adsorption G process using ferric-based media to sorb arsenic and other heavy metals from raw water supplies.	0	с	Arsenic levels in excess of the MCL in the drinking water for Caruthers Community Service District.	0	672	2,103 23	Fresno	ш	2002

538 1010039	1010039-012	Caruthers Comm Serv Dist	New Well and Water Treatment Facility	The recommended project includes construction of a new well and abandonment of existing Wells No. 1 and 4. The existing Well No. 5 would remain in use and the water produced would be piped to the new well site. A new well would be constructed with the intent of obtaining at least 1,000 gpm to replace the capacity of Well No. 1 and No. 4. The new well would be designed and constructed with the intent of avoiding arsenic concentrations above 5 ppb, to allow the flows from both wells to be blended. A storage tank will be constructed on the new well site and is anticipated to be approximately 0.75 MG to provide for blending. Booster pumps will be required, along with additional onsite and offsite piping to transmit water from the existing well to the new well site and then deliver wate to the water distribution system. A standby generator will also be required. However, if the new well does no produce water that has an arsenic concentration that is sufficient for blending, a coagulation filtration plant will be constructed on the new well is te to treat water from Well No. 5 and the new well is the tot reat water from Well No. 5 and the new well is the treat water from Well No. 5 and the new well is the treat water from Well No. 5 and the new well is required. Additional equipment will be required to be installed; a backwash tank, a pre-oxidation tank, a pH adjustment tank, additional on site electrical, a control building, dewatering facility, etc. This project could be phased.	G I A A I I D T S I I I I I	0	c	The existing water supply facilities for Caruthers include four (4) wells, Numbers 1, 3, 4, and 5. Well No. 1 (flow rate of 350 gpm) is not used except in the summer months. The four (4) wells have a pumping capacity of 3050 gpm, which is adequate for the current population. The water from Well No's 3, 4, and 5 have Arsenic levels of 8, 20, and 12 ppb, respectively, with Well No's 4 and 5 being above the new Federal limit of 10 ppb. These existing 2 wells require treatment for Arsenic removal. The arsenic is in the form of arsenite (As III) and must be pre-oxidized to form an arsenate (As V) species for highest removal efficiency. In general, the pH of the water must be reduced to approximately 7.5 to facilitate conversion to arsenate.	7,174,450	672	2,103 23	Fresno		2009
539 1010028	1010028-002C	Riverdale Public Utility District	Achieve compliance with Revised (10 ug/L) Arsenic Standard.	Plan, design and construct media filtration systems at each well.	G	0	С	PUD's existing three wells exceed revised (10 ug/L) Arsenic standard.	5,905,000	866	2,416 23	Fresno	Ш	2005
540 1510002	1510002-001P	BORON CSD	Arsenic treatment plant	Arsenic Removal treatment, AVEK water is currently available as a secondary source with low arsenic	G	0	С	Arsenic in the system wells is above the new federal MCL of 10 ug/L,	5,000,000	839	2,500 19	Kern	Ш	2007
541 5410009	5410009-010	Pixley Public Util Dist	Wells 1, 2A, 3A Arsenic Treatment	The project would entail construction of three new well to replace the existing three wells that are not in compliance with the EPA Arsenic thresholds. The existing three wells would be properly abandoned. Depending on the quality of water obtained from the three new wells, arsenic treatment systems would be constructed on each new well site to treat the source water prior to distribution. Additional on-site and off- site piping is required to deliver finished water to the water distribution system. A standby generator would be included at each well site.	I G	0	с	The current water system utilizes four wells (1, 2A, 3A and 4) to provide the water supply for the community. The four wells have Arsenic levels of 22, 23, 21 and 4 parts per billion (ppb), respectively. Wells, 1, 2A, and 3A exceed the Environment Protection Agency standard of 10 ppb.	6,575,350	801	2,793 12	Tulare	Ш	2009
542 5410009	5410009-002	Pixley Public Util Dist	Arsenic Treatment for We 2A	II Install arsenic treatment	G	0	С	Arsenic levels in Well 2A exceeds the federal MCL of 10 ppb	10,000	801	2,793 12	Tulare	Ш	2007

543 3610002	3610002-002	ALPINE WATER USERS ASSOCIATION	Alpine Water Users Association, Uranium Treatment Compliance Order 05-13-11CO -002	The Alpine Water Users Association, in conjunction with G our contract Engineer Mr. John Egan with Engineering Resources of Sothern California, have conducted an Engineering Report (as required by CDPH outlined in Compliance order 05-13-11C0-002), and have determined that Ion Exchange treatment is the most realiable means of removal of the contaminant from the drinking water. A copy of the engineers report has been submitted to Mr. Sean F. McCarthy, P.E., Senior Sanitary Engineer, CDPH on February 9, 2012.	0	c	The CDPD has issued compliance order No. 05-13-11CO- 002 to the Alpine Water Users Association for the following violations.1) California Health and Safety Code, Section116555 (a)(1); Specifically, the Association has failed to provide water that complies with primary drinking water standards.2) California Health and Safety Code, Section 116555 (a)(3); Specifically, the Association has failed to ensure that the system is providing a reliable and adequate supply of pure, holesome, healthful, and potable water. 3) Title 22, California Code of Regulations, Section 6442 (a). Specifically, the Association does not at all times deliver water to all customers that complies with the uranium maximum contaminant level of 20 pCi/LAWUA had exceeded the uranium maximum contaminant level (MCL) from the fourth quarter of 2010 to the third quarter of 2011 for ground water wells No. 1 and 12. therefore CDPH has required the Association to conduct Tier 2 public notifications for each quarter that the Association was not in compliance with the uranium MCL. Currently, the wells that exceed the uranium MCL. Currently, the wells that exceed the uranium MCL have been turned off and can no longer be used as a reliable source of water for the community. AWUA is seeking funding for water treatment facilities for water wells that exceed the maximum contaminant level of uranium and none again become self reliant and not be required to purchae water from the California State Water Project,	242,121	932	3,000 13	San Bernardino	v	2012
544 2610003	2610003-002C	BRIDGEPORT PUD	Arsenic Removal System	Install treatment system to meet future MCL.(2006) G	0	С	Arsenic level in twowells are high (0.039 mg/l)	10,000	227	3,000 13	Mono	v	2004
545 2010007	2010007-008	HILLVIEW WC-OAKHURST/SIERRA LAKES	Oakhurst-Sierra Lakes 2010007 Uranium-Arsenic Compliance & Fire Flow	G a compliance order for Uranium & Arsenic for the water produced in this area. A project bringing on 6-700 gallons per minute of new source out of five new wells, including the raw water line to the current treatment facility has just been completed. However, the area water is not in compliance with uranium or the new arsenic standards. The solution is to install uranium removal treatment on the wells that are the highest in uranium and then blend the treated water to go well below compliance levels. The solution for the arsenic problem will require separate treatment of a larger quantity of the source water with a separate treatment on the existing 500gpm iron and manganese removal treatment facility with a 1500gpm arsenic, iron and manganese removal treatment facility with a 1500gpm arsenic, iron and manganese removal treatment facility with a 1500gpm arsenic, iron and manganese removal treatment facility with a diding storage. Since all sources in the area are ground water, increasing fire flow. A 250,000 gallon storage tank will replace two 40,000 gallon tanks at the arsenic treatment facility, a 500,000 gallon tanks at the location of the existing 420,000 gallon	0	C	Treatment for Uranium: On September 8, 1997, the Department of Health Services (DHS) issued Hillview Compliance Order No. 03-11-970-002 for failure to comply with the Uranium Maximum Contaminant Level and failure to insure that customers are provided with a reliable and adequate source of pure, wholesome, healthful and potable water. Treatment for Arsenic: On January 26, 2009, the California Department of public Health (CDPH) issued Hillview Compliance Order No. 03- 11-090-001 for Arsenic Maximum Contaminant Level exceedance. CDPH (DHS) has ordered Hillview, among other things, to develop a project that will correct the water quality problems. Hillview has developed such projects and now seeks funding by this application.Additionally, this water system is in a fire danger area and Hillview's system would be the only water source available for fire fighting in the area. No part of the system will meet fire flow requirements during peak consumption periods and in some areas of the system fire flow cannot be met at all. Since all sources in the area are ground water, increasing storage is a more reliable and cost effective solution for fire flow.	5,482,300	1,007	3,006 11	Madera	Ш	2009

storage tank and the 420,000 gallon and 40,000 gallon water tanks will be refurbished. The funding would be

546 1610001	1610001-009	Armona Community Services Dist	Well 2 Replacement	The project would consist of drilling a replacement well for Well No. 2. The goal is to drill a new well that would not require treatment, producing water with Arsenic concentrations below the maximum contaminant level. The replacement well would require property acquisition, drilling a test well, installation of a permanent production well, appurtenant site facilities, and construction of a new water main to connect to the existing distribution system. Additionally, the project may include treatment facilities and a transmission main to Well No. 2 for blending if the new well does not produce a sufficient amount of water with desirable water quality characteristics.	G	0	c	Well 2 is in violation of the Federal Drinking Water Standards of 10 ppb for Arsenic. The USEPA has issued an Administrative Order requiring corrective action. The problem must be addressed to remain compliant with the California Department of Public Health Supply Permit.	6,970,000	1,179	3,239 12	Kings		2009
547 5410024	5410024-001	Richgrove Community Services District	Richgrove DBCP compliance and Rodriguez Labor Camp Consolid	EITHER DRILL NEW WELL OR INSTALL TREATMENT. OTHER - STUDY, DESIGN AND CONSTRUCTION	G	0	С	WELL 4 EXCEEDS DBCP MCL	4,640,324	520	3,330 12	Tulare	Ш	1998
548 1310007	1310007-002C	Heber Public Utility District	Improve and expand The Water Treatment Plant	The water treatment plant expansion consists of the construction of a new Flash Mik Basin - Which will greatly reduce TTHMs problems.Demolition of the existing and construction of a new raw water pump station to meet the actual capacity and be sufficient for the expansion capacity.Construction of two additional Clarifier/Filter Treatment units; will allow for maintenance problem and will increase the treatment capacity.Expansion of the Einish Water transfer pump station.Demolition of the existing and construction of a new High Service Pump Station. These up-grades will meet the required pumping demand and the new capacity.Expansion of the Sodium Hypochlorite Disinfection system, expansion of the coagulant (Polymer) Chemical system and coagulant aid (Polymer) Chemical system and coagulant aid (Construction of a an incline settling plate clarifier, construction of a lice stating plate clarifier, construction of a lice water backwash pump station. Due to the high solids content in the canal water it is necessary to modify all this components to increase the treatment capacity.Expansion of the existing operations building, demolition and construction of a dictional site piping, expansion of electrical and instrumentation facilities.	6	0	C	Phase III Water Treatment Plant up-grade from 2MGD to 6MGD.Problems:-The Potable water exceeded the MCLs of the TTHMs. for 1st, 2nd 3rd Qtrs of 2005-The Water demand exceeded the water treatment plant capacityThe raw water ponds don't meet the 6 days raw water supplyThe existing raw water pumps do not meet the actual capacityThe treatment filter units can't be taken out of service for maintenance The water supply will last only 1 1/2 days in case of emergency; this after the completion of the Phase I - 3MG pre-stressed concrete reservoir, placed in service in May 2008, project phase paid by the impact capacity fees. CDPH permit 05-174-08-PA-040.Phase II - 36" reliable raw water trasmission pipeline. The construction of 9,100 feet of Raw Water Pipeline from the IID Central Main Canal from the Colorado River - to the Water Treatment Plant Funds commited by USDA.	6,150,000	1,420	3,508 14	Imperial	V	2009

549 5510008	5510008-011	LAKE DON PEDRO C S D	Clarification Basin Buildin Completion	g Pour a concrete foundation with drainage system for the metal building that will be placed over the clarification basin. Construct the metal building that has already been purchased. Most of the engineering work has been completed for this project. With the required funding in place, this project can be started immediately.	G	0	C	The district is currently out of compliance with our Trihalomethanes (THM). They are above the Drinking Water Standard. We should be at 80 micrograms per liter. Last quarter we reported a level of 83.6. The standard is set to be lowered in the future so we will be even further out of compliance. By covering our open clarification basin, it will reduce the entry and growth of organic material and increase the effectiveness of our polymers, reducing our THM levels. The metal building has been purchased and is on site, but funds are not available to complete the project. Our district is facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of unbalanced budgets. The Department of Public Health is requiring us to complete this project as a part of upgrading our facilities in order to meet the water quality standards they desire.	140,000	1,442	3,600 11	Tuolumne	ш	2009
550 1510014	1510014-001	MOJAVE PUD	arsenic treatment	Construction of a new well and blending the new well water with the existing wells to reduce the arsenic leve in the water.	G	0	с	Existing water wells in Cache Creek currently blend the groundwater together and provide water to Mojave. The blended water quality exceeds the new federal arsenic MCL of 10 ue/L	1,187,500	1,332	3,900 19	Kern	Ш	2006
551 1510014	1510014-002	MOJAVE PUD	Well No. 9 and Arsenic Treatment Project	The project involves construction of a new potable water Well No. 9 with an integrated arsenic treatment process. Also, the existing 8-inch transmission pipeline that joins the existing Well No. 7 and No. 8 to new Well No. 9 will be replaced. The pipeline will include an encased crossing beneath the UPRR tracks. The new Well No. 9 will supply groundwater to residents with in the Mojave Public Utility District service area. The project includes, but is not limited to one new water well, the necessary electrical and instrumentation equipment, a water transmission pipeline, an arsenic removal system, one encased railroad track crossing and other appurtenances. All project improvements will be constructed on exisitng District property.	G 9 11	0	C	The project involves construction of a new potable water Well No. 9 with an integrated arsenic treatment process. Also, the existing 8-inch transmission pipeline that joins the existing Well No. 7 and No. 8 to new Well No. 9 will be replaced. The pipeline will include an encased crossing beneath the UPRR tracks. The new Well No. 9 will supply groundwater to residents with in the Mojave Public Utility District service area. The project includes, but is not limited to one new water well, the necessary electrical and instrumentation equipment, a water transmission pipeline, an arsenic removal system, one encased railroad track crossing and other appurtenances. All project improvements will be constructed on exisiting District property.	1,200,000	1,332	3,900 19	Kern	Ш	2009
552 4910011	4910011-005P	Sebastopol, City of	Well 06 Arsenic Treatmer	t Blending water from another water zone with Well 06 i proposed to meet arsenic regulatory compliance. Installation of about 400' of water main and booster pumps with variable frequency drives to boost water into source to blend water is proposed. Monitoring wil be required on a weekly basis per CDPH to ensure regulatory compliance. Prior efforts to install an inflatable packer to isolate arsenic laden areas in the well have not been successful. This is the most cost effective solution in our incremental effort to remediat arsenic levels in this well.	is G II te	0	с	Arsenic standard of 10 ppb is exceeded in Well 06. Public notification has not yet been required as the well is off line until it can meet regulatory compliance.	400,000	2,885	7,750 18	Sonoma	Ι	2009
553 4910011	4910011-004	Sebastopol, City of	Well 6 & Well 7 Arsenic Treatment System	Purchase and install adsorption arsenic treatment system designed for treatment flow rate of 2,000 gpm, average arsenic influent level of 15 ppb, effluent target arsenic level of 8 ppb, and a 100% well utilization rate.Project will involve reconfiguration of water mains for plumbing into the treatment system.	G , t s	0	с	Water System problem is in violation of U.S. EPA Arsenic Rule of 10 ppb at two System Wells, #06 & #07. These System Wells exceed the arsenic standard by 5-8 ppb. Currently issuing quarterly Public Notice to customers for arsenic violation, per Compliance Order from California Dept. of Public Health.	2,169,000	2,885	7,750 18	Sonoma	II	2009

554 0310012	0310012-006C	AWA Buckhorn Plant	CAWP - Buckhorn WTP Disinfection By-Products Compliance	The project proposes to install a UV system at the WTP G and 3- post Chlorine Stations within the system. This will reduce the chlorine dosage at the WTP and will therefore conform to the Disinfection Bi-Product Requirements	0	С	The Buckhorn Water Treatment Plant (WTP) provides both retail and wholesale domestic service to communities in the Eastern part of Amador County. Currently 2- of the Wholesalers have been cited by the Department of Health Services for non-compliance of HAAS and TTHM of the Disinfection Bi-Product Rule. Although, the Agency has exceed the individual site requirements its retail service, the system's data has been average out, it has therefore collectively met the Disinfection Bi-Product Rule. In 2008, averaging will no longer be allowed and therefore it is expected that the system will be in violation of the Disinfection Bi-Product Rule.	0	2,558	8,508 10	Amador	111	2007
555 3610112	3610112-005	HELENDALE COMMUNITY SERVICE DISTRIC	T Arsenic Supply Alternatives- New Source Development	The Helendale Community Services District assumed G operations from the County of San Bernardino Special District's Department on April 1, 2007. The water supply consists of seven production wells. There are three main production wells that exceed the Maximum contamanent Limit (MCL) for Arsenic. Nothing had been done previously to address the Federal Environmental Protection Agency's (EPA) MCL of 10 ppb. Additionally, a fourth well exceeds the MCL for Manganese.	0	с	The Helendale Community Services District assumed operations from the County of San Bernardino Special District's Department on April 1, 2007. The water supply consists of seven production wells. There are three main production wells that exceed the Maximum contamanent Limit (MCL) for Arsenic. Nothing had been done previously to address the Federal Environmental Protection Agency's (EPA) MCL of 10 ppb. Additionally, a fourth well exceeds the MCL for Manganese.	2,750,000	2,610	8,646 13	San Bernardino	v	2007
				Progress to date: The Board of Directors understands the need to comply with EPA's requirement and immediately the Board of Directors hired a consultant to review the water quality data and evaluate the potential alternatives available to the Helendale CSD. The study evaluated three alternatives which included blending, filtration and new well development. It was determined that new well development would be the best long-term solution to meet the MCL. It is important to note that the District is located within			Progress to date: The Board of Directors understands the need to comply with EPA's requirement and immediately the Board of Directors hired a consultant to review the water quality data and evaluate the potential alternatives available to the Helendale CSD. The study evaluated three alternatives which included blending, filtration and new well development. It was determined that new well development would be the best long-term solution to meet the MCL. It is important to note that the District is located within						
				an adjudicated groundwater basin with no available surface water treatment to supplement the groundwater supply.			an adjudicated groundwater basin with no available surface water treatment to supplement the groundwater supply.						
556 1510018	1510018-004	ROSAMOND CSD	Arsenic treatment for Wells 8 & 9	Install package arsenic removal plant at one well that G will be used to remove arsenic from water of two wells (Wells 8 and 9). Blend this water with other well water to get arsenic level below 10 ug/L.	0	C	Rosamond CSD has four wells and all of them are 10 ug/l or higher for arsenic, thereby exceeding the new federal arsenic MCL of 10 ug/L	950,000	4,593	10,633 19	Kern	ш	2005
557 1510018	1510018-005	ROSAMOND CSD	Arsenic treatment for Well 7	Install package arsenic removal plant at one well that G will be used to remove arsenic from water of two wells (Wells 8 and 9). Blend this water with other well water to get arsenic level below 10 ug/L.	0	с	Rosamond CSD has four wells and all of them are 10 ug/I or higher for arsenic, thereby exceeding the new federal arsenic MCL of 10 ug/L Well #7 water exceeds MCL for arsenic.	250,000	4,593	10,633 19	Kern	III	2006

558 1510018	1510018-009	ROSAMOND CSD	RCSD Regional CDPH Arsenic Compliance Project	Connect all water systems mentioned in the "Problem G Section" to the RCSD water distribution system in order to provide potable water that meets all applicable state and federal water quality standards. Grouping of these subprojects together resolves their common water quality problems in an economical way. The largest proposed subproject will satisfy a number of CDPH concerns of the Lands of Promise and WFM users and the CDPH: The water delivered to the WFM customers will be below the arsenic MCL levels of 10 ppb; water volume and pressure will meet RCSD, Kern County, and CDPH standards; water volume will be adequate to provide fire fighting water; piping and apputenance land purchases will be minimized while easements and public lands usage will be maximized; two systems (WFM and Lands of Promise) can be connected with one common water main system; booster pumps will be surface mounted thereby eliminating hazardous enclosures and areas; water sources will be from recognized and tested groundwater wells, treated surface water wholesalers (AVEK), and by groundwater banking. Re-chlorinating stations will be provided at the booster station and at a 2.0 MG steel reservoir. Both WFM and Lands of Promise to the new customers will be as dependable and safe to drink as is the rest of the	0	c	RCSD is planning to annex the following: William Fisher Memorial Water System (WFM), First Mutual MWC, and Lands of Promise MWC to lower their high arsenic levels. At the same time, RCSD would like to connect Kern Mobile Estates, Rosamond High School, Desert Breeze Mobile Home Park, Rosamond Mobile Home Park, Rose Villa Apartments and Antelope Valley Mobile Estates to the RCSD system. All these water systems, except Desert Breeze MHP and Rosamond MHP, also currently experience arsenic levels above the allowed MCL. Rosamond MHP currently exceeds the uranium MCL. The Desert Breeze MHP well is less than 100 feet away and is very likely to also be in violation of the MCL in the near future. Other than WFM, First Mutual and Lands of Promise, all other entities are within RCSD boundaries. The financial ability of all the water systems is limited. The capital, operation, and maintenance cost of wellhead arsenic treatment for the three mutual water companies is beyond their shareholders means. The remaining water systems have similar problems. They are located close to existing RCSD water distribution facilities. However, the construction costs, fees, and charges to connect to the RCSD water system are also prohibitive. No funding is available for the Rosamond High School to separate its onsite water system in order to connect to RCSD's water system for	15,600,000	4,593	10,633 19	Kern		2009
				RCSD supplied water. No operational difficulties are			domestic uses and retain the wells for irrigation uses.	500.000		10.000.10			
559 1510018	1510018-008	ROSAMOND CSD	Planning Project - Rosamond consolidation of small water systems	G	U	C	Arsenic et al	500,000	4,593	10,633 19	Kern	111	2010
560 1510001	1510001-002P	Arvin Community Services Dist	Arsenic Treatment for Wells 1, 5, 6, & 8	Construct arsenic removal equipment at each well site. G	0	С	Arsenic Concentrations exceed federal MCL for Wells 1, 5, 6, & 8.	2,000,000	3,194	11,847 12	Kern	Ш	2004
561 3910015	3910015-006	CITY OF LATHROP	Removal of Arsenic and Bacteria from Well 21	Installation of a oxidation filtration system to remove G the arsenic and installation of pipng to flush the bacteria from the well which is contained in a localized area of the well. Additional treatment to removed the bacteria is included if the flushing does not adqequately remove all of the bacteria. the major equipment to be installed is Chemicla feed pump, Chemicla storage tank, flow meter,solids pump and piping, filter press and solids storage bin.	0	С	Well 21 was recently constructed. the well has bacteria contamination and the groundwater also does not met the new regulation for aresenic levels. This project will provide for the removal of arsenic and the bacteria. So that this water well can be part of the City's water supply.	2,000,000	3,675	12,427 10	San Joaquin	Ш	2009
562 1910005	1910005-003P	LOS ANGELES CO WW DIST 40 Reg 38 Lake I	L Dist 40 2850 Zone Tanks (Lake Los Angeles)	The proposed project consists of constructing two 1 MG G water storage tanks and appurtenances south of the intersection of 164th Street East and East Avenue P in the community of Lake Los Angeles. The proposed tanks will provide storage to the 2850 pressure zone to reduce the need to pump water to reservoirs at a higher pressure zone. This additional storage would reduce the monthly energy cost. The proposed site will require land acquisition and need preliminary site grading.	0	с	District No. 40 Region No. 38 has three pressure zones. The 2850 pressure zone supplies drinking water to approximately two thirds of the customers in the region. Currently, the water from two wells at the 2667 pressure zone is pumped to the 3.2 million gallon (MG) reservoirs in the 2992 zone to service both the customers in the 2992 and 2850 pressure zones. The customers in the 2850 zone have no dedicated storage, therefore additional energy is needed to pump water to the 2992 zone to supply customers in the 2850 zone.	905,000	3,526	12,609 16	Los Angeles	IV	2011
563 1510012	1510012-006	Lamont Public Utility Dist	Well 12 Arsenic Treatment Project	Well 12 was found to exceed the MCL for arsenic early G 2008. The goal for this project is to purchase treatment that will include ion exchange to address the issue of arsenic. This will begin with the installation of a 900 GPM BWiX/Ion Exchange, or absorption treatment/removal system for arsenic.	0	C	Well 12 Arsenic Treatment Project will address the issue of high arsenic levels. The drinking water standard violated is for exceeding the MCL for arsenic.	1,000,000	3,603	13,296 12	Kern	Ш	2008

564 3510003	3510003-001C	Sunnyslope County Water Dist	Ventures Estates Mutual Water Company Consolidation & Mainline Extension	The project consists on connecting the distribution G systems of the Sunnyslope County Water District to the Venture Estates Mutual Water company. The mainline connecting the two systems will consist of a large diameter mainline of 300 feet of a 12" diameter main, and 4500 feet of a 24" diameter main located in the existing rights of way. Sunnyslope County Water District will be constructing additional well capacity to serve this project and other projects as a separate project.	5	0	c	Currently the Venture Estates Mutual Water Company is supplied by only one well which has malfunctioned from time to time. At various times Venture Estates Mutual has been completely out of water due to the malfunctioning of their only well. The water supplied by the Venture Estates well exceeds seccondary standards for total dissolved sollid (well about 1000 mg/liter TDS). Venture Estates has discontinued treating this well for TDS due to malfunctioning equipment, and the residents of Venture Estates currently drink water which exceeds secondary standards for hardness and total dissolved solids. Finally, Venture Estates has difficultly employing a propely qualified water treatment operator at a price they can afford to pay and the existing equipment at Venture Estates is reaching the end of its useful life. For the abover reasons, Venture Estates desires to connect to the Sunnyslope County Water District to improve water quantity deficiencies, and water quality deficiencies, and increase reliability by connecting to the Sunnyslope potable water system which has several groundwater sources, surface water treatment, a a staff of licensed operators.	500,000	5,241	16,713 05	San Benito	Ι	2009
565 1610002	1610002-001	Avenal, City of	Avenal - DBP Compliance	Planning, design and construction of an ammonia G injection system to convert from free chlorine disinfection to chloramine disinfection.	6	0	С	CANNOT MEET PROPOSED THM STD. DUE TO HIGH TURBIDITY LEVELS IN THE LOCATION OF THE TURNOUT FROM THE SAN LUIS DAM	809,000	1,892	16,737 12	Kings	ш	2006
566 3410011	3410011-002	Galt, City of	Arsenic Treatment Project Carillion, Golden Heights, Fumasi, and Gateway	The City of Galt water treatment plant's for this project G are known as Carillion, Golden Heights, Fumasi, and Gateway. These sites that are in need of arsenic treatment currently have a greensand/limestone filtration system in place for the removal of manganese and iron. Implementation of the arsenic treatment removal process requires retrofitting our current well treatment systems. Based on current engineering design, a chemical feed system consisting of ferric chloride, carbon dioxide, and sodium hydroxide is needed for arsenic removal. Utilizing the existing filters, ferric chloride will be added as a coagulant to cause the arsenic to combine with and precipitate out with the iron. To aid in the coagulation process, the pH of the water must be lowered in order for the iron and arsenic to combine with each other, which will then allow the arsenic to be removed during filtration. To accomplish this a carbon dioxide chemical feed system will be installed to lower pH to allow for proper coagualtion and flocculation before filtration. To adjust the pH back to normal levels, a post filtration sodium hydroxide chemical feed system will be installed before treated water enters the storage tank. The monitoring and instrumentation equipment includes PLC controllers, pH meters, turbidity meters, and a SCADA system. In addition, the sites will be monitored by an alarm system	5	0	C	The project will address arsenic treatment at 4 city ground water treatment plants where 5 of the City's wells are treated and are currently out of compliance with primary drinking water standards for arsenic. California's adoption of EPA's Arsenic Rule has changed the maximum contaminent level from 50 to 10 ug/l (parts per billion). For each entry point to our water distribution system the level of arsenic in the water must be at or below 10 ug/l (parts per billion). In the City of Galt, where each ground water treatment system must meet this requirement, five of the city's nine water wells are out of compliance with the new Arsenic Rule.CDPH directive is for the City of Galt to provide modifications for arsenic removal at the ground water treatment plants for the wells that are out of compliance. These well sites that are not in compliance will remain offline until a system is installed that will treat arsenic to new MCL limits.	1,822,000	7,872	22,982 09	Sacramento	I	2008

567 3410011	3410011-006P	Galt, City of	Kost Well Project	This Kost well project includes site exploration, test hole/monitoring well construction, well design, plans and specifications preparation, and well construction. Installation of the test hole/monitoring well and final design is anticipated to be completed by June 2009. the construction of the Kost well is anticipated to be completed in the fall of 2009. This installation of Kost well will provide available drinking water supplies to make up for the lost water production currently experienced at the existing Creekside and Quail Hollow well site. It is also anticipated that this deep well will produce water that is within the new adopted arsenic limitations and reduce capitol costs as well as future O&M costs for arsenic treatment.	6	0	C	Most of the City of Galt wells have historically required iron and manganese treatment to meet state drinking water standards. In addition, most of these same wells now require arsenic treatment to meet new drinking water standards recently adopted by the State of California that lowered arsenic limits from 50 ppm to 10 ppm. The City of Galt was issued a Notice of Violation (NOV) by CDPH for arsenic levels above the MCL and provided public notification per the NOV to its users until the problem is resolved. This new arsenic standard will significantly impact the cost for providing water service to Galt residents as arsenic treatment is emerging as a very costly treatment process in addition to current cost for iron and manganese treatment. The City of Galt's water wells are typically drilled to a depth of approximately one thousand (1,000) feet. City of Galt staff has recently learned that the City of ElK Grove has drilled to a new aquifer at a depth of approximately one thousand seven hundred (1,700) feet. This deeper aquifer has had no detectable limits of arsenic and produces a higher water flow yelid. Prelimary research indicates that this deeper aquifer exists near the proposed Kost well site in Galt. Although the capitol cost in drilling a deeper well is higher, and pending successful monitoring/test well results, the need for arsenic treatment as part of the new water treatment plant could be eliminated. The elimination would save	0	7,872	22,982 09	Sacramento	I	2009
568 1610005	1610005-006	Lemoore, City Of	Disinfection Byproducts Reduction Study	Conduct a study to identify solutions to reduce the disinfection byproducts. The study will include but not be limited to types of disnfections available, storage tank retention times, reducing dead end lines, and reviewing the organinc loadings at each well site.	G	0	С	The City of Lemoore has recieved compliance order 03- 12-110-003 for non compliance of Total Trihalomehanes (TTHM) maximum contaminant level. The order requires public quarterly notifications of its inability to meet TTHM during any calendar quarter that the four-quarter running annual average exceeds MCL.California Health and Safety Code (CHSC) and Code of Regulation (CCR)violations listed in the order:CHSC Section 116555 (a)(1)CHSC Section 116555 (a)(3)CCR Section 64533	150,000	5,597	24,500 12	Kings	Ш	2012
569 4910017	4910017-036	Windsor, Town of	Bluebird Replacement Well System Evaluation and Hook-Up	The scope of work to be completed in the proposed project involves several tasks; these are as follows: Task 1: Well Redevelopment - This task is necessary due to the time that has elapsed since well installation. Task 2: Water Quality Testing – This task is necessary to collect up-to-date water quality samples to (1) meet CDPH requirements for permitting of the replacement well as a new water supply; (2) provide information as to the geochemical processes in the screened aquifer; and (3) to provide data necessary for wellhead treatment design. Task 3: Aquifer Pump Testing – This task is necessary to reconfirm the capacity of the redeveloped well and to meet CDPH requirements for permitting of the replacement well as a new water supply. Task 4: Preliminary Design Report – In this task, existing equipment at the wellhead (i.e. chlorination system, submersible pump) will be evaluated for redesign. A Preliminary Design Report will be prepared following this evaluation to provide the basis for design of the wellhead treatment system and piping system and to identify any data gaps. Task 5: System Design – Under this task, designs, plans, and specifications will be prepared for the wellhead treatment facilities and piping layout necessary for hooking up the replacement Bluebird well to the Town's water system. Pilot testing of the treatment system will also occur during this task	<b>G</b>	0	C	The Town of Windsor is currently facing potential cutbacks to its primary water supply, the Russian River, as a result of a Biological Opinion published in 2008. In anticipation of these cutbacks, the Town recently replaced its existing Bluebird well with a new, deeper well. This well was replaced primarily due to the age and condition of the existing Bluebird well, which has been subjected to a significant amount of silting and production drop-off in recent years. Based on water quality data obtained during installation of the replacement Bluebird well groundwater in the replacement Bluebird well contains elevated concentrations of arsenic (above the primary MCL of 10 ug/L), and possibly iron (above the secondary MCL of 300 ug/L). To that end, wellhead treatment is required before groundwater from this well may be used as part of the Town's potable water supply. While a treatment system is currently present at the Bluebird wellked, this treatment system is not designed for arsenic removal, nor is it appropriate for the anticipated production rate from the replacement well.	1,107,000	8,697	26,432 18	Sonoma	Π	2011

570 4910017	4910017-035	Windsor, Town of	Esposti Park Replacement	The scope of work to be completed in the proposed	G	0	С	The Town of Windsor is currently facing potential	1,108,000	8,697	26,432 18	Sonoma
			Well Evaluation and Hook-	<ul> <li>project involves several tasks; these are as follows:Task</li> </ul>	¢			cutbacks to its primary water supply, the Russian River,				
			Up	1: Well Redevelopment - This task is necessary due to				as a result of a Biological Opinion published in 2008. In				
				the time that has elapsed since well installation. Task 2:				anticipation of these cutbacks, the Town recently				
				Water Quality Testing – This task is necessary to collect	t			replaced its existing Esposti Park well with a new,				
				up-to-date water quality samples to (1) meet CDPH				deeper well. This well was replaced primarily due to the				
				requirements for permitting of the replacement well as	5			age and size of the existing well. Based on water quality				
				a new water supply; (2) provide information as to the				data obtained during installation of the replacement				
				geochemical processes in the screened aquifer; and (3)				well, groundwater in the replacement Esposti Park well				
				to provide data necessary for wellhead treatment				contains elevated concentrations of arsenic (above the				
				design.Task 3: Aquifer Pump Testing – This task is				primary MCL of 10 ug/L), and manganese (above the				
				necessary to reconfirm the capacity of the redeveloped	i			secondary MCL of 50 ug/L). To that end, wellhead				
				well and to meet CDPH requirements for permitting of				treatment is required before groundwater from this				
				the replacement well as a new water supply. Task 4:				well may be used as part of the Town's potable water				
				Preliminary Design Report – In this task, required				supply. Furthermore, the replacement Esposti Park well				
				wellhead treatment systems and equipment (i.e.				has a production capacity far greater than the existing				
				chlorination system, submersible pump) will be				well. Environmental documentation (project-level EIR				
				determined and a piping/connection layout developed				analysis) is currently being prepared to evaluate the				
				for the site. A Preliminary Design Report will be				maximum rate at which this well can be operated long-				
				prepared following this evaluation to provide the basis				term. As such, the larger capacity of the replacement				
				for design of the wellhead treatment system and piping	g			well will be considered in the development of a				

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1510029-007P	Vaughn WC INC	

Treatment

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**Regional Consolidation** Project-planning phase Heath No. 1 Well Arsenic The project involves an existing water well site - the G Heath No. 1 facility. The well site will be modified to install a well head arsenic treatment system to treat a maximum flow of 1,000 gpm utilizing coagulationfiltration. The raw water will be pumped from the well and receive sodium bisulfite, ferric chloride, sulfuric acid, and sodium hypochlorite additon at the appropriate locations in the system and enter into the reaction vessels. The water is then directed through filter vessels and into the system. A backwash supply is provided to backwash the filter vessels. The backwash water will be directed to a storage tank where the solids can be settled out and periodically removed while the decant is pumped back to the headworks of the well site. This will greatly reduce the amount of water wasted. The solids in the tank will be cleaned annually, at a minimum, and be transported to an approved landfill site. The existing site will require modifications to the deep well pump and motor, site piping, valving, electrical and controls to accommodate the treatment system.

system and to identify any data gaps.Task 5: System

Evaluation – Under this task, designs, plans, and specifications will be prepared for the wellhead treatment facilities and piping layout necessary for hooking up the replacement Esposti Park well to the Town's water system. Pilot testing of the treatment

> Nitrate and/or arsenic in wells of adjacent water systems The Heath No. 1 water well is a 1,000 gpm well in the west area of the Vaughn Water Company system. It is located near the intersection of Heath Road and Rosedale Hwy in Kern County, California, T29S, R26E, M.D.B.&M. The arsenic in the Heath No. 1 well has been sampled for the past four quarters and the average arsenic concentration is above the chemical MCL at 10.5 ppb. The problem is a water quality issue and if the well has to be abandoned due to exceeding the chemical MCL the water company will experience low pressure problems and complaints during peak hour demand.

treatment system for that well.

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573 1510017	1510017-004	INDIAN WELLS VALLEY W.D.	New Construction - Arsenic Treatment and Blending Facilities	To bring the arsenic levels at these four wells into compliance, the District plans to construct two treatment facilities, one at the site of each of the two wells with the highest arsenic levels. Water from the two wells with the lower levels will be blended with the higher level water and then treated. The filtration system at each treatment facility will be capable of removing arsenic from the raw water supply to an arsenic level below the MCL but above non-detection levels. Chemical feed systems will deliver chlorine (as an oxidant), ferric chloride (as a coagulant) and hydrochloric Acid and caustic soda (for pH adjustment) to each facility in liquid form where they will be stored in onsite double-walled tanks. The chemical sotrage tanks, feed pumps and accessories, as well as the electrical panels, controls and instrumentation that will monitor and automatically operate the treatment facilities, will be housed in a masonry block building. Each treatment plant will include a backwash water supply system, including storage tanks and pumps. This will allow the plants to operate while backwashing is in progress. Since treated water is required for backwashing operations, the supply water would be provided by an onsite treated water storage tank and two backwash supply pumps (one duty and one standby).	6	0	C	Four of the 11 active wells in the District's system exceed the 10 ug/L arsenic maximum contaminent level (MCL) as established by the US Environmental Protection Agency and the California Department of Public Health. The average arsenic levels for two wells are over 18, while the levels for the other two wells are 12 or less. These four wells produced 30% of the water distributed in the service area during 2008.	8,000,000	11,688	30,000 19	Kern		2009
574 5110002	5110002-041	City of Yuba City	Wildwood/Marguerite Water Systems	The requested funds would enable the City to extend its existing distribution system to connect these 228 homes and businesses to the City's safe surface water system. The project would include Engineering costs, the procurement and installation of the necessary piping, meters, and related necessary equipment. The project would use approximately 6000 feet of water main 12" pipe and 2100 feet of 14" pipe plus additional smaller connection pipes to each unit. This would also bring 228 more homes and businesses in compliance with the states metering requirements.	G	0	С	Five small community water systems, with a combined 228 connections, are experiencing deteriorating water quality and are failing to meet regulatory requirements for arsenic, nitrates, iron and manganese. The El Margarita Estates water system, with 50 connections, was found to contain Perclorate. These systems are located within the City of Yuba City's Sphere of Influence and Water Rights Place of Use. Yuba City's system meets all regulations for clean drinking water. The current small community systems lie south of highway 20, north of Franklin Road, and along either side of George Washington Boulevard.	2,739,000	13,550	51,504 21	Sutter	I	2009
575 5010019	5010019-003	Turlock, City of	Well-Head Arsenic Treatment	The first phase of the project will be to determine which treatment approaches will be the best fit for the water quality found in the affected wells. Parameters that will be considered in the treatment systems chosen include the effectiveness of arsenic removal, equipment capital cost, annual operating cost, chemical storage requirements, equipment foot print (how large an area is needed for the treatment system), residuals disposal (if any), and the staff time needed to maintain and operate the system. Based on the results from the first phase study, a pilot plant will be installed using two or three of the best system approaches. The pilot plant study will be used to determine which one of these systems will be the most effective based on overall cost and removal efficiencies. The final portion of the project will be to purchase and install the arsenic removal system. The two well sites that are affected have sufficient room for equipment installation so additional land purchases will not be required.	G	0	С	Several City drinking water wells have arsenic levels that are close to the MCL of 10 ppb and they currently are being sampled on a quarterly basis. Two of the wells have exceeded the MCL on the first three quarterly analyses and due to the high levels of arsenic found, both will require treatment in order to consistently meet the arsenic limit.	1,500,000	16,691	64,215 10	Stanislaus	III	2011

576 1910070 1910070-031 LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well This project will reduce arsenic levels from the

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This project targets arsenic contamination in drinking water. Arsenic has been shown to negatively impact human health and is considered one of the primary causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to establish a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster and Desert View Highlands (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2007, groundwater made up approximately 39 percent of the water supply in the Regions. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelone Valley Groundwater Basin which is impacted by arsenic found naturally in rocks and minerals. In order to increase water supply reliability, the District recently drilled Well No. 4-83 at 419 West Avenue J. Lancaster. This well is projected to provide water at the rate of 1,000 gallons per minute (GPM). However, analysis of a water sample collected on December 12, 2007 showed an arsenic concentration

of 9.53 ppb, just below the new standard by 0.47 ppb. The Los Angeles County Waterworks District No. 40 receives its water supply from the Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley Groundwater Basin. AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project The water supplied by AVEK is currently disinfected with chlorine and AVEK plans to switch disinfection to chloramines in 2009 Within the District, the Ana Verde tanks located at 2700 Moonwort Court have a total capacity of 4,260,000 gallons; 2 tanks with 2,130,000 gallons. Long storage times and the lack of mixing of water in the storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule (DBPR) and/or Total Coliform Rule may lead to severe customer illness throughout the District.Air temperature in the District is consistently high during the summer months, averaging 89, 95, 95, and 88 degrees Fahrenheit in June, July,

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arsenic from the well water. The columns are installed in a 10'W x35'L x 9'H mobile container, eliminating the need for a building or other housing structures. The ion exchange resin is regenerated using a sodium chloride LOS ANGELES CO WW DIST 4 & 34-LANCASTI Improving Water Quality in The purpose of the proposed project is to thoroughly G the Ana Verde Tanks mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel

placed on the top of the tank. This system efficiently mixes all the water in the tanks by creating a nearlaminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank; and a chlorine injection system that will help maintain appropriate disinfectant levels in the tanks. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with bottom of the tank, preventing the mixer from moving out of place or rotating. This device is capable of pumping about 10,000 gallons per minute for mixing. By using this mixing device, fewer chemicals

will be needed when boosting and TTHM formation will

groundwater pumped from Well No. 4-83 ensuring

compliance with the new arsenic standard of 10 ppb.

To accomplish this goal, the District proposes using one

of the commercially available ion exchange systems for

removal of arsenic from drinking water sources. Several

permitted by the California Department of Public Health

exchange treatment system is simple, robust, compact, easy to automate, and can be operated on demand.

arsenic treatment. Ion exchange is designated as the

ion exchange treatment systems have already been

Best Available Technology by the US EPA for the

and are in operation in the State. A typical ion

The treatment goal is to reduce the arsenic in the

proposed packaged wellhead arsenic removal system

salt/saturator tank, brine processing unit, and brine

wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-83 at

1,000 GPM are as follows. The treatment module (i.e.,

ion exchange system) uses multiple columns of ion

exchange resin operating in parallel to remove the

effluent (treated) water to less than 4 ppb. The

includes a treatment module, pre-filter assembly,

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1910010	19100/0-033	LOS ANGELES CO	vv vv	DIST 4 &	34-LAIN

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4-82

ICASTI Arsenic treatment in Well This project will reduce arsenic levels from the G groundwater pumped from Well No. 4-82 ensuring compliance with the new arsenic standard of 10 ppb. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as the Best Available Technology by the US EPA for the removal of arsenic from drinking water sources. Several ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. A typical ion exchange treatment system is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to reduce the arsenic in the effluent (treated) water to less than 4 ppb. The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-82 at 500 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns are installed in a 8'W x20'L x 9'H mobile container, eliminating the need for a building or other housing structures. The ion exchange resin is regenerated using a sodium chloride

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the M-5E Tanks mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform short water age. To accomplish this goal, the District proposes using one of the commercially available tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes all the water in the tanks by creating a nearlaminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank and a chlorine injection system that will help maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with the bottom of the tank, preventing the mixer from moving out of place or rotating. This device is capable of pumping about 10,000 gallons per

> minute for mixing. By using this mixing device, fewer chemicals will be needed when boosting and TTHM

This project targets arsenic contamination in drinking water. Arsenic has been shown to negatively impact human health and is considered one of the primary causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to establish a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster and Desert View Highlands (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2007, groundwater made up approximately 39 percent of the water supply in the Regions. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelone Valley Groundwater Basin which is impacted by arsenic found naturally in rocks and minerals. In order to increase water supply reliability, the District recently drilled Well No. 4-82 at 419 West Avenue J. Lancaster. This well is projected to provide water at the rate of 500 gallons per minute (GPM). However, analysis of a water sample collected on February 5, 2008 showed an arsenic concentration of 14.9 ppb, exceeding the new standard by 4.9 ppb.

The Los Angeles County Waterworks District No. 40 receives its water from the Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley. AVEK currently disinfects with chlorine but plans to switch to chloramines in 2009. Within the District the three M-5E tanks located at 41956 5th Street East each have a storage capacity of 3,000,000 gallons. The tanks have a common inlet/outlet connection. This connection is sized for throughput capacity at minimum head loss, resulting in a very low flow velocity into the tank during filling. This low velocity results in poor mixing within the tanks, leading to stagnation. In addition, the freshest water added to the tank is the first to be drawn out. This process leads to thermal stratification within the tank since fresh cold water stays near the base and warmer, older water stagnates near the top. Long storage times and lack of mixing water in the storage facilities promotes formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and

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the Tierra Subida Tanks mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform short water age. To accomplish this goal, the District proposes using one of the commercially available tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes all the water in the tanks by creating a nearlaminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank and a chlorine injection system that will help maintain appropriate disinfectant levels in the tank This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with the bottom of the tank, preventing the mixer from moving out of place or rotating. This device is capable of pumping about 10,000 gallons per minute for mixing. By using this mixing device, fewer chemicals will be needed when boosting and TTHM

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 the M8-75W Tanks
 mix the water in the tank to eliminate temperature

mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform short water age. To accomplish this goal, the District proposes using one of the commercially available tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes all the water in the tanks by creating a nearlaminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank and a chlorine injection system that will help maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with the bottom of the tank, preventing the mixer from moving out of place or rotating. This device is capable of pumping about 10,000 gallons per minute for mixing. By using this mixing device, fewer chemicals will be needed when boosting and TTHM

its water from the Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley. AVEK currently disinfects with chlorine but plans to switch to chloramines in 2009. Within the District. the two Tierra Subida Tanks located at 38301 N. Tierra Subida West have a total storage capacity of 4,800,000; 2,800,000 and 2,000,000 gallons. The tanks have a common inlet/outlet connection. This connection is sized for throughput capacity at minimum head loss, resulting in a very low flow velocity into the tank during filling. This low velocity results in poor mixing within the tanks, leading to stagnation. In addition, the freshest water added to the tank is the first to be drawn out. This process leads to thermal stratification within the tank since fresh cold water stays near the base and warmer, older water stagnates near the top. Long storage times and lack of mixing water in the storage facilities promotes formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and

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Los Angeles County Waterworks District No. 40 receives its water from the Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley. AVEK currently disinfects with chlorine but plans to switch to chloramines in 2009. Within the District. the two M8-75W tanks located at 41610 75th Street West have a storage capacity of 1,700,000 and 3,000,000 gallons. The tanks currently have a common inlet/outlet connection. This connection is sized for throughput capacity at minimum head loss, which results in a very low flow velocity into the tank during filling. This low velocity results in poor mixing within the tanks, leading to stagnation. In addition, the freshest water added to the tank is the first to be drawn out. This process leads to thermal stratification within the tank since fresh cold water stays near the base and warmer, older water stagnates near the top. Long storage times and lack of mixing water in the storage facilities promotes formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and

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> the City Ranch North Tanks mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes all the water in the tank by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with the bottom of the tank, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. By using this mixing device, fewer chemicals are needed when boosting and

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583 1910070 1910070-040 the Bancho Vista Tanks

LOS ANGELES CO WW DIST 4 & 34-LANCASTI Improving Water Quality in The purpose of the proposed project is to thoroughly G mix the water in the tank to eliminate temperature stratification and stagnant water conditions, which will provide a uniform short water age. To accomplish this goal, the District proposes using one of the commercially available tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes all the water in the tanks by creating a nearlaminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control and Data Acquisition (SCADA) output signals that allow for real-time monitoring of the tank and a chlorine injection system that will help maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for peak performance at any water depth. The intake remains stationary just above and in contact with the bottom of the tank, preventing the mixer from moving out of place or rotating. This device is capable of pumping about 10,000 gallons per minute for mixing. By using this mixing device, fewer chemicals will be needed when boosting and TTHM

its water from Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley. AVEK currently disinfects with chlorine but plans to switch to chloramines in 2009. Within the District, two City Ranch North tanks located at 3002 W. Avenue P12 have a storage capacity of 2,500,000 and 1,500,000 gallons. The tanks have a common inlet/outlet connection. This connection is sized for throughput capacity at minimum head loss, resulting in a very low flow velocity into the tank during filling. This low velocity results in poor mixing within the tanks, leading to stagnation. In addition, the freshest water added to the tank is the first to be drawn out. This process leads to thermal stratification within the tanks since fresh cold water stays near the base and warmer older water stagnates near the top. Long storage times and the lack of mixing water in the tanks promotes formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and potential increases in total

Los Angeles County Waterworks District No. 40 receives

The Los Angeles County Waterworks District No. 40 receives its water from the Antelope Valley-East Kern Water Agency (AVEK) and the District's wells in the Antelope Valley. AVEK currently disinfects with chlorine but plans to switch to chloramines in 2009. Within the District the two Bancho Vista tanks located at 40400 Gemelos Court each have a storage capacity of 3,800,000 gallons. The tanks have a common inlet/outlet connection. This connection is sized for throughput capacity at minimum head loss, which results in a very low flow velocity into the tank during filling. This low velocity results in poor mixing within the tanks, leading to stagnation. In addition, the freshest water added to the tank is the first to be drawn out. This process leads to thermal stratification within the tanks since fresh cold water stavs near the base and warmer, older water stagnates near the top. Long storage times and the lack of mixing of water in the tank promotes formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems and may increase the risk of cancer. Once chloramination begins in 2009, the situation is likely to foster nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count bacteria concentration, and

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2008

584 1910070	1910070-032	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-84	This project will reduce arsenic levels from the groundwater pumped from Well No. 4-84 ensuring compliance with the new arsenic standard of 10 ppb. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as the Best Available Technology by the US EPA for the removal of arsenic from drinking water sources. Several ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. A typical ion exchange treatment system is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to reduce the arsenic in the effluent (treated) water to less than 4 ppb. The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-84 at 500 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns are installed in a 8'W x20'L x 9'H mobile container, eliminating the need for a building or other housing structures. The ion exchange resin is regenerated using a sodium chloride	G	0	C	This project targets arsenic contamination in drinking water. Arsenic has been shown to negatively impact human health and is considered one of the primary causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to establish a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster and Desert View Highlands (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2007, groundwater made up approximately 39 percent of the water supply in the Regions. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin which is impacted by arsenic found naturally in rocks and minerals. In order to increase water supply reliability, the District recently drilled Well No. 4-84 at South East corner of Avenue H-8 and 5th street East, Lancaster. This well is projected to provide water at the rate of 500 gallons per minute (GPM). However, analysis of a water sample collected on March 26, 2008 showed an arsenic concentration of 12.7 ppb, exceeding	449,345	46,878 144,215 16	Los Angeles	IV	2008
585 1910067	1910067-052c	LOS ANGELES-CITY, DEPT. OF WATER & POW North Hollywood Ammoniation Station	Plan, design and construct the North Hollywood Ammoniation Station to add aqua ammonia to form a chloramine residual disinfectant in the water being supplied to customers via the North Hollywood Pumping Station Complex.	G	0	С	North Hollywood Ammoniation Station is required for Phase 3 of the system-wide conversion to chloramine disinfection. This station will treat groundwater produced by North Hollywood, Rinaldi-Toluca, and aeration wells. Conversion to chloramine disinfection is necessary for two reasons: (a) to reduce the level of disinfection byproducts, including THMs, in the water served to consumers and (b) to comply with the requirements of the Federal Stage 2 Disinfectants and Disinfection Byproducts Rule which became effective on March 6, 2006.	35,639,983	686,422 4,071,873 15	Los Angeles	IV	2012
586 1910067	1910067-032c	LOS ANGELES-CITY, DEPT. OF WATER & POW Manhattan Wells Ammoniation Station	The Manhattan Wells Ammoniation Station project consists of the construction of a single story concrete or concrete block building (approximately 32 ft. by 50 ft.) to house ammoniation and water softener equipment. The building will house two 3,200 gallon steel aqua ammonia storage tanks, ammonia scrubber, aqua ammonia transfer and metering pumps, residual analyzers and controllers, water softener, and electrical control equipment.	G	0	с	The Stage 2 Disinfectant/Disinfection Byproducts Rule lowers the maximum contaminant level for TTHMs and HAAs to 0.080 milligram per liter (mg/L) and 0.060 mg/L respectively. In order to meet these requirements the Department of Water and Power is converting from free chlorine to chloramine residual disinfectant. The Manhattan Wells are currently disinfected using chlorine only. Ammonia must be injected into the well water along with the chlorine in order to form chloramine and allow the water to blend with the other chloraminated water in the distribution system.	6,646,395	686,422 4,071,873 15	Los Angeles	IV	2009

587 1910067	1910067-035	LOS ANGELES-CITY, DEPT. OF WATER & PO	W 99th Street Wells Ammoniation Station	The 99th Street Wells Ammoniation Station project consists of the construction of two concrete or concrete block buildings to house the ammoniation and water softener equipment. The project also includes replacing the existing sodium hypochlorite system with a new sodium hypochlorite generation system. The first building would be a single story approximately 17 ft. by 32 ft. to house two 3,200 gallon steel aqua ammonia storage tanks, transfer pumps and ammonia scrubber. The aqua ammonia metering pumps, residual analyzers and controllers and other minor appurtenances would be retrofitted into the existing pump station building. The second building would be a single story approximately 6 ft by 20 ft. to house the water softener equipment.	5	0	c	The Stage 2 Disinfectant/Disinfection Byproducts Rule lowers the maximum contaminant level for TTHMs and HAAs to 0.080 milligram per liter (mg/L) and 0.060 mg/L respectively. In order to meet these requirements the Department of Water and Power is converting from free chlorine to chloramine residual disinfectant. The 99th Street Wells are currently disinfected using chlorine only. Ammonia must be injected into the well water along with the chlorine in order to form chloramine and allow the water to blend with the other chlorina water in the distribution system.	6,732,830	686,422	4,071,873 15	Los Angeles	IV	2009
588 1910067	1910067-051	LOS ANGELES-CITY, DEPT. OF WATER & PO	W Tank & Reservoir Nitrification Control Plan	The project includes the installation of mixers in some G 30 – 40 priority storage tanks and reservoirs to allow fro easier treatment of the water should nitrification begin in these facilities. Also additional on-line analyzers will be installed at numerous locations to monitor the total chlorine level to prevent having to breakpoint chlorinet the water which would produce disinfection byproducts. An additional step may include the development and installation of ultraviolet blacklights in a number of tanks and reservoirs to inhibit the effect of nitrifying bacteria in the water.	5	0	c	The LADWP has determined that it must change from a free chlorine residual disinfectant in the water distribution system to a chloramine disinfectant in order to meet the Stage 2 Disinfectant/Disinfection Byproducts Rule. When this change occurs there are approximately 30-40 priority tanks and reservoirs which have longer than 5 day residence times and will therefore be prone to nitrification due to the presence of ammonia in the water.	3,636,177	686,422	4,071,873 15	Los Angeles	IV	2012
589 1910067	1910067-043c	LOS ANGELES-CITY, DEPT. OF WATER & PO	W Los Angeles Aqueduct Filtration Plant Ultraviolet Treatment Process	Add an ultraviolet light treatment process to help G achieve the disinfection requirements and reduce the formation of disinfection byproducts and bromate at the Los Angeles Aqueduct Filtration Plant.	5	0	с	To meet the regulatory requirements set by the Stage 2 Disinfectants and Disinfection Byproducts Rule along with the maximum contaminant level for bromate.	67,432,227	686,422	4,071,873 15	Los Angeles	IV	2012
590 1700698	1700698-001	Larsen s Office Complex	Treatment for Aluminum Compliance	system now has dual sand filters. we would develop a gree filter of variable cartrige filters to remove all particles to 2 micron. process thru sand filters as we do now. then thru a large R.O. filter system with disinfection. prior to injection of clh. for line disinfection and finish water storageall this because of system size.	5	0	Ρ	to design and install water treatment for the removal of aluminum and other more minor contaminates from well water. Because system is so small, conventional type treatments are impracticalLarge R.O. treatment may be the most cost effective method. we notify a warning on use of water because of high aluminum content.	40,000	4	25 03	Lake	ΙΙ	2011
591 2702050	2702050-002P	CHURCH OF THE GOOD SHEPHERD WS	Episcopal Church of the Good Shepherd in Corral de Tierra PreApp	We are planning on fitting our system with a Culligan GASM2-2 lead/lag configuration Arsenic Exchange Tank System Includes totalizing water meter, 20" pre sediment filter, pressure gauges, sample ports, and piping. We will then have an Independent Testing Lab verify the effect of the treatment.	5	0	Ρ	Water System is contaminated with arsenic, and is therefore a hazard for anyone to drink, and even use to any great extent.	13,000	1	50 05	Monterey	Ι	2007
592 4000774	4000774-001P	PLEASANT VALLEY ELEMENTARY	pleasant valley school	We are still looking into various solutions but need to make a decision as quickly as possible We will need additional storage and plumbling with additional pressure pumps to adapt to a treatment devices. We have researched cities and other water districts but still have concerns on waste disposal and the proper system to meet our needs. Our estimate is based on preliminary proposals onlyWhen we select a system upgrade with the approval of our county health department we will go out bid to remedy our situation.	5	0	Ρ	Pleasant Valley School district has its own water source Water well in a rural setting which supplies water to our school community. We are considered a water district. We are currently experiencing a level of Arsenic which is above the tolerant levels We are researching for a treatment system to provide clean and safe water to all our students. Current research indicatates we need a total system upgrade which could be in the range of 20-30,000 dollars. Our current school population is 140 with staff at 20 and community access at times as large as 225. We are in need and would greatly desire the monitory assistance needed to provided clean drinking water.	0	1	100 05	San Luis Obispo	IV	2008

593 0900210	0900210-002	MILLERS HILL SCHOOL	Millers Hill Pipeline Proje (planning)	ct Consolidation is not feasible as the nearest water system is EID and it is about 7 miles away. We are not contiguous to thier service area and it is not likely that EID will be expanding in our direction any time soon. The school district has invested in the installation of holding tanks/ infrastructure and has the ability to seperate the potable source from irrigation/ fire protection. We currently have four wells of which only one complies with the current arsenic standards. We now need to replumb the good quality water (well #3) to the potable tank and redirect the current supply (well #4) to fire protection and insure no cross contamination of the sources in the process.Miller's Hill school needs new water lines to reidirect well #4 to fire protection and to redirect well #3 to potable. The major components of the system are in place, tanks, pumps, etc. If the quality or quantity of water in well #3 was to deteriorate we would also need a treatment plant to remove the arsenic from the water. At that time we may possibly need to treat water from well #4 to insure supply.	0	Ρ	New water lines to transport the potable quality water from west side of property (well #3) to the potable tank. Well #3 currently qualifies under Safe Drinking Water arsenic standards with a recent test of 7.7. During the same process we will divert the current water supply (well #4)which does not qualify under arsenic standards to fire protection storage. We will insure that there is no cross contamination of the potable water by this source. Miller's Hill School is currently violating the arsenic standard for potable drinking water.	500,000	7	120 09	El Dorado	I	2009
594 2702030	2702030-002	CYPRESS COMMUNITY CHURCH WS	Arsenic filtration and removal for Cypress Community Church & School	Cypress Community Church proposes to install equipment to remove Arsenic using a process known as co-precipitation and filtration. Liquid ferric chloride and liquid sodium hypochlorite (chlorine) are injected into the water and the Arsenic is oxidized and adsorbed on the precipitated iron hydroxides. The precipitated hydroxides including the arsenic are removed for the water through a pressure filter containing a catalyzing filter medium sand coated with manganese dioxide. The filter is periodically backwashed to remove the precipitated solids and this sludge is accumulated in disposable cartridges which are stored for disposal in accordance with county and state regulations.	0	Ρ	The Cypress Community Church water system is a small water system serving a community church and pre- school. The system relies on one groundwater well for production. At present the system has no disinfection or filtration. Raw water is pumped to storage then distributed. Recent raw water monitoring indicates that Arsenic exceeds the MCL of 10 ug/l at about 19ug/l. The Monterey County Health Department indicates that all systems exceeding the Arsenic MCL must reduce this contaminant to less than 10ug/l. This system is on a mandatory "Bottled Water Order" and is in compliance with that order.	150,000	4	200 05	Monterey	Ι	2009
595 1503368	1503368-001	SOUTH FORK MIDDLE SCHOOL	uranium; consolidate or	Drill new well to correct problem or connect to nearest G	0	Ρ	Uranium above the MCL in the system well.	800,000	1	204 19	Kern	Ш	2006
596 2701221	2701221-002	WASHINGTON SCHOOL WS	WUSD Water System Grant WU	Drill and construct a new well to current drinking water G         standards. Test for primary and secondary constituents.         It has been demonstrated that the Arsenic MCL will not         be mitigated by drilling a new well. Cadmium, Coliform         and TTHM's may be reduced in a properly designed and         constructed well.         Cost of design, construction, and testing a new well         \$225,000         Cost of design and construction of treatment system         \$175,000         Engineering Costs       \$         \$0,000         Monitoring equipment       \$         \$,000         Total Project Cost         \$450,000	0	Ρ	<ul> <li>Washington Union School is located in a rural setting in the Corral de Tierra area of Monterey County. It serves 224 students. Due to several water quality problems this school is currently under a compliance order from the Monterey County Health Department to treat their water to current water quality standards or use bottled water exclusively for drinking water. They have been under a bottled water order for several years since the only treatment currently is liquid Sodium Hypochlorite disinfection. The well has had several positive Total Coliform tests over the past several years. The source is one ground water well which is over 21 years old and poorly constructed. The raw water from this source exceeds the MCL for the following constituents:</li> <li>Arsenic MCL 10ug/1 Test results from 2007 show a range of 28 ug/1 to 38 ug/1</li> <li>Cadmium MCL is Sug/1 Test results from 2007 show a range of 7 ug/1 to 8 ug/1</li> <li>Trihalomethanes (TTHM) MCL is 80 ug/1 Test results from 2007 show a range of 90 ug/1 to 100 ug/1</li> </ul>	455,000	1	250 05	Monterey	Ι	2007

597 1600253	1600253-001	COS-HANFORD CENTER	College of the Sequoias Hanford Center - Interconnection to City of Hanford	To connect with the school with the city of Hanford's water system. The project will consist of a backflow prevention device, piping, and the destruction of the onsite well.	G	0	Ρ	College of the Sequoias failed to comply with the National Revised Primary Drinking Water Regulations, Section 141.62(b)(16), Title 40, Code of Federal Regulations, which establishes the revised MCL for arsenic.Specifically, College of the Sequoias has exceeded the MCL of 10 µg/L for arsenic. The running annual average (RAA) as of the 3rd quarter 2008 is 90.0 µg/L. College of the Sequoias has been directed to provide bottled water on an ongoing basis to their employees, students, and visitors.	250,000	2	515 12	Kings	111	2008
598 1502154	1502154-002	LAKESIDE SCHOOL	Lakeside School consolidation with Bakersfield	The selected project alternative is consolidation with and water service by the City of Bakersfield. Construction will consist of approximately 4 miles of 16 inch pipeline. The existing well will be isolated from thh potable system and used exclusively for irrigation. The project will provide adequate water for the school's potable and fire protection needs, while the landscape irrigation will continue to be supplied from the existing wells. Water service by the City of Bakersfield will require the school property to be annexed into the incorporated City limits.	G	0	p	The water system distributes drinking water that exceeds the Federal MCL for Arsenic contamination. The contaminant levels also exceed the State Title 22 primary drinking water standards for Arsenic MCL.	4,875,000	1	800 19	Kern	Ш	2009
599 1000221	1000221-002	WASHINGTON UNION HIGH SCHOOL	Well Replacement Easton High School & Stadium	Meet with Hydrogeologist to review the water quality information, School's well logs and water quality records. Prepare a Source Water Assessment and submit to CDPH for review and approval. Draft copies of plans, specifications, and estimate of probable construction to be prepared for test hole, submit to CDPH for review and approval. Prepare bid documents Perform a topographic survey of the property in the vicinity of new well location. Prepare a topo survey of the entire football stadium site showing building outlines, fencing and other specific surface features necessary to identify the various water pipeline connections to the School distribution system and buildings as required for this project. Contact utility company (PG&E) for new service request to accomodate the addition of the new electrical loads from the proposed well. Employ a construction contractor to oversee construction of test hole and production well, log drill cuttings, collect water samples for analysis to provide preliminary compliance with state drinking water standards. The following water quality analyses are expected to be performed. General mineral, Inorganic Chemical, General physical, Gross alpha and uranium, Organic Chemicals, Radium 228, Perchlorate. Easton High School and the stadium next to it is a main hub of the Easton community. This	G s,	0	Ρ	Washington Union High School is located in Fresno County at 6041 S. Elm Avenue in the unincorporated community of Easton California. Easton is a few miles southwest of Fresno, California. Easton is a predominantly rural community. However, approximately 30% of Washington Union and Easton High School students live in the urban west side of Fresno, California. Easton can be characterized as a highly impoverished area. 70% of the high school students qualify for free and reduced lunches. 43% of students qualify for free and reduced lunches. 43% of students qualify for the 436 congressional districts, ours is the poorest. Washington Union High School is the oldest high school in Fresno County. The School currently owns three domestic wells that supply potable water for domestic and irrigation uses. Two of the wells are located at Washington Union High School and a third is located at the Easton High School. The well located at the Easton High School. The well is also used for irrigation of the athletic fields. The School was notified by the California Department of Public Health (CDPH) to stop domestic wells at Depart well at the Easton High School due to levels of DBCP above the maximum contaminant level (MCL). The School is planning the construction of a new domestic well at this is to meet the DBCP MCLs. The	537,901	19	1,150 23	Fresno	ΙΙ	2009
600 1000221	1000221-001	WASHINGTON UNION HIGH SCHOOL	Washington Union High School	Upgrade distribution system to eliminate cross- connections, construct new wells & replace distribution	G	0	Ρ	DBCP detectable in wells 1 & 3; cross-connections throughout campus btw domestic & irrigation supplies;	255,000	19	1,150 23	Fresno	ш	2000
601 2000567	2000567-001	YOSEMITE HIGH SCHOOL	Yosemite High School- uranium, fluoride and arsenic removal	Hire consultants and/or engineers to find the best fit solution to uranium, flouride and arsenic (after determining non compliance for arsenic), either by drilling a new well, consolidation or treatment.	G	0	Ρ	Water system has three wells, two are active and one is not connected to the system. The well is not connected to the systems because of high flouride levels. Uranium and arsenic, over the MCL, are also present in at least one of the wells. Quarterly monitoring is being conducted to determine the running annual average and compliance with the Federal Arsenic Rule. Initial arsenic level was 22.7 ppb.	500,000	10	1,200 11	Madera	III	2008

602 3301482	3301482-001	ORTEGA OAKS RV PARK&CAMPGROUND	Arsenic treatment project	project intends to install a treatment system to resolve the arsenic issue. There are no other systems close by to connect to and consolidate with.	G	0	Ν	Our water system exceeds the MCL for arsenic. We have published the public notice as required by the CDPH. We have received a verbal notice of violation from the county CDPH and have been told that a written compliance letter is forthcoming.	300,000	80	25 20	Riverside	V	2011
603 1300555	1300555-002	MITCHELL'S CAMP FAMILY ASSOC.	Mitchells Camp - Storage and water source construction	Project will construct a new well and about 10,000 gallons of storage to meet state requirements as told to us by the CDPH. It will also include connection meters so we will better be able to manage water usage and support water conservation. Treatment would ensure we stay below the MCL for arsenic.	G	0	Ν	Issues with gross alpha and arsenic MCL. (KO 4/4/2013) Montioring results from January 24, 2012 exceeded the MCL for Arsenic, Gross Aplha, and the secondary MCL for Iron. The original Problem Description is as follows We have been told by the CDPH that our well needs to be augmented and storage increased to meet daily demands and fire flow. We cannot regulate water usage by individual customers because we do not have meters for each house. We also fluctuate on the boarderline of exceeding the MCL for arsenic.	100,000	62	80 14	Imperial	v	2012
604 2702009	2702009-001	LAGUNA SECA RECREATION WS	Laguna Seca Drinking Water Filtration System Installation	To install a filtration system and holding tank at our well site to process and treat potable water for park patrons and employees.	IG	0	Ν	We have received notice from the Monterey County Environmental Health Department that we exceed the allowable level of arsenic for public our water system in this recreation facility. We will be in violation if we do not correct problem in near future.	150,000	1	500 05	Monterey	II	2009
605 3600184	3600184-001	North Shore MWC	Uranium Treatment	Study, design, engineer, and install a treatment system	G	0	S	Exceeds the MCL for uranium	150,000	0	0 13	San Bernardino	v	2012
606 2702374	2702374-001	COUNTRYSIDE ESTATES MWC	Meters for service	Install water meters. Build fence around storage tanks.	н	40	с	System needs water meters and protection from vandalism and trespassing	10,000	23	73 05	Monterey	П	1998
607 1000054	1000054-001C	LAS DELTAS MUTUAL WATER SYSTEM	Las Deltas Water Meter Project	The project would be to install meters on 10 connections int he communities of Las Deltas so that they would be able to consolidate with the City of Firebaugh. The project would include, meters, meter boxes, and shut off valves and would bring the community water system up to date to allow a consolidation with a nearby larger water system.	Н	40	C	The Las Deltas Mutual Water Company is seeking funding to place meters on all of its customers. The community and mutual would like to consolidate with the City of Firebaugh. The City has stated that they would be willing to consolidate with Las Deltas if they put meters on each connection.	0	107	375 23	Fresno	Ш	2011
608 5400957	5400957-003	WEST GOSHEN MUTUAL WATER CO.	West Goshen Water Meter Project	<ul> <li>Residential water meters would be installed, ensuring a high degree of water supply reliability for the community.</li> </ul>	н	25	С	West Goshen Mutual Water Company's system is overburdened. The community is unmetered; installing meters will control water consumption by consumers and maximize the availability of water resources.	100,000	69	200 12	Tulare	Ш	2011
609 2000551	2000551-004	MD#07 MARINA VIEW HEIGHTS	Water Meter Installation	The project would entail installation of water meters at each service connection to promote water conservation. The addition of meters will allow the system to establish a tiered water rate to generate revenues to maintain and upgrade the system's facilities and infrastructures.	H s	25	С	The current water system does not include water meters, leading to increased water usage by the customers. The current system serves 92 connections.	184,000	74	200 11	Madera	Ш	2009

610 5500077	5500077-003	SLIDE INN SNOWBOWL WATER CO	Slide Inn Snowbowl Water Phase 3 - Water Meters	<ul> <li>The scope of this project would consist of the purchase of 104 telemetry meters (wand), equipment rental (extended period of time), piping, valves, cement, sand, asphalt and laborers.</li> </ul>	н ,	25	c	Slide Inn Snowbowl Water Company is requesting your assistance to complete our Phase III Project - Actual Service Hook-up to each customer. Currently only 30 customers out of 134 customer connections are on a meter. Many customers have requested having a meter but because of the water company existing debt to pay for two new water storage tanks we do not have adequate funds. We need assistance in purchasing and installing 104 telemetry meters (since the Water Company gets lots of snow each winter). New meters would need to be plumbed. Snow levels in the winter can reach several feet and telemetry water meters would be the most practical and cost effective for the water company long term.	65,000	100	315 11	Tuolumne		2011
611 2000728	2000728-001	MD#37 LA VINA	Water Meter Installation	The project would entail installation of water meters at each service connection to promote water conservation. The addition of meters will allow the system to establish a tiered water rate to generate revenues to maintain and upgrade the system's facilitie and infrastructures.	s H	25	с	The current water system does not include water meters, leading to increased water usage by the customers. The current system serves 176 connections.	352,000	69	350 11	Madera	Ш	2009
612 1010035	1010035-004C	DEL REY COMMUNITY SERV DIST	Water Meter Installation Project	The project consists of new 1-inch water meter installations for 225 existing service connections. The project would include the meters, meter box, handheld meter reader, meter billing software, and software training. It would also required right-of-way encroachment permits from the County of Fresno.	н	25	c	Del Rey Community Services District (District) provides a variety of services including water to the community of Del Rey, CA with a population of approximately 1,200. The District provides potable water to residential, commercial, and industrial users through approximately 320 service connections. A recently constructed 20 acre Self-Help residential and multi-family development is already metered and along with industrial/commercial users are charged a volume-based rate. Approximately 225 connections within the District's service area are unmetered and therefore charged a flat rate only. As a result of the District inability to implement a community- wide volume-based rate program, the uncontrolled water usage by unmetered customers not only has left the community divided because of unfair water fees charged to water-saving-conscious and metered costumers, but it has also contributed to the depletion of the area's groundwater supply due to the extended current drought experienced within the State. Water conservation is greatly needed due to the capacity, age, and condition of the District's existing wells. Three of the District's existing wells are on standby or are inactive due to groundwater contamination from DBCP, Uranium, and recurring bacteriologic problems.The installation of water meters and implementation of a volume-based rate program community-wide will help educate the residents on controlled water usage which	793,980	402	1,100 11	Fresno	Ш	2009
613 3610007	3610007-001	BASELINE GARDENS MWC	Meters for service connections	Purchase and install meters	н	25	С	System currently not metered	300,000	424	1,300 13	San Bernardino	V	1998

614 2010003	2010003-004	BASS LAKE WATER COMPANY	Bass Lake System Upgrades	February 25, 2009Bass Lake Water CompanyFederal H Economic Recovery Fund ProjectsPossible Projects1. Replace Falls Water Storage Tank \$ 150,000.00 Existing tank is 60+ years old, leaking and sits on a metal platform 30 feet high and not engineered to current earthquake standards. Bid has been obtained and permit received to construct a 100,000 gallon replacement tank. 2. Replace Falls Tract distribution line \$100,000.00 Approximately 12 residences are supplied by undersize lines and without fire protection. This project would install 6" distribution line, fire hydrants and services and loop the system with the remaining section of the Falls Tract distribution system. Permission is by easement over private land and no other permit is required. Project can proceed September 2009.3. Drill new well for back-up and peak season water \$75,000.00 supply. CEQA Initial Study is complete and project could commence summer of 2009. This project is being encouraged by California Department of Health4. Water Conservation Program for existing 945 flat rate residential customers5. Water Meters for 945 flat rate residential customers. Commercial customers are currently metered. 6. System consolidation. \$ 100,000.7. Water Conservation \$ 600,000.	25	C	<ol> <li>Replace Falls Water Storage Tank \$ 150,000.00</li> <li>Existing tank is 60+ years old, leaking and sits on a metal platform 30 feet high and not engineered to current earthquake standards. Bid has been obtained and permit received to construct a 100,000 gallon replacement tank. 2. Replace Falls Tract distribution line \$100,000.00 Approximately 12 residences are supplied by undersize lines and without fire protection. This project would install 6" distribution line, fire hydrants and services and loop the system with the remaining section of the Falls Tract distribution system.</li> <li>Permission is by easement over private land and no other permit is required. Project can proceed September 2009.3. Drill new well for back-up and peak season water \$75,000.00 supply. CEQA Initial Study is complete and project could commence summer of 2009. This project is being encouraged by California Department of Health4. Water Conservation Program for existing 945 flat rate residential customers. Commercial customers are currently metered.6. System consolidation. \$ 100,000.7. Water Conservation \$ 600,000.</li> </ol>	1,118,500	989	2,800 11	Madera		2009
615 5410001	5410001-004	Cutler PUD	Cutler PUD Water Meter Installation Project	The proposed project would reduce water use by making users more accountable for their water use, and enable the District to charge users fairly and appropriately for actual water used. The community has already obtained funding for approx. 25% (390) of the meters, and is requesting the balance of the connections to be metered (710) with funds from this request for assistance.Cutler is a Disadvantaged Community and is a Census Designated Place with a 2000 Census Meidan Household Income (MHI) of \$24,330.	25	c	The Cutler PUD provides water to the town of Cutler and its residents. Water is supplied by two deep (approx 500') wells. The Community has about 1200 connections and the two wells are hard pressed to keep up with demand. The reason is that this impoverished community has a problem with overcrowding, with multiple families packed into single-family dwellings. Under these conditions many "single family" houses are using much more water than they are paying for with their flat fee rate.	500,000	1,197	6,200 12	Tulare	II	2009
616 1010023	1010023-002C	ORANGE COVE CITY OF	Orange Cove Water Mete Imovements	r The project involves the installation of 1,450 water H meter devices throughout the City. The meters are necessary in order to conserve water use. As well, the City needs to move forward with installation water meters in order to comply with the State of California mandate for water meter installation beginning in 2010.	25	C	The City of Orange Cove is ranked as one to the five poorest communities in the State of California. Per the 2000 Census, City MHI is \$22,357, 44% of the population lives below the poverty level and the community reflects a 25% unemployment rate. Orange Cove is an extremely poor community. This project involves the installation of 1,450 water meters in the community. This project is part of a long term multiphase City Water Improvement Plan that was begun in the early 2000s. The Improvements encompassed several phases which included enhancements and replacement of water mains (approx. \$3,100,000) in the community and installation of water meter devices (approx. \$1,580,000) in the community. According to engineering estimates the water meters should result in a 20% to 30% reduction in current water usage, as residents will be shifted from a flat rate billing system to a metered rate billing system. Of course, as well, the State of California has mandated that all cities move to metering of all water services starting in 2010. The City of Orange is moving forward to coplying with this edict. The new meters will be those with a new radio technology that can be read remotely, and thus saving costs versus the traditional manual meter reading method. The City has tested these meters and found the meters can detect water leaks from a remote location. The City will use this information to send notices to residents and	0	1,503	8,500 11	Fresno	11	2009

617 5410004	5410004-001	Farmersville, City of	Farmersville Water Meter Installation	The City of Farmersville proposes to install 2717 water meters in order to create a 100% metered water distribution system. The current system only provides water on a flat rate basis. The project falls under Category H in the Project Priority List, "water systems which do not provide meters for the water delivered to customers." In order to achieve this goal, the City will utilize its standard procurement process to obtain bids and select the best purveyor to provide the most appropriate meters, software, and other necessary equipment. Preliminary estimates have been provided by numerous manufacturers. A final implementation schedule will be prepared and environmental clearance will be obtained by June 2009. It is anticipated that the project will be categorically exempt from NEPA and CEQA, because in all cases the meters will be installed at previously disturbed sites. The project will be ready for implementation by August 2009 and complete within 1 year from the actual start date.Equipment costs are estimated at \$624,470. Equipment needed includes:• 1600 3/4" water meters, • 1100 1" water meters• 6 1 ½" water meters, • 1100 1" water meters• 1 ½% and related software Labor costs for installation are estimated at \$37,530 which includes 1,330 hours at a rate of \$27 per hour. In obtaining initial estimates for this project. City staff has forund it to be most cost effective to implement this	25	C	The City of Farmersville serves a disadvantaged population of approximately 10,500 residents. The median household income in Farmersville in 2007 was \$33,068. (www.city-data.com) The City is not supported by a strong retail tax base, and as a result, at times, struggles to provide even basic services to its residents due to financial constraints. The City's Public Works Department provides water to approximately 2700 households and structures. At this time, all of the water is provided on a flat rate basis. This is due, in large part, to the fact that the great majority of existing meters in Farmersville are more than 20 years old, non-functional, (broken dials) and have reached the end of their useful life. Flat rate billing for water service is simply the only option for Farmersville at this time. State law will require approximately one third of farmersville water customers to be metered by the end of this year. All of the City's water customers will need meters by 2025. Empirical evidence has proven that flat rate water billing encourages excessive and wasteful water use, since the customer has no knowledge of exorbitant use or the financial cost associated with it. Installing current technology would enable the City to accurately and efficiently read meters and charge accordingly for water usage. The City of Farmersville arcognizes that installing new meters will have multi-faceted benefits. These advantages include a greater consciousness of	662,000	2,374	10,672 12	Tulare	11	2009
618 1510019	1510019-011	Shafter, City of	Shafter Water System Meter Upgrade and Retrofit	The project would upgrade existing manual read meters H (appr. 1,500) to automatic meter reading (AMR) meters and retrofit existing unmetered connections (appr. 2,500) with AMR meters as well. The City has already adopted and tested a new water meter standard that will assure a proper data link to its Itron AMR handheld data collector. The collector will upload meter reads into the City's Eden billing software program. Existing water meters have already been inventoried with the City's Geographical Information System (GIS) with documented locations and specific information about	25	с	Regulations adopted per the passage of State Assembly Bill 2572 require that the City use meters currently installed on existing service connections for service billing purposes by 2010 plus install and read meters on the other connections that are currently without meters by 2025. The City's water utility is not currently funded for the operational and capital costs needed to comply with these regulations. The Public Works Department will be recommending new water service rates to the City Council in September, 2009, but the City's status as a disadvantaged community, escalating energy costs,	2,500,000	3,863	15,609 12	Kern	ΙΙ	2009

each meter (make, model, serial #, etc.) to determine which need complete replacements and which may only

need new registers and radio transmitters added to

them. The project will be advertised for bidding and

contracted with the lowest responsive bidder that is

timely matter. Those benefitting from the project

include City residents as well as over ten outlying

communities and unincorporated areas (North Farm

Labor Camp, Mexican Colony, Cherokee Strip, etc.) that

have consolidated with the City system over the years.

qualified and State-certified to complete the work in a

pending additions of treatment facilities and other

into the future, automatic meter reading (AMR)

The City has also changed its service connection

standard to require an AMR assembly on all new

connections. However, the large scale of retrofits for unmetered connections (appr. 2,500) and upgrades for existing metered connections (appr. 1,500) is cost prohibitive for the City's water customers at this time.Funding the project will enable the City to expedite the conversion to meters which will promote better

factors have severely limited what the new rates can

handheld hardware and software have already been

purchased with the intent of eventually using them to

read new meters equipped with radio data transmitters.

realistically deliver for meter upgrading and retrofitting.

To minimize staff time used for reading meters now and

619 1310001	1310001-007C	Brawley, City of	Water meter installation project for commercial an- industrial businesses	The meter project would allow the City of Brawley to d purchase and install water meters to commercial accounts, 500 commercial accounts ranging in size from 1 inch to 12 inch diameter. The meters will be installed in city right of way and be owned and maintained by the City of Brawley. The City has recently finished the purchase and installation of residential meters however the city has no additional funds to proceed with the commercial accounts. This project is an important part of the existing City of Brawley's water conservation plan. Commercial accounts will be able to conform and apply water conservation programs within their operations, which is a requirement of the State of California in its efforts to reduce water consumption. In addition the City completed a water rate study and fulfilled the requirements of Proposition 218 during the Fall of 2008 to be able to apply equitable rates to the residential and commercial accounts. The purchase and installation of the commercial water meters will assist the City to determine accurate water usage and will provide the City a tool to recuperate operations and maintenance costs, as well as enforcing its water conservation plan.	25	c	Commercial and industrial businesses are not currently metered and require meters to properly determine water usage and invoice upon consumption. The meters will encourage water conservation and enable industries to adopt measures to conserve water. There are approximately 500 industrial and commercial accounts. Meter sizes range between 1 inch to 12 inch. The city at this time charges a flat rate for commercial, and industrial businesses and can not determine actual water usage. This makes it difficult to address water conservation and properly determine water usages for the commercial, industrial businesses, city parks and school districts. Water meter project will enable the city to properly project water demands in their 5 and 10 year capital improvement projects, water master plans, the states Urban Water Management Plans.	0	5,530	26,513 14	Imperial	v	2009
620 5602108	5602108-001	GARDEN ACRES MUTUAL WATER CO	New Water Meter Installations	Garden Acres is now on a flat monthly fee for water service. This results in a huge amount of wasted water. We propose to install water meters in our service area. This will reduce our infrastructure costs and save valuable grount water. We will install new meters and meter boxes. We will also purchase a hand held computer to read the meters and a new computer system to down load the information and prepare the bills.	20	с	We plan to install water meters for the service area controlled by Garden Acres Mutual Water Co.	150,000	110	795 06	Ventura	IV	2011
621 2010006	2010006-002	MADERA CSA NO 3 PARKSDALE	Water Meter Installation	The project would entail installation of water meters at H each service connection to promote water conservation. The addition of meters will allow the system to establish a tiered water rate to generate revenues to maintain and upgrade the system's facilities and infrastructures.	20	С	The current water system does not include water meters, leading to increased water usage by the customers. The current system serves 560 connections.	1,120,000	530	1,188 11	Madera	111	2009
622 2010004	2010004-001	MADERA CMD NO 19 PARKWOOD	Water Meter Installation	The project would entail installation of water meters at H each service connection to promote water conservation. The addition of meters will allow the system to establish a tiered water rate to generate revenues to maintain and upgrade the system's facilities and infrastructures.	20	С	The current water system does not include water meters, leading to increased water usage by the customers. The current system serves 634 connections.	1,200,000	634	1,240 11	Madera	Ш	2009

623 2010001	2010001-011C	CHOWCHILLA CITY WATER DEPT	Install water meters	The City will install approximately 2000 residential, commercial and industrial meters. When the project is complete all customers will be metered.	н	20	c	The City is in an area that for the last several years has experienced an overdraft of our water aquifer. We have instituted water conservation water ordinances and engaged in public education to encourage responsible use of the water supply. As staffing limitations have allowed, we have made an effort to find wasting, educate and assist the homeowners with their irrigation management. We have imposed fines. Through these efforts we have made some advancements but, we are still experiencing a significantly higher than average water consumption in the community. Absent installing water meters the City has been unable to find a successful means to encourage responsible use of this valuable resource. We have included a requirement for the installation of meters for new construction since 1994. We currently have meters in approximately one third of the homes in the community. These funds would allow for the installation of meters in the remainder of the community. By having meters and instituting a tiered rate for the water use that, increases the cost for high volume users, other communities have been able to achieve significant reductions in the water use. Reducing water use would have the following benifits to the community and the State: It will reduce the enviromental impacts created by the overdraft conditions;It will assist the community in maintaining a	0	3,073	10,682 11	Madera	ш	2009
624 1010018	1010018-002	Kerman, City of	Kerman Water Meter Replacement	Kerman has successfully installed meters for the majority of its customers. In order to complete the project and come into compliance with State mandates, water meters must be installed for the rest of the City's water customers. The City has the necessary equipment and processes in place for metered billing for both commercial and residential customers, and has only to install meters at the older homes and businesses that do not yet have meters. The City must install 1,400 residential meters in older neighborhoods, at an estimated average cost of \$643 per meter for installation. This \$643 estimate does not include the purchase price of \$230 per ½ inch residential water meter. The City anticipates that the installation of the meters will likely require the removal and replacement of old obsolete water lines, the installation of meter boxes and the integration of the new meters into the current radio-read water billing system.	Η	20	c	The City of Kerman has embarked on a project to install water meters throughout the City. To date, Kerman has successfully installed meters for approximately 60% of its water customers. All homes that were built since 1992 now have automated water meters installed. The cost of these meters was paid for primarily from deposits that were made previously by the homeowners for that purpose. Volumetric water charges for all metered customers took effect on September 1, 2010. The remaining 40% of water customers will continue to be billed a flat rate until they have meters installed at their locations. These homes without meters are located in older neighborhoods in which residents are predominantly lower-income. This project also calls for the purchase and installation of meters for commercial customers, but to a much smaller extent.In order to comply with AB2572 and meet State requirements of mandatory water metering for the entire City, meters must be installed in the older neighborhoods and in small businesses that do not yet have meters. The City of Kerman is eager to comply with AB2572 and these State requirements and to provide the remainder of residents with meters, but lacks the necessary funds. With the appropriate funding for this project, not only will the City be able to comply with State mandates, but low-income residents that live in these neighborhoods will be able to take advantage of cost-savings	1,500,000	2,882	13,878 23	Fresno	111	2011
625 1610004	1610004-006	Corcoran, City of	Meters for service connections	INSTALL METER SYSTEM WIDE. OTHER - DESIGN AND CONSTRUCTION	н	20	С	GENERALLY NON-METERED, HOWEVER, NEW DEVELOPMENTS ARE METERED. THE METERED HOMES GREATLY REDUCE WATER USE	1,800,000	2,878	26,047 12	Kings	Ш	1998
626 0410007	0410007-001	Paradise Irrigation District	Reservoir B replacement	Remove "B" reservoir and install new 10 MG reservoir.	н	20	С	The District's "B" Reservoir is a hypalon-covered reservoir that needs to be improved or replaced.	6,600,000	10,098	26,299 21	Butte	I	1998

627 3410001	3410001-011	Sacramento Suburban Water District	SSWD - Water Meter Retrofits	The District is currently retrofitting approximately 1,325 residential flat rate customers each year with water meters. At the present time, meters are being retrofitted and installed on customer service lines that connect to water mains already located in the street in front of the customer's homes. This situation is very convenient for retrofitting. The retrofit consists of replacing the existing curb stop and installing a new meter setter and meter box. In some areas district service lines are constructed of plastic, which does not meet District specifications and has a tendency to leak over time. If plastic lines are found, they are replaced per District specifications with a more durable copper pipe. Placement of the new meter boxes is located to within one-foot back of walk. All disturbed hardscape and landscaping is restored to its existing condition. The average cost for these meter retrofits currently ranges from \$1,250 to \$1,500 per service assuming a %-inch meter with a radio read transponder.	5 H	20	C	The District currently has approximately 32,550 single- family residential lots that remain un-metered. These customers are on a flat rate billing and are billed the same amount each month regardless of water usage. In June 2003, the District signed the Sacramento Area Water Forum Agreement which requires complete metering of all flat rate accounts by the year 2030. Subsequently, in 2005, Governor Arnold Schwarzenegger signed Assembly Bill 2575 (AB2575) which requires residential metering in California to be completed by 2025. To meet the 2025 deadline, the District has developed a Water Meter Retrofit Plan that will retrofit approximately 1,325 residential flat rate customers each year with water meters. In addition to meeting State law, these water meters will help promote water conservation; will place each District customer on a fair, usage-based billing structure; and will help the District comply with Water Forum requirements for water conservation Best Management Practices (BMP <sup>5</sup> ), including BMP # 4 on residential meter retrofits. One concern with the meter retrofits is that the District still has many residences that are served by water mains located in rear or side-yard easements. Out of a total of 700 miles of water mains within the District, approximately 150 miles are located in these rear and side-yard easements. As part of a separate project, the District is currently installing 6 to 8	5,000,000	44,744	177,000 09	Sacramento	1	2008
628 0707501	0707501-003	ANGLER S RANCH #3	Installation of Residential water meters and study of water treatment	Install water meter at system main and at each property. reroute pipes on 8 properties so each is serviced directly from water main through their own meter. Investigate treatment options to meet secondary water quality standards.	н	15	С	Need for meters to encourage conservation of water and to change billing from flat rate to use based. Also, investigate storage and treatment to meet Secondary Water Quality Standards.	100,000	30	60 04	Contra Costa	II	2009
629 2210906	2210906-002	Mariposa Pines Mutual	Add Water Meters to Mariposa Pines Water Water System	Ine major work will be done at the water main service conection. The water meters will be installed with in one foot of the corporation valve at each service conection. Each water meter will be install in such a way as to facilitate ease of repair and calibration. A water meter box with lid will be place over each water meter box with lid will be place over each water meter and transceiver. Each water meter box will have adequate drainage and will be flush with ground level. The remote data collection equipment will collect data and prepare billing information. The following are the labor, equipment and material costs for 120 connections:Labor \$57,139.20Equipment \$56,371.20Materials Parts \$39,574.80 Data Collection \$12,573.13 Tax \$4,039.91 Total \$169,678.24The cost for current 86 service connection wil be \$122,290.33.	H .	15	c	Due to Assembly Bill AB 975 Mariposa Pines Mutual Water Co., Inc. will be required to install 120 water meters. The Mariposa Pines subdivision has 120 lots to service with 84 exesisting and two recent connections for a total of 86 current connections. The water system is built on the west side of Snyder Ridge on a slope of 200 feet elevation and undulating terrain. This make it very difficult for heavy equipment access. The water mains are located at the rear or front of each lot. This water system modification will require a backhoe, plumbing, and water meters with transceivers and a data collection unit. These resouces will have to be brought into Mariposa County as there are no D1 certified backhoe operators or plumbers in Mariposa County. All Mariposa Pines Mutual Water customers will be notified of the requirement for the Company to install water meters. No public notifications are currently in effect however while new water meters are being installed each customer will be notified when their service will be effected. The proper desinfection proceedures and notification will be followed as a part of the each water meter installation.	122,291	84	168 11	Mariposa	10	2009
630 1400070	1400070-005	Sierra Grande Estates Mutual Water Co.	Install water meter & create billing system	Install water meters at each service connection & create billing system based on consumption to encourage conservation	e H	15	с	Excessive water consumption by customers	60,000	49	200 13	Inyo	v	2004
631 0310015	0310015-003	Rabb Park Community Ser. Dist.	Meters for service connections	INSTALL METERS	н	15	с	71 SERVICES HAVE NO METERS.	14,100	107	268 10	Amador	Ш	1998

632 1700554	1700554-002	Lake County CSA 13 - Kono Tayee	Metered Service Project - Purchase/Install 90 Water Meters	This project involves the purchase and physical installation of 90 Sensus 3/4" cuft water meters within the CSA #13 service area.	н	15	С	The water meter project is designed to finish installing water meters throughout the Kono Tayee (County Service Area #13) water system to allow transition to metered service. This will show compliance with the CDPH directive for metered service.	20,000	136	333 03	Lake	II	2009
633 5100107	5100107-008	Sutter Co. WWD#1 (Robbins)	Water Meter Installation Project	The current system is comprised of approximately 4 miles of water piping and valves, and 94 lateral connections. The active ground water well incorporates treatment for iron and manganese. The system provides municipal drinking water to approximately 336 year-round residents. The project will also include the purchase and installation of 94 water meters and associated appurtenances on the existing water distribution service laterals. Installation of the water meters will encourage water conservation, improve equitable billing and is required under state law. Replacing the galvanized water mains would be necessary before water meters could be installed.Lacking a source of funding for infrastructure improvements, WWD#1 could be in a position where it is unable to continue providing municipal water service in the next few years. There are no other sources for municipal drinking water near the community of Robbins. Absent this project, the community of Robbins may lose municipal water service, affecting nearly 100 families.	H ;	15	C	The community is under a mandate to install water meters under California law. Water meters will allow more equitable billing (as opposed to flat rate billing which benefits larger water users) and will encourage water conservation. The majority of the homes in Robbins are currently without water meters. The existing distribution system currently charges its customers a flat monthly fee for water consumption. Sutter County has had problems with excessive use and waste of the community's water supply. The County has installed several meters to monitor customers, revealing a water consumption of over three times the national average. The County intends to remove the flat-rate fee structure in place of a tiered metered-rate system to promote conservation, fair and equitable fees, as well as conservation of the community's aquifer source water supply. Water meters will enable the community to decrease the demand on the system, decrease operation and maintenance costs by reducing pumping costs, increase the life cycle of the existing equipment, reduce the quantity of chemical treatment, aid in the detection of leaks and preserve and monitor the groundwater aquifer.	150,000	94	336 21	Sutter	I	2011
634 2010009	2010009-002	MADERA CO SA NO 19-ROLLING HILLS	Water Meter Installation	The project would entail installation of water meters at each service connection to promote water conservation. The addition of meters will allow the system to establish a tiered water rate to generate revenues to maintain and upgrade the system's facilities and infrastructures	H	15	с	The current water system does not include water meters, leading to increased water usage by the customers. The current system serves 361 connections.	722,000	333	727 11	Madera	Ш	2009
635 5310003	5310003-005	Trinity Center M.W.C.	Trinity Center Install individual meters to all service connections	Install customer meters at each individual service connection. (approximately 250 connections) The installation of meters along with a rate structure that rewards conservation efforts will reduce daily demands and permit the sizing of the proposed new treatment and storage facilities to be based on consumption typical of a metered system. Comment from Mey Bunte/CDPH Redding Klamath District: The installation of meters meets the Economic Recovery Bill's aim for 20% green infrastructure. Meter installation would result in water conservation through a decrease in usage. The importance of water conservation is underscored by California's current drought.	н	15	С	The water system is not currently metered and revenue is collected based on a flat rate. The system experiences unusually high demand because there is no incentive to conserve. Additionally, the water system is concerned about future source capacity - flows are expected to be lower given reduced precipitation in recent years. Demand needs to be reduced to acceptable levels such that sizing of the proposed new filtration system and storage is based on typical daily demands of a metered system. Reduction in demand would reduce operating costs signficantly.	400,000	220	729 01	Trinity	I	2009
636 1805007	1805007-003	Herlong Utilities Incorporated	Herlong water meter program	Install AMR system on individual residences, area is metered by master meter and an wholesale intertie. Would allow for customers to be aware of individual consumption and financially responsible for their own useage.	н	15	С	Install 260 meters on existing homes. 155 homes are non metered and the Distrcit bills the CSD from which they recieve potable water service. The CSD is not capable of providing any service beyond water availability; they have no certified operator or provide any means for a customer to be financially responsible for their own use.	76,500	1	1,200 02	Lassen	I	2008

637 2010008	2010008-002	Madera County M.D. #10A - Madera Rancho Water Main Replacemen	t The proposed solution to the failing water mains is to H replace the with 8" PVC C-900 water mains in the street rights-of-way and connect the homes from the front rather than the rear of the house. Additionally, water meters will be installed on each house. The installation of water meters and replacement of the failed mains will provide a tiered metered rate to encourage conservation of water and supply capital for future improvements and maintenance of the system.	15	с	The current system has no water meters and approximately 50,000 linear feet of 4-inch steel pipes that are over 60 years old. Recently it has been determined that the pipes are leaking severely and have 1-inch to 2-inch holes where the pipe has rusted completely through, every 3 to 4 feet. This poses a significant health risk due to contamination from the surrounding soil. A review of the distribution system's bacteriological monitoring results from December of 2004 through December of 2006 shows that, on several occasions, when total coliform bacteria have been detected in the distribution system.	5,332,875	922	2,255 11	Madera	II	2009
638 5010028	5010028-011	Ceres, City of Meter Retrofit Program	This project will allow the city to expedite H implementation of the Demand Management Measures (DMM#4 - Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections) established in our approved 2005 Urban Water Management Program. Under this two-phase project, the city will 1) retrofit water meter boxes that have been installed since 1992 with remote-read water meters and convert to a metered water rate system; and 2) retrofit all pre-1992 water connections to metered services with remote-read water meters. The city anticipates that this conversion will result in as much as a 25% reduction in water consumption. This project will include:• project engineer to write specs and quality control for project do provide for project oversight and management• purchase and installation of meters, boxes and fittings as required for metering 11,000 homes• automated meter reading with water conservation, leak detection, backflow alarm and	15	C	The city currently possesses sufficient groundwater resources to meet average demands; however, the city's ability to meet peak demands has been stressed by the loss of critical wells due to water quality concerns (exceeding maximum contaminant levels) or reduction in treatment capacity of critical well sites. During peak demand periods, system pressures have been less than desirable due to the lack of peak water production capacity.Since 1992, the city has installed meter boxes and some meters but does not currently bill residential water use according to metered usage. Thus, the city cannot properly record water usage and adequately curb water watsring. The City Council has approved a conversion to water meters and metered billing. The city has received quotations to install all meters in a six month period. The city lacks the funds to fund the meter conversion project.	3,200,000	10,617	40,943 10	Stanislaus	Ш	2009

tampering alarms• water conservation and education to equip a conservation staff person to read high use meters and educate customers on water saving measures (water audit software)

639 4410011	4410011-003	Watsonville. City of	Elimination of Zone 1	The project will address these solutions: Solution 1: The H	15	С	Problem 1: The City's existing floating cover reservoirs	3.800.000	15.448	51.703 05	Santa Cruz	Ш	2009
			Floating Cover Reservoirs	floating cover reservoirs will be eliminated from the			are antiquated and vulnerable. Floating covers have						
			-	system to improve system security, as well as the			both maintenance problems and on-going security						
				reliability of the entire system. In order to eliminate the			issues which require constant diligence and sizeable						
				existing floating cover reservoirs, a number of			capital resources. The City's 2004 Vulnerability						
				significant infrastructure changes will be required.			Assessment has identified the floating cover reservoirs						
				These changes will allow the City's network of existing			as the most vulnerable part of the entire water system,						
				groundwater wells to respond instantaneously to			and this susceptibility must be addressed. The reservoir						
				demand, utilizing the groundwater basin as a reservoir.			has been vandalized on numerous occasions, including						
				Groundwater storage and above-ground steel tanks will			slashing of the hypalon cover. Since staff has been						
				replace the floating cover reservoirs.Solution 2: In order			unable to determine if there was contamination of the						
				to achieve compliance with the disinfection			reservoir associated with cover vandalism, the City's						
				requirements of the Water Works Standards, new back-			only response is to isolate and drain the reservoirs each						
				up generators and chlorination equipment will be			time. The City's floating cover reservoirs include two						
				installed at well sites 10, 14, and 15. Solution 3: The			bermed in-ground reservoirs with capacities of						
				existing booster pump station will be eliminated from			5,300,000 gallons and 700,000 gallons. In 1979, hypalon						
				the system. The distribution system wells will serve as			liners and floating covers were installed on both						
				booster pumps by using variable frequency drives and			reservoirs. The floating covers have been repaired and						
				modern control strategies. This will improve the energy			replaced several times, but continue to need additional						
				efficiency of the operations and improve the overall			repairs. Problem 2: The City's water system lacks						
				system reliability. Project Details: The most important			needed reliability features, and has disinfection						
				modification will be to convert all wells to variable			deficiencies that violate current Water Works						
				frequency drives. The Zone 1 well control scheme will			Standards. Several of the existing well sites do not have						
				be upgraded to be intelligently controlled by local			back-up power sources, and as a result, during the City's						
				pressure as well as the remote master SCADA			frequent power outages, produce and distribute water						
				computer. Additional storage capacity and pumping			that has not been disinfected. This project would						
				capacity will be added to the Zone 2 reservoir and			include providing back-up power generators at several						
640 0910002	0910002-014	South Tahoe PUD - Main	STPUD Water Meter	The project STPUD is seeking assistance for is Phase 4 of H	15	С	South Tahoe Public Utility District (STPUD) has 13,956	4,278,000	13,635	60,000 09	El Dorado	I	2012
			Installation Phase 4	the district-wide water meter installation program.			water service connections in the disadvantaged						
				Phase 4 targets the water zones in South Lake Tahoe of			community of South Lake Tahoe, CA. Approximately						
				East Stateline, West Ralph, Heavenly and Keller. These			5400 of these water service connections are metered. In						
				water zones represent approximately 2139 water			order to meet AB 2572, a 2004 California State law						
				meters to be installed. This project consists of design,			requiring water suppliers to install water meters on all						
				development of plans and specifications, hiring a			customer connections by January 1, 2025, STPUD must						
				contractor to locate the position of the water meter on			begin implementing water meter installation programs						
				each property, order the meter boxes and meters.			immediately. Due to the large amount of meters to be						

install both and provide the necessary restoration on each property. At approximately \$2000 per meter, Phase 4 will cost \$4,278,000. STPUD plans on installing these water meters over a 2 year period due to the

limits on construction in the Tahoe Basin.

installed, (approximately 8556) STPUD has planned this project in 4 phases. Each of the four phases targets specific water zones in STPUD's service area. Currently, due to the severe weather conditions in our community, it costs approximately \$2000 per meter to install as they need to be placed in special meter boxes that withstand freezing temperatures. In addition, due to the Tahoe Regional Planning Agency construction ordinances, we can only place meter boxes in the ground between May 1 and October 15. Once the meters have been installed, STPUD will begin a metered billing rate for each customer and feels the transition from a flat rate service fee to a volume-based service fee will go more smoothly if the meters are installed in water zone neighborhoods.

## 641 0910002 0910002-015 South Tahoe PUD - Main

STPUD Meter Installation The project STPUD is seeking assistance for is Phase 3 of H the district-wide water meter installation program. Phase 3 targets the water zones in South Lake Tahoe of West Stateline, West Gardner Mountain and Montgomery Estates. These water zones represent approximately 2139 water meters to be installed. This project consists of design, development of plans and specifications, hiring a contractor to locate the position of the water meter on each property, order the meter boxes and meters, install both and provide the necessary restoration on each property. At approximately \$2000 per meter, Phase 3 will cost \$4,278,000. STPUD plans on installing these water meters over a 2 year period due to the limits on construction in the Tahoe Basin.

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South Tahoe Public Utility District (STPUD) has 13,956 water service connections in the disadvantaged community of South Lake Tahoe, CA. Approximately 5400 of these water service connections are metered. In order to meet AB 2572, a 2004 California State law requiring water suppliers to install water meters on all customer connections by January 1, 2025, STPUD must begin implementing water meter installation programs immediately. Due to the large amount of meters to be installed, (approximately 8556) STPUD has planned this project in 4 phases. Each of the four phases targets specific water zones in STPUD's service area. Currently, due to the severe weather conditions in our community, it costs approximately \$2000 per meter to install as they need to be placed in special meter boxes that withstand freezing temperatures. In addition, due to the Tahoe Regional Planning Agency construction ordinances, we can only place meter boxes in the ground between May 1 and October 15. Once the meters have been installed, STPUD will begin a metered billing rate for each customer and feels the transition from a flat rate service fee to a volume-based service fee will go more smoothly if the meters are installed in water zone neighborhoods.

4.278.000

13,635

60,000 09

El Dorado

2012

South Tahoe PUD - Main 642 0910002 0910002-017

STPUD Water Meter Installation Phase 2

Phase 3

The project STPUD is seeking assistance for is Phase 2 of H the district-wide water meter installation program. Phase 2 targets the water zones in South Lake Tahoe of Arrowhead, Iroquois and Country Club. These water zones represent approximately 2139 water meters to be installed. This project consists of design, development of plans and specifications, hiring a contractor to locate the position of the water meter on each property, order the meter boxes and meters, install both and provide the necessary restoration on each property. At approximately \$2000 per meter, Phase 2 will cost \$4,278,000. STPUD plans on installing these water meters over a 2 year period due to the limits on construction in the Tahoe Basin.

South Tahoe Public Utility District (STPUD) has 13,956 water service connections in the disadvantaged community of South Lake Tahoe, CA. Approximately 5400 of these water service connections are metered. In order to meet AB 2572, a 2004 California State law requiring water suppliers to install water meters on all customer connections by January 1, 2025, STPUD must begin implementing water meter installation programs immediately. Due to the large amount of meters to be installed, (approximately 8556) STPUD has planned this project in 4 phases. Each of the four phases targets specific water zones in STPUD's service area. Currently, due to the severe weather conditions in our community, it costs approximately \$2000 per meter to install as they need to be placed in special meter boxes that withstand freezing temperatures. In addition, due to the Tahoe Regional Planning Agency construction ordinances, we can only place meter boxes in the ground between May 1 and October 15. Once the meters have been installed, STPUD will begin a metered billing rate for each customer and feels the transition from a flat rate service fee to a volume-based service fee will go more smoothly if the meters are installed in water zone neighborhoods.

4.278.000 13,635 60,000 09 El Dorado 2012

643 0910002	0910002-010	South Tahoe PUD - Main	Water Meter Installation - Phase 5	The project STPUD is seeking assistance for is Phase 5 the district-wide water meter installation program. Phase 5 targets the water zones in South Lake Tahoe o East Stateline, West Ralph, Heavenly and Keller. These water zones represent approximately 2435 water meters to be installed. This project consists of hiring a contractor to locate the position of the water mater or each property, order the meter boxes and meters, install both and provide the necessary restoration on each property. At approximately \$2500 per meter, Phase 5 will cost approximately \$6,087,500. STPUD plans on installing these water meters over a 2 year period due to the limits on construction in the Tahoe Basin.	of H e a n	15	C	South Tahoe Public Utility District (STPUD) has 14,000 water service connections in the disadvantaged community of South Lake Tahoe, CA. Approximately 2600 of these water service connections are metered. In order to meet AB 2572, a 2004 California State law requiring water suppliers to install water meters on all customer connections by January 1, 2025, STPUD must begin implementing water meter installation programs immediately. Due to the large amount of meters to be installed, (approximately 11,400) STPUD has planned this project in 5 phases. Phase 1, consisting of approximately 1660 meter installations, is currently under bid and will be completed in October 2010. This leaves an additional four phases of 2435 meters per phase to complete. Each of the four remaining phases targets specific water zones in STPUD's service area. Currently, due to the severe weather conditions in our community, it costs approximately \$2500 per meter to install as they need to be placed in special meter boxes that withstand freezing temperatures. In addition, due to the Tahoe Regional Planning Agency construction ordinances, we can only place meter boxes in the ground between May 1 and October 15. Once the meters have been installed, STPUD will begin a metered billing rate for each customer and feels the transition from a flat rate service fle to a volume-based service fee will go more smoothly if the meters are installed in	6,087,500	13,635	60,000 09	El Dorado	1	2009
644 0910002	0910002-016C	South Tahoe PUD - Main	STPUD Water Meter Installation Phase 1	The project STPUD is seeking assistance for is Phase 1 the district-wide water meter installation program. Phase 1 targets the water zones in South Lake Tahoe o Flagpole, Christmas Valley, Lookout, Forest Mountain and Angora. These water zones represent approximately 2139 water meters to be installed. This project consists of design and development of plans ar specifications, hiring a contractor to locate the positio of the water meter on each property, order the meter boxes and meters, install both and provide the necessary restoration on each property. At approximately 52000 per meter, Phase 1 will cost \$4,278,000. STPUD plans on installing these water meters over a 2 year period due to the limits on construction in the Tahoe Basin.	of H s nd n	15	C	South Tahoe Public Utility District (STPUD) has 13,956 water service connections in the disadvantaged community of South Lake Tahoe, CA. Approximately S400 of these water service connections are metered. In order to meet AB 2572, a 2004 California State law requiring water suppliers to install water meters on all customer connections by January 1, 2025, STPUD must begin implementing water meter installation programs immediately. Due to the large amount of meters to be installed, (approximately 8556) STPUD has planned this project in 4 phases. Each of the four phases targets specific water zones in STPUD's service area. Currently, due to the severe weather conditions in our community, it costs approximately S2000 per meter to install as they need to be placed in special meter boxes that withstand freezing temperatures. In addition, due to the Tahoe Regional Planning Agency construction ordinances, we can only place meter boxes in the ground between May 1 and October 15. Once the meters have been installed, STPUD will begin a metered billing rate for each customer and feels the transition from a flat rate service fee to a volume-based service fee will go more smoothly if the meters are installed in water zone neighborhoods.	4,278,000	13,635	60,000 09	El Dorado	I	2012
645 2702073	2702073-001	SAN MIGUEL WS #22	Meters for service	Install water meters.	н	10	С	System has water conservation problem.	10,000	31	93 05	Monterey	П	1998

connections

646 3500910	3500910-001	Dunneville Estates CSA #50	Dunneville Estates CSA#50 Well Project	The project will include the installation of meters, providing for the accurate recording of and billing by usage, encouraging water conservation on the user side of the water plant. On the water supply side of the water plant, it is recommended that both well have the pumps replaced with higher capacity pumps. This will increase the water supply available to the treatment plant that is only running at 1 third capacity.	н	10	C	There are 30 residents in the CSA and one common lot. Average day demand is creating emergency low level alarms in the water treatment plant and requiring expensive monitoring costs to reset the system. The water service is not metered - homeowners are not charged for their usage. Therefore, water rationing is inequitable and not provided with a conservation tool. The water plant is running at one third of capacity with ever increasing demand on the user side and limited availability on the water well side.	75,000	30	120 05	San Benito	II	2009
647 2610002	2610002-002	JUNE LAKE PUD VILLAGE	Water Meter Installation	Install 185 meters for the water delivered to customers.	н	10	С	185 customers of the District do not have water meters for the water delivered to these customers.	185,000	311	330 13	Mono	V	2009
648 3901348	3901348-003	FAIROAKS PWS #44	CSA-44 FAIROAKS, METERS	The work in general consists of the installation, by contract, of 239 San Joaquin County provided radio- read type meters on the unmetered connections and the installation of radio-read modules on an additional 121 meters.	Н	10	С	exThe CSA-44 Fairoaks Water System provides domestic drinking water and fire protection to a 360 connection residential subdivision located in an unincorporated area of San Joaquin County. Water services are a mix of metered and non-metered services. Metered services are manually read and are billed quarterly based on usage. Non-metered services are assessed annually and the assessment is unrelated to water use. Water metering is a proven water conservation tool. As California enters the third consecutive year of drought, the County is seeking to fully master its water systems. In addition, the County has purchased a drive-by "Automated Meter Reading" system. Installation of water meters conserves water. Use of the AMR conserves labor, fuel, equipment use, and traffic congestion during meter reading cycles.	282,700	314	1,036 10	San Joaquin	III	2009
649 5710007	5710007-003	Esparto C.S.D.	Esparto CSD - Balance of Water Meter Installations	The installation of approximatly 230 1 1/2 inch Water Meters to complete the federal requirement of metering by a certain date and to meet the water conservation program in the District.	н	10	с	e are in the process of going to the metering program for our services, we have installed 630 Water Meters at this point but need to install the 1 1/2 inch Water Meters to complete this project. The District has discovered we do not have the funds for this section of the Project.	200,000	688	2,000 09	Yolo	I	2009
650 2610003	2610003-004	BRIDGEPORT PUD	Water Meters	The proposed Arsenic Mitigation and Associated Improvements project has 4 related parts as described below. Part 1 - Arsenic Treatment, is the highest priority and could be completed without Parts 2–4 if funding is not available. However, the additional parts are beneficial to the Bridgeport Public Utility District in that they correct existing problems and reduce capital and O&M costs for arsenic treatment. All parts are ready to go to final design and construction. Part 1 – Arsenic Treatment \$2,058,845 Arsenic treatment is the major portion of the project and is a centralized coagulation/filtration water treatment plant to treat the maximum day demand of 651 gpm, reducing the arsenic concentrations from the current flow weighted average of 26 µg/L arsenic to less than 10 µg/L. The treatment plant will be located on two adjacent parcels owned by the BPUD. It will include skid mounted coagulation/filtration treatment units in an approximate 700 square foot heated building. Part 1 will also include the necessary piping changes within the system to allow centralized treatment; an exterior sludge settling/storage tank; electrical; and site improvements associated with the treatment. Part 2 – Water Meters \$407,675Water meters will be installed on the 77 existing non-residential services. Then, a rate structure put in place that promotes conservation with the goal of reducing demand on the non-residential connections by	н	10	c	The Bridgeport Public Utility District (BPUD) obtains water from 3 groundwater wells within the community. The water from all wells exceeds the drinking water standards for arsenic and there are currently no facilities for removal. The State of California, Department of Public Health issued Compliance Order 05-13-09CO-001 on February 13, 2009 requiring compliance. In response to the Order the BPUD has completed a Preliminary Engineering Report (PER) that evaluates different options for arsenic mitigation and presents preliminary Ingineering Report (PER) that evaluates different options for arsenic mitigation and presents preliminary plans and estimated costs for the preferred option as described in the Project Description portion of this Pre-application. Additionally, the CEQA environmental for the preferred option has been completed. The BPUD is within a disadvantaged community (76% of California MHI) and has virtually no capital available to finance the project. They were recently unsuccessful in obtaining ARA funds through Rural Development Services. An application is pending with RDS for the next fiscal year but preliminary indications are that at best only a portion of the project will be funded. Upon determining that funding is available the complete CDPH application will be submitted within 30 days. The preparation of final plans and specifications will take approximately 90 days with bid solicitation and construction to follow immediately subject to the conditions placed on funding. There are 3	407,675	227	3,000 13	Mono	v	2011

651 5010021	5010021-006	Denair Community Services District	Denair Community Services District 2009 Water Meter Installation Project	The Denair Community Services District 2009 Water Meter project will complete the installation of water meters with remote reading capabilities on all residential and commercial water services through out the District. This process will allow the District to become a metered service District which will increase revenues and help minimize the waste of water from un- metersusers.	Н	10	С	The Denair CSD is currently operation as a flat rate municipal provider of domestic water. The District will be required to provide meters in the upcoming years due to State and Federal regulations. This project addresses the issue.	1,500,000	1,294	3,225 10	Stanislaus	III	2009
652 1900158	1900158-007	LITTLE BALDY	Distribution meters	Install 7 Pressure reducing valves in the distribution system in locations that prevent system pressure from getting higher than 85 psig. The pressure at the bottom of the system without pressure reduction would be 400 psig. Install 38 water meters and shut-off valves.	н	5	C	LBWC currently has no customer meters in their system. Only recently have meters been added to the wellheads, along with a Master meter. This will help in monitoring production of the individual wells, and monitor line loss. Since the water is billed at a flat rate, the benefits to be derived from metering the connections would be to track water loss, conserve water, and reduce excessive use. Every time the wells are shut off, the distribution pipe drains, and the pressure drops to zero. Each time that happens, a potential of contamination occurs. This method of operation of the distribution system violates California Water Works Standards. The system elevation differences result in an operational pressure of 70 psig at the highest point in the service area 400 psig at the lowest point.	40,000	27	76 16	Los Angeles	IV	2009
653 0310002	0310002-002	AWA, City of Ione	lone WTP Clear Well Cover Replacement - Geodesic Dome	r An aluminum, geodesic dome will be constructed over the lone reservoir. The existing cover will be removed. Turnkey construction will be used for this project. The duration for design through completion will be 25 weeks. The lone reservoir will not be taken out of service during the construction period.	Н	5	C	A blue, 9,160 square-foot, hypalon cover encloses the 750,000-gallon, 108-foot diameter Ione clearwell. The Ione clearwell cover is equipped with a pier tension system and one automatic rainwater pump. The cover rises and falls with the water level in the clearwell. Wind borne debris collects in the folds of the cover. An electric fence surrounds the clearwell to keep foxes from jumping on the cover to take a drink from the pool of water that collects on it. Section 64585 of Title 22 of the California Code of Regulations outlines specific criteria for distribution reservoirs. When operated and maintained properly, distribution reservoirs with floating covers meet these criteria. However, covers fatigue and crack due to the up and down movement of stored water. Birds peck holes in the covers and wind borne debris collects in the folds of the cover. Rain water collects on the cover. Operators must walk out on the covers to repair, inspect, and clean the cover and pumps for rainwater removal. Although the site is enclosed with a chain link fence (with barbed wire), the covers could easily be cut with a knife or falling tree branch from a significant rain event, exposing treated water for distribution to the elements. Replacement of the floating covers with a new geodesic dome significantly reduces the potential for violation of total collform maximum contaminant level per Section 64426.1 of Title 22 of the California Code of	560,000	1,497	4,940 10	Amador	III	2009
#### 654 0310003 0310003-015 AWA Sutter Creek

## Replacement

CAWP Ranch House

Tanner Water Treatment A truss supported, geodesic, aluminum roof will be Plant Clearwell Cover constructed over the Tanner reservoir. The existing cover will be removed after the new roof is in place. Construction will include a new perimeter footing and wall to support the roof load. Turnkey construction will be used for this project. The duration for design through completion will be 28 weeks. The Tanner reservoir will remain in service during construction. Without funding, the Agency will replace the existing floating cover this fiscal year. The new floating cover will be operated and maintained in accordance with Section 64585(b)(3)(B) of Title 22 of the California Code of Regulations.

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655 0310012 0310012-013 AWA Buckhorn Plant

The Ranch House Tank is part of the Central Amador Storage Tank Replacement Water Project ('CAWP') system, located along Highway 88 in Amador County. The Ranch House Tank is fed by the CAWP main, serving three existing subdivisions (Ranch House, Pine Park East, and Gayla Manor), plus one subdivision with entitlements (Mokelumne Bluffs) and a California Youth Authority facility.A 8,200 square foot hypalon cover encloses an existing 750,000-gallon conical shaped, partially recessed Ranch House Tank. The Ranch House Tank floating cover is equipped with a tension pier system and three surface drains. The existing conical shaped tank will be removed (portion underground will be backfilled) and replaced with a new storage tank (approximately 30 feet in height and 72 feet in diameter), with a volume of 825,000 gallons. The recessed portion of the existing conical tank will be backfilled and the new tank will be constructed completely above-ground. The tank will be equipped with features such as modernized system controls; inlet, outlet, and overflow pipes; air vent; manway; liquid level gauge; and tank ladder with guardrail. This project will significantly reduce operator time spent maintaining the floating cover and increase the reliability and safety of drinking water by significantly reducing the potential for violation of total coliform maximum contaminant level per Section 64426.1 of Title 22 of the California Code of Regulations.

treated water stored in the 2-million gallon Tanner clearwell. Seventy-nine tension piers support the cover. The tension system traps leaves and debris in the folds of the cover. The cover has been repaired with fiftynine patches. The depressed cover collects rainwater which is pumped off the cover by 5 automatic pumps. Section 64585 of Title 22 of the California Code of Regulations outlines specific criteria for distribution reservoirs. When operated and maintained properly, distribution reservoirs with floating covers meet these criteria. However, covers fatigue and crack due to the up and down movement of stored water. Birds peck holes in the covers and wind borne debris collects in the folds of the cover. Rain water collects on the cover. Operators must walk out on the covers to repair, inspect, and clean the cover and pumps for rainwater removal. Although the site is enclosed with a chain link fence (with barbed wire), the covers could easily be cut with a knife or falling tree branch from a significant rain event, exposing treated water for distribution to the elements. Replacement of the floating covers with a new geodesic dome significantly reduces the potential for violation of total coliform maximum contaminant level per Section 64426.1 of Title 22 of the California Code of Regulations. Although floating covers are allowed per Section 64585(b)(3)(B) of Title 22 of the A 8,200 square foot hypalon cover encloses an existing 750,000-gallon conical shaped, partially recessed treated water storage reservoir. Section 64585 of Title 22 of the California Code of Regulations outlines specific criteria for distribution reservoirs. When operated and maintained properly, distribution reservoirs with floating covers meet these criteria. However, covers fatigue and crack due to the up and down movement of stored water. Birds peck holes in the covers and wind

borne debris collects in the folds of the cover. Rain

pumps for rainwater removal. Although the site is

covers could easily be cut with a knife or falling tree

branch from a significant rain event, exposing treated

floating covers with a new storage tank significantly

reduces the potential for violation of total coliform

maximum contaminant level per Section 64426.1 of

Title 22 of the California Code of Regulations. Although

floating covers are allowed per Section 64585(b)(3)(B)

Stockton office of the Department of Public Health has

of Title 22 of the California Code of Regulations, the

reported their concerns over the continued use of

floating covers, and has recommended replacing

floating covers.

water for distribution to the elements. Removal of the

water collects on the cover. Operators must walk out

on the covers to repair, inspect, and clean the cover and

enclosed with a chain link fence (with barbed wire), the

A 40,170 square-foot, tan, polyethylene cover protects

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1.654

5,458 10

Amador

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2009

1,780,000 2,558 8,508 10 Amador 2009 ш

656 3410004	3410004-009	Carmichael Water District	Carmichael Water District La Vista Well and Tank Replacement Project	this project will include planning, design, permitting, environmental compliance, and construction of replacement of Carmichael Water District's (District) existing aging La Vista groundwater well, storage tank, and booster pump station facility. The new facility will be consistent with the objectives laid out in the Regional Water Authority's 2005 Integrated Regional Water Management Plan. This project will also better equip the District to address the threat of Aerojet/Gencorp Corporation groundwater contaminant plumes and local plumes through continued efforts to manage groundwater extractions and increase the use of surface water when available. The specific project components are described as follows: Groundwater Well Replacement – The existing La Vista well will be selectively screened in layers of the aquifer to minize the likelihood of future impacts from migration of the Aerojet groundwater contaminant plumes and local	5	с	To date, five of the eight Carmichael Water District (District) groundwater supply wells have been impacted by contamination from multiple sources, primarily perchlorate and Tetrachlorethylene (PCE). Other contaminants, including n-nitrosodimethylamine (NDMA), trichlorethylne (TCE), and 1,4 dioxane are known to be present in the aquifer underlying District and also present long term threats to the sustainability of a high quality groundwater source. The primary known source of contamination in the District service area is from historical activities at Gencorp/Aerojet Corporation's (Aerojet's) aerospace and rocket engine manufacturing facility. The Aerojet plume is a Superfund site administered cooperatively by the USEPA, California Department of Toxic Substances Control, and the Central Valley Regional Water Quality Control Board. There have been ongoing remediation efforts within the District's service area, however the contaminant plume is still not fully contained and is	5,000,000	11,548	40,000 09	Sacramento	I	2009
				Potential Contaminating Activities. The new well will also be used as a long term groundwater source to offset some of the effects the loss of the Barrett Road Well in the north part of the district to contamination. The reconstruction of the La Vista well will improve the District's reliable source water production capacity. E 4 Million Gallon (MG) Storage Tank and Booster Pump Station - This project will include demolition of the			migrating westerly towards the District's groundwater wells at an estimated rate of 500 feet per year. Following is a description of the contaminants that currently impact District supply sources: Dever the past 5 years, perchlorate has been detected in three (3) of the District's wells over a range of approximately 1 to 4 parts per billion (ppb), approaching the California Maximum Contaminant Level (MCL). The perchlorate is						
657 0910001	0910001-013	El Dorado ID - Main	El Dorado Irrigation	(Dolomite) Replace floating cover with rigid cover. H	5	С	Reservoir is covered with a floating cover, which has	2,300,000	36,244	112,000 09	El Dorado	I	2006
658 0910001	0910001-015	El Dorado ID - Main	El Dorado Irrigation District	(Res B) Replace floating cover with rigid cover and an H adequate bypass. Involves design and construction.	5	С	defects. Reservoir is covered with a floating cover which is defective.	800,000	36,244	112,000 09	El Dorado	I	2006
659 0910001	0910001-012	El Dorado ID - Main	El Dorado Irrigation District	(Moose Hall) Replace floating cover with a rigid cover H and an adequate bypass. Involves design and construction.	5	с	Reservoir is protected with a floating cover, which has defects.	600,000	36,244	112,000 09	El Dorado	I	2006
660 0910001	0910001-029	El Dorado ID - Main	Reservoir 11 Floating Cover Replacement	Replace the existing floating covered reservoir with two H steel storage tanks, with a total volume of 5.0 million gallons.	5	C	The District is currently under Compliance Order No. 01- 09-98-ORD-001, Amendment No. 5 dated June 6, 2005. A prior amendment (No.3) required the District to "abandon the use of all existing uncovered and floating covered drinking water reservoirs and construct new, covered drinking water storage facilities"	6,140,000	36,244	112,000 09	El Dorado	I	2009
661 0910001	0910001-016	El Dorado ID - Main	El Dorado Irrigation District	(Res C) Replace floating cover with a rigid cover and an H adequate bypass. Involves design and construction.	5	С	Reservoir is covered with a floating cover which is defective.	800,000	36,244	112,000 09	El Dorado	I	2006
662 0910001	0910001-024	El Dorado ID - Main	Pollock Pines Reservoir Floating Cover Replacement	Replace the existing floating covered reservoir with two H steel storage tanks, with a total volume of 3.5 million gallons.	5	C	The District is currently under Compliance Order No. 01- 09-98-ORD-001, Amendment No. 5 dated June 6, 2005. A prior amendment (No.3) required the District to "abandon the use of all existing uncovered and floating covered drinking water reservoirs and construct new, covered drinking water storage facilities"	4,500,000	36,244	112,000 09	El Dorado	I	2009
663 0910001	0910001-017	El Dorado ID - Main	El Dorado Irrigation District	(Res 1) Replace floating cover with a rigid cover and an H adequate bypass. Involves design and construction.	5	С	Reservoir is covered with a floating cover which is defective.	1,700,000	36,244	112,000 09	El Dorado	I	2006
664 1910087	1910087-016C	Metropolitian Dist. of So. Cal.	Palos Verdes Reservoir Floating Cover Replacement	Design, planning, purchase and installation/construction H of replacement of existing reservoir cover.	0	С	To design and implement replacement of reservoir floating cover and asssocaited inler/outlet tower retrofit.	20,000,000	647	0 16	Los Angeles	IV	2012
665 3301045	3301045-001	BLYTHE MOBILE HOME ESTATES	Meters for service connections	Install water meters. (System has one 4" well & 220 gal H pressure tank to serving 23 connections. County reports that system is rent controlled and needs to present cost issues to the Rent Control Board for review.))	0	С	Water testing costs, permits, & well maintenance costs are prohibitive & escalating - We do not charge for water.	12,000	23	30 20	Riverside	V	2002

666 2702026	2702026-002	APRICOT LN WS	Water meters	To fix the problem, install water meters . Installation of H water meters near the main line for every house would resolve this issue.	0	c	Lack of water meters to reduce overall household water usage. Currently homeowners are on a flat rate and can use however much water they want to. There is also no incentive to conserve water, fix leaks or report water line leakage or breaks. Just recently a water leak on a homeowers line leaked for over two weeks prior to it being fixed. This also required the shut down of the entire water system since no shutoff valve existed on this line where the break occured.	75,000	24	72 05	Monterey	II	2011
667 0500027	0500027-002	LILI VALLEY WATER CO.	Lili Valley - Installation of water meters	The project would include:1) Planning2) Engineering3) H Purchasing of water meters4) Securing a County permit5) Installing the water meters.We don't think that consolidation would be the best option for our members. We think consolidation would further increase water assessments. We think the best solution to our problem is installing water meters on the new system that was just updated by the USDA loan we received.	0	c	The project will address the lack of water meters for the 70 properties in the Lili Valley Estates located in West Point, Ca. All properties are members of the Lili Valley Water Company (LVWC). In 2007, the LVWC entered into an agreement with the USDA to upgrade our water system after we were cited several times for a chlorination problem. The upgrade cost a bit over \$1 million dollars. The USDA provided a grant of \$770,000 and the LVWC seuted a 40 year loan for \$280,000 to pay for the upgrade. This upgrade had a significant impact on the water bill, raising it by \$223 per year. (Bills are now \$488 for an undeveloped lot and \$644 for a developed lot per year.)We would like to install water meters but won't be able to do it without raising rates again. This will be a hardship for our shareholders who just had a significant rate increase in their water assessment in 2008. The LVWC is located in Calaveras County and many of our members have incomes below the poverty level. We would appreciate funding for the installation of water meters but water atten will require our members to better conserve water.Thank you for your consideration.	25,850	70	99 10	Calaveras	11	2012
668 2701257	2701257-007	GARRAPATA WC INC	Installation of water meters in entire system to convert system from unmetered, flat rate system	The project includes the furnishing and installation of Neptune R9-00i radio read water meters on each customers service line at the agreed service point which is normally within a few feet of a company main. Said meters will be installed with new saddles on the main, brass corporation stops, brass meter stops, and new meter boxes. A signal receiver and the software to convert that to a billing statement is included in the project. The expected savings in the cost of meter reading and billing will quickly offset the additional costs of the equipment required. Our service area is spread over a mountainous square mile of territory. It is not a nice flat subdivision with the meters all in a row. Our service area goes from sea level to 1000 feet above sea level and includes numerous gates and other obstacles to traditional meter reading.	0	c	This water system has never been metered since its inception in 1962 and has always billed the customers with a flat rate. The State Water Resources Control Boad granted an appropriation permit for 35 acre feet per annum to the company in 2000. We are now getting considerable pressure from said Board and from the County and CPUC to meter the system as it is needed in order to implement conservation of water measures and to aid in the finding of leaks in the system and the customers service lines. A complaint is pending before the SWRGB against the company for civil penalties and a restraining order because our appropriation of water has exceeded the 35 acre feet each year for several years past. Meters also provide greater equity among the customers. We must make this conversion to a metered service and the company has no funds with which to accomplish this. The potential liability of the company for civil penalties is not included in this preapplication for a grant.	93,466	50	150 05	Monterey	Π	2009

669 2000506	2000506-003	SIERRA LINDA MUTUAL WATER CO	Sierra Linda MWC - Meter Installation project	A project will be designed and bid to install meters on each connection in the water system. Some pipeline relocation work may be needed to locate meters and waterlines in accessible easement areas. Because of the extra workload of reading meters and billing specific quantities the project will include electronic meters and a meter reading wand.	0	С	The water system does not have water meters and has been billing on a flat rate. The water supply wells are marginal during the late summer season and flat rate billing is problematic to water conservation. Also due to the water quality problems it is likey that a treatment plant will be needed and meters will be essential for equitable billing of the treated water used by each customer.	90,000	75	180 11	Madera	111	2012
670 4900660	4900660-005	Yulupa Mutual Water Company	YMWC Water Meters Project 2011	The project will consist of replacing the existing service H from the main to the back side of the existing meter if there is one or near the roadway including, new saddle, corp stop, service lateral piping, angle meter stop, meter, customer side shut off, connection to existing private service piping box and electronic meter reading module. Construction will be monitered by Brelje and Race Consulting Civil Engineers.	0	с	At this time the YMWC system has no water metering capability. This makes it impossible for the Company to monitor leakage, encourage conservation and minimize waste. Given that the membership own large rural parcels, summer water usage increases dramatically over winter usage averages. The Company intends to institute a tiered rate structure commensurate with other local water utilities to encourage conservation of both water and electricity.	380,000	60	200 18	Sonoma	Ι	2012
671 1700501	1700501-002	Adams Springs Water District	Adams Springs Meter Installation Project	We have water meters and the parts to install them, we H would like to have the funds to install them.	0	с	Labor costs to have water meters installed	10,000	71	200 03	Lake	II	2009
672 2600546	2600546-002	CROWLEY LAKE MUT. WATER DIST.	Water meters for 67 connections (CLMWC) per AB 2572 requirement.	1) Site survey / engineering evaluation to locate the current inlet water location of each of the 67 connections serviced by the CLMWC and determine the optimum installation location for all proposed water meters.2) Installation of water meters on each of the 67 connections (residences) serviced by the CLMWC, (potential automated meter reading system requirements TBD).	0	С	Crowley Lake Mutual Water Company (CLMWC) services 67 connections (residential properties) in the residential development of Lakeview Unit #1. The monthly Water fee is billed to each connection at a flat rate due to the fact that all 67 connections (residences) lack water metering of any kind. This request for funding through the Safe Drinking Water State Revolving Fund (SDWSRF) is intended to:1) conserve water by changing from the current 'flat rate' monthly charge to 'volume based' billing with metering of the actual water used by each individual connection,2) conform to state Iaw (AB 2572) that requires the installation of water meters for all water customer services.	147,000	67	250 13	Mono	v	2012
673 2800530	2800530-001	MEYERS WATER CO.	Edgerly Island Community Water System Metering Project	Installation of Sensus Water Meters, meter reading H equiptment and back flow valves (including testing) on all 100 homes in the community. Installation of concrete Cristie Boxes for viewing of the meters and patching all concrete, asphalt, landcaping etc. to original condition is included.	0	c	Currently the community water system is a Flat Rate payment by the homeowners. There is no incentive for them to conserve water. All attempts to encourage water conservation have been unsuccessful. Recently we had an incident where a homeowner purposefully ran their garden hose at full bore for a 24 hour period and wasted 10,000 gallons, a neighbor called and alerted us to the situation. Our normal useage for the 100 homes is approx. 15,000 gallons per day during the winter months. Another incident was when the local community Sewer District had very high flows coming into their system and they finally had to hire a Video Camera service to find our exactly who was inundating their sewage lines. They found the house and discovered two leaking toilets, the tenant, a renter, had informed the landlord of the problem 4 months earlier but she never did anything about it. The Sewer District was saddled with the costs of the extra flows and hiring the special Video equiptment, costing them many thousands of dollars to discover this problem. All water systems will be required to be metered per State Law to conserve both water and energy.	290,000	75	260 03	Napa	Ν	2009

674 3110043	3110043-007	Madden Creek Water Company	Water Conservation and metering project.	Installing meters at all customer service sites. This would involve locating and exposing service lines. These service lines are on average 3 feet deep due to freeze potental making installing a meter a significant project.	н	0	С	Very few of our customers are metered. Complete Metering would encourage all to conserve. The cost of metering would be prohibitive for us.	300,000	154	300 02	Placer	I	2011
675 3110042	3110042-008	Tahoe Swiss Village Utility	TSVU service meter installation program	Install electromic meters, yokes and boxes to every water service in the service area. Included in that will be the computer program and eletronic meter reading devices. Additionally, install three new electronic production meters at the sources so that all water produced can be accounted for.	н	0	С	The State of California's water users are requested, by the Governor of California, to reduce water consumption by 20%. Water Meters are an excellent and the most practical water conservation tool that water purveyors have.	715,000	378	300 02	Placer	I	2009
676 1700526	1700526-002	Pine Grove Water System	PINE GROVE METER PROJECT	There are already existing service connection, this project will add a meter valve, a standard service meter, and a meter box, plus labor. Metered rates have already been processed through the Prop 218 process, and accounts will coverted from the flat rate on a block by block basis. There are ninety-one (91) hookups, any future hookups will be metered and will be paid for from the hookup fee.	н ,	0	с	The Pine Grove Water System is a private system that has been placed under court ordered receivership by the Department of Public Health. The receiver is the Cobb Area County Water District (1710012). The project is to install water meters meters in a system that is currently using flat-rate billing, and has historically had shortages in the dry months, to the extent that supply must be subplimented.annexation into the Cobb Area County Water District is forthcoming.	22,750	91	304 03	Lake	II	2009
677 4400598	4400598-001	PURESOURCE WATER, INC	Water Meter Installation	The project is to physically locate all 79 service connections at the curb stop, then install "drive by" remote meters, curb stops, meter boxes and lids, plus the meter-reading equipment and software. This will permit the use of tiered rates and thus encourage water conservation. During periods of restricted usage, it will provide a means of monitoring use and of any violation of use restrictions. It will also permit leak detection for individual consumers and for the system as a whole.	н	0	С	Currrently the system is un-metered and only flat-rate service is offered. Project is to install drive-by remote- read meters all necessary at all service connections and appropriate billing and record-keeping software, etc. This is to comply with CDPH and CPUC, as well as Federal efforts to reduce water consumption.	70,000	79	450 05	Santa Cruz	II	2009
678 3103836	3103836-002	HIDDEN VALLEY COMMUNITY ASSOCIATIO	N Hidden Valley Community Assoc Domestic Supply System Replacement	Install residential meters for all 163 homes to promote domestic conservation.	н	0	c	Hidden Valley Community Assoc (HVCA) urgently requires complete replacement of 60-year-old Domestic Water Distribution Lines. HVCA owns a water plant supplying both irrigation lines of canal water, and domestic water supply to 163 full-time residence homes. Domestic Supply system has mixed pipe types: 4- in PVC glued bell, and 4-in asbestos cement pipe (AC), with some 6-in AC at meter. And 6-in and 4-in steel, badly rusted. All domestic water to 430 residents flow through rusted steel and AC sections. Many leaks are on glued bell 4-in pipes. There are no CWA standard gasketed bells. No water meters are on exitine system	200,000	161	499 02	Placer	I	2012

beyond delivery point, as raw water was initially purchased for treatment by HVCA.

679 3110019	3110019-007	Squaw Valley Mutual Water Comp	Metering of homes in SVMWC area	The project will be to install automatic reading meters (ARM) at every service connection. We currently have 263 connections. Some of the service boxes are being improved as part of the system improvements, so the number of service box improvements will not be the same as the number of meters needed. In the Auerbach master plan, the engineers used the cost estimate of \$2,500 per service box installation. The ARMs will need to be powerful enough to transmit through four to eight feet of snow (depending on location) during the winter months. The system will also need handheld readers, and computer program to handle the data management for billing. Service boxes 207@2500 515,500Meters 263@ 400 105,200Readers and computer program 1,000Subtotal 621,700Construction contingency 155,375 Construction cost 777,075Engineering, Admin, Legal 233,122 Total Project Cost \$ 1,010,197	H	0	c	The Squaw Valley Mutual Water Company (SVMWC) was built in the late 1950s and early 1960s in order to service a subdivision being developed on the northern side of Olympic Valley, CA. Pipes of varying sizes – from 1 inch to 10 inches – and of varying kinds – AC, steel, PVC and ductile iron were installed. Some fifty years later, these pipes are leaking and no longer provide the flow and water pressure needed for to meet modern public health and fire suppression standards. In December 2008, the SVMWC Board adopted a master plan for the water system developed by Auerbach Engineering. They computed the SVMWC average daily demand (ADD) at 431 gallons/day. The estimated Maximum Daily Demand (MDD) is 1,230 gallons/day. At this time there are no water meters in the system. Not having water meters means that we cannot quickly locate leaks in the system, provide feedback to our members on their water usage and potentially move to a tiered water rate system that rewards water conservation. Because the SVMWC serves a mix of second homes and full time homeowners, the issue of water meters has been very controversial. However, with the increasing price of servicing the system second homeowners are increasingly calling for water meters. Global warming will increase the challenge of providing unlimited water to our members, and therefore it is necessary to begin educating them on the extent of	500,000	263	500 02	Placer	I	2009
680 2710023	2710023-002	TASCO Spreckels Water Company	Install water meters for 210 residential connections -Spreckels WS	The Spreckels Water Company has developed installation costs and has generated standard specifications and details for meter installation at the 210 currently unmetered connections. No CEQA review is required for the installation of water meters on existing services. Procurement, installation and final testing will be completed prior to December 31, 2009. Cost breakdown follows: Engineering & Administration - \$ 1,500.00Procurement & installation - \$ 1,500.00Creating, certification & closeout \$ 1,000.00Contingency at 15% \$ 24,000.00Total Cost \$184,000.00	н	0	C	The Spreckels Water Company serves a small unincorporated community in Monterey County. The system was installed in the early 1900's. Meters for the 200 + homes in the older sections of town have never been feasible. Water services are clustered in groups of 3 in yards and adjacent to streets and sidewalks, curbs, etc. will be required to separate and install meters for each home. Monterey County has serious water shortage and quality issues and the installation of meters will greatly assist in water conservation to the been fit of the aquifers underlying the Salinas Valley. This updating of the infrastructure will provide benefit for this small working class community as well as the surrounding areas sharing the ground water supplies. This project will allow for an accounting of all purchased water, encourage conservation, and provide data for determination of system water losses. The system serves predominantly single family homes and currently has a high usage rate for the climate and demographics.	184,000	212	660 05	Monterey	Π	2009
681 1510054	1510054-004	PINON PINES MWC	Water System Improvements	Due to the lack of control over customer usage, PPMWC would like to replace all the flat rate services with radio read water meters. The tasks include disconnecting each flat rate service from the system and installing the meter, meter box, and transmitter for each service and reconnecting to the PPMWC system and the customer system.	СН	0	c	Currently Pinon Pines Mutual Water Company (PPMWC) serves its customers with a flat water rate per service connection. This does not allow the PPMWC to have control over the amount that the customers use each month. They would like the ability to be able to monitor the usage by installing water meters.	302,000	247	740 19	Kern	III	2012

682 4710001	4710001-006P	City of Dorris	Dorris Water Meter Project	City would need Preliminary engineering done to install H meters on all or our service locations. The environmental review would have to be performed to install all meters on our current locations. Construction would be the next task for installation of the meters.	0	с	The City of Dorris has mandated that any new water service or any building that is being reconstructed 50 percent or more is requred to have a water meter installed. That still leaves approximately 460 services without a meter and the City budgets can not afford to install that many meters. As a disadvantaged community our residents can not afford to pay for meter installation. The meters would make our residents accountable for the amount of water used and through their education, water resources would be saved as less water would be used through efficient use and recycling efforts. With less water use, the City's only well would be capable of serving the community for several years.	0	481	887 01	Siskiyou	I	2012
683 5610001	5610001-001	DEMPSEY ROAD MUTUAL WATER CO	Install water meters in all homes.	We would like to install meters on the 300 homes in our H water company. We need to pay for the meters, labor, training to read the meters, and training for the billing department on how to charge appropriately.	0	с	Our problem is that we don't have water meters on the properties. We charge a flat rate and some homes are overpaying while other homes are not paying enough. A family of two pays the same as a family of 6. We are concerned with our senior citizens paying too much because they are considered one family in the home while a young family can have up to 5-8 people living in the home.	350,000	300	900 06	Ventura	IV	2011
684 1010042	1010042-013	MALAGA COUNTY WATER DISTRICT	Malaga CWDInstallation o water meters	f Although not mandated for a District the size of Malaga, H the Residential Metering for Project will expedite compliance with the State requirement that all residential water services be metered by 2025 and provide data for residential conservation and management of the water system. Meters will be installed on approximately 232 existing unmetered residential services that currently pay a flat fee for unlimited water use. Residential customers will have an incentive to conserve water and will benefit by being able to control water costs through conservation efforts. Meters will provide data for budget based revisions to the existing rate structure and improve water system management through annual water audits. Conservation resulting from the project will not be growth inducing, almost all residential parcels in the community have been developed. Remaining undeveloped parcels are zoned for commercial and industrial use. Some MCWD wells have been removed from service due to Nitrate and DBCP contamination. Reduced groundwater pumping may reduce the potential migration of the DBCP plume and preserve water quality in non-impacted areas. The project will reduce the potential of poor water quality contributions from standby wells pressed into service by high water demand. Installation of water meters on all residences is identified as a Planned Activity in the Groundwater	0	c	An Infrastructure Rehabilitation Program Feasibility Study, funded by a Department of Water Resources (DWR) Proposition 13 grant, was conducted in 2004 by MCWD to identify water losses within the District. The feasibility study identified that a significant amount of water was unaccounted for in the system. A Leak Detection Report and a Metering Study were performed as a part of the study. The Leak Detection Report concluded that leaks from pipes, valves, hydrants and risers were not the source of unaccounted for water. The Infrastructure Rehabilitation Program Feasibility Study conducted in 2004 estimated that 20% of the water in the system was unaccounted for. Metering all service connections will allow water audits to identify locations where water wasting is occurring and assist in identifying leaking fixtures within residences. Reduced pumping will conserve groundwater reserves. Water savings are estimated to be 3.9% to 5.4% of total system usage approximately 95 AF/yr.	498,400	472	900 11	Fresno	11	2012
685 0510005	0510005-002	C.C.W.D., West Point	new clearwell	Construction of two new treated water storage tanks H	0	С	See Attached	1,750,000	556	1,400 10	Calaveras	ш	2001
686 2410011	2410011-008	LE GRAND COMM SERVICES DIST	New Water Meter InstallationLe Grand CSD	Le Grand CSD has prepared the improvement plans and H specifications for the installation of water meters for the customers of the District. The ability to install the water meters is dependent on funding, which the District is currently short on to complete the project.	0	с	The proposed project is to install water meters and purchase meter reading equipment for the customers of the District. The District customers currently do not have water meters. The District has prepared project plans and specifications for the water meter installation and is ready to put the project out for bid with a grant for funding on the project. The District has located all of the water service laterals to the individual residential customers and determined the meter size and meter box size and type of installation.	600,000	501	1,700 11	Merced	Ш	2012

687 3610048	3610048-004C	TERRACE WATER CO	Terrace Water Co. Meter Installation	Terrace Water Company is seeking support from the CDPH Economic Recovery funding program to install water meters on all of our approximately 600 service connections. Since its establishment in 1890, Terrace Water Company has billed on a flat rate system. With rising operating costs and emergency drought situations, we can no longer afford to operate with this rate structure. We are seeking funding to install meters on every service connection-residential and commercial. Over the last year, the Company has been surveying the service connections and installing shut-off valves where they previously did not exist. Nearly two- thirds of this project, the first step in installing meters, is complete. We are looking to install 5%3/4 meters on the majority of the services with mobile reading capabilities. Terrace Water Company currently has one staff member and cannot afford the added cost of hand meter reading. A radio frequency system allowing meter reading via drive-by is the most efficient manner of data collection.Installation will also include all meter boxes, brass fittings, collection equipment and software, as well as a computer to run the application. The installation of system-wide meters will result in water conservation, higher revenues, and the a more stream-lined billing procedure.	0	c	Terrace Water Company is seeking install meters on the entire system. The entire Terrace Water Company service area is without water meters and each of the connections, regardless of property use, is charged on a flat rate system. During 2008, Terrace Water Company pumped 264,870,000 million gallons of water for 600 service connections. This averages to 1,200 gallons a day per house, which is nearly 3 times the average usage. In 2006 our well level was 190 feet, and only 2 years later it is 230 feet. The Board of Directors has repeatedly requested conservation by its customers, but with no viable consequences, water wasting continues. Terrace Water Company was founded in 1890, and many of the lines in the current system are more than 50 years old—several date back more than 100 years to the inception of the Company. The 1950s resulted in great growth for the Terrace service area, with the building of hundreds of homes. Terrace Water Company currently services approximately 600 connections—the majority of which are single-family homes, though there are several commercial properties as well as a mobile home park. When water was bountiful and customers few, this system made sense, however after several years of drought and the state of California's water supply, this system is no longer feasible.In addition to the extreme need for conservation, Terrace Water Company is losing valuable	600,000	574	2,200 13	San Bernardino	v	2009
688 3610048	3610048-005	TERRACE WATER CO	Terrace emergency tie and system conservation improvements	Project will replace failing distribution lines, create an H intertie with a nearby system and install meters to help better manage and enforce water conservation.	0	C	System currently experiences frequent failures due to old and failing lines. During failures there is no backup water source thus leaving customers without water during repairs. It has no means to accurately measure water usage by customers resulting in a high water waste factor.	200,000	574	2,200 13	San Bernardino	v	2009
689 1010028	1010028-006C	Riverdale Public Utility District	Riverdale Public Utility District Water Meter Project	The proposed project will consist of installing new water H meters on all of the 930 existing services including the Riverdale High School. The addition of water meters would allow the District to monitor usage and identify potential leaks or other wasteful usage from its customers. Accurate metering from all of the customers would allow the District to switch to a metered rate. A metered rate would give incentive to existing customers to conserve water and would likely decrease wasteful usage. An increase in customer conservation would help to ensure that costly chemicals used in the new water treatment facilities are not being wasted.	0	с	Riverdale Public Utility District does not currently have any way of accurately monitoring water usage from all of their customers or detect leaks in the distribution system. The District must charge their customers at a flat rate. At present, the District does not have the infrastructure to accurately meter all of their customers and therefore cannot charge their customers at a metered rate. The Riverdale High School is one of the Districts largest customers and is currently unmetered. This makes it difficult for the District to identify potential leaks and overall usage from one of its largest customers. As part of a separate project, the District is currently in the process of designing new water treatment facilities for two of its water supply wells. The chemicals used to treat the water are costly and wasteful usage from the customers would result in uneconomical operation of the new treatment facilities.	650,000	866	2,416 23	Fresno	Π	2012
690 3110013	3110013-005	Tahoe Cedars Water Company	Meter Install	instal approx 1000 meters.installing meters will require H locating and excavating a hole approx 3.5 feet in depth at each home.	0	с	system has few metered services, it is believed that system will be required to install meters soon. installing meters would curb waste.	1,000,000	1,114	2,775 02	Placer	I	2009

691 3910017	3910017-003	San Joaquin County-Mokelumne Acres	Mokelumne Acres Maintenance District Meters	The work, in general, consists of the purchase and H installation by contract, of 1140 radio read type water meters on all unmetered connections in the Mokelumne Acres Maintenance District.	1	0	C	The Mokelumne Acres water system provides domestic drinking water to 1140 connection residential subdivision located in an unincorporated area of San Joaquin County. The water system is currently unmetered and properties are assessed annually for water service. The assessment is unrelated to water use. As California enters the third consecutive year of drought, San Joaquin County is seeking to fully meter its water systems. In addition, San Joaquin County has purchased a drive-by "Automated Meter Reading" system. Installation of water meters conserves water. Use of the AMR conserves labor, fuel, equipment use, and traffic congestion during meter reading cycles.	1,140,000	1,103	3,640 10	San Joaquin		2009
692 3110009 3110009-002 Meadow Vis 693 1710015 1710015-005 Hidden Valle	Meadow Vista County Water Dist		Replace two (2) 2mg reservoirs with welded steel tanks. H	1	0	с	Storage reservoirs have floating covers which	2,259,000	1,370	3,640 02	Placer	I	1998	
693 1710015	1710015-005	Hidden Valley Lake CSD	Automatic Meter Reading System	Install fixed network communicators (data collection H hardware) throughout the District, replace registers with automatic meter reading devices, replace old meters, install software, which interfaces with existing billing software and install a GPS system to interface with software program. Water conservation is critical more than ever. The Fixed Network project would be an efficient and effective addition to the District's current water conservation program.	1	0	C	The District has leak detection issues relating to the customer and the water system. With the Fixed Network meter reading system the District would be able to detect leaks 24/7 in the water system and on the customers' side. This program overlays with a GPS program to enable mapping of the water system to detect leaks within 2 feet. Being a small agency the District also encounters meter reading staffing issues. This would relieve Field Operations staff to continue to run their daily operations without interruptions. Currently, meter reads ties up our entire Field Operations for 3-4 days.	1,100,000	2,433	6,971 03	Lake	II	2009
694 5010006	5010006-001	City of Modesto, DE Waterford	Waterford Citywide Meter Installation	The City of Waterford will be fully metered and billed according to metered water usage. This will include installing meters and automated meter reading equipment on over 1,100 water services. As meters are installed by contractors, up to one-half of the sites will require complete service replacement where old galvanized pipes currently exist from the water main to the residence. A meter, meter box, and automated reading device will be installed at each site. Once meters are installed, a leak audit will be performed to locate water wasting leaks in the system so that they can be repaired. With a fully metered system and leak detection and repair, the daily water demand for the City of Waterford can be reduced 20% to 30%. This will produce more water volume and pressures for domestic use, school uses and emergency fire protection. The regional ground water beneath the City of Waterford will be protected from depletion and water waste will be in check.	1	0	C	The City of Waterford Water System is owned and operated by the City of Modesto. The water system for the City of Waterford derives its water solely from six ground wells. The system is more frequently close to violating State requirements to maintain above 20lbs. pressure throughout the system. During peak day usage in the summer months, all wells are operating at full capacity. There is no storage capacity or surface water available at this time for the Waterford system to utilize. There are over 2,200 water services in the Waterford system. About one-half of these services are billed on a flat rate and do not have water meters. Water production for Waterford is nearly double that of nearby communities that are billed on actual water consumption using meters. A recent consultant study of the system has suggested that water meters be installed throughout the system to reduce water consumption. Until meters are fully installed, it is impossible to conduct an efficient water audit to find unaccounted water usage, leaks and unauthorized water use. Currently the City of Waterford is restricted from growing due to the water situation. Best management practices have been implemented to conserve water without meters, including daily water use restrictions, however these programs have not	1,000,000	2,214	7,897 10	Stanislaus	Ш	2009

been effective where no meters exist.

695 0310012	0310012-012	AWA Buckhorn Plant	CAWP Jackson Pines Storage Tank Replacemen	The Jackson Pines Tank is part of the Central Amador t Water Project ('CAWP') system, located along Irishtown Road, near Highway 88 in Amador County. The Jackson Pines Tank is fed by the CAWP main, serving the Jackson Pines subdivision plus one subdivision with entitlements (Black Oak Ridge). A 2,400 square foot hypalon cover encloses an existing 270,000-gallon conical shaped, partially recessed Jackson Pines Tank. The Jackson Pines Tank floating cover is equipped with a tension pier system and three surface drains. The existing conical shaped tank will be removed (portion underground will be backfilled) and replaced with a new storage tank (approximately 10 feet in height and 76 feet in diameter), with a volume of 300,000 gallons. The recessed portion of the existing conical tank will be backfilled and the new tank will be constructed completely above-ground. The new tank will be equipped with features such as modernized system controls; inlet, outlet, and overflow pipes; air vent; manway; liquid level gauge; and tank ladder with guardrail. This project will significantly reduce operator time spent maintaining the floating cover and increase the reliability and safety of drinking water by significantly reducing the potential for violation of total coliform maximum contaminant level per Section 64426.1 of Title 22 of the California Code of Regulations.	н	0	c	A 2,400 square foot hypalon cover encloses an existing 270,000-gallon conical shaped, partially recessed treated water storage reservoir. Section 64585 of Title 22 of the California Code of Regulations outlines specific criteria for distribution reservoirs. When operated and maintained properly, distribution reservoirs with floating covers meet these criteria. However, covers fatigue and crack due to the up and down movement of stored water. Birds peck holes in the covers and wind borne debris collects in the folds of the cover. Rain water collects on the cover. Operators must walk out on the covers to repair, inspect, and clean the cover and pumps for rainwater removal. Although the site is enclosed with a chain link fence (with barbed wire), the covers could easily be cut with a knife or falling tree branch from a significant rain event, exposing treated water for distribution to the elements. Removal of the floating covers with a new storage tank significantly reduces the potential for violation of total coliform maximum contaminant level per Section 64426.1 of Title 22 of the California Code of Regulations, the Stockton office of the Department of Public Health has reported their concerns over the continued use of floating covers, and has recommended replacing floating covers.	1,060,000	2,558	8,508 10	Amador		2009
696 1010001	1010001-005c	BAKMAN WATER COMPANY	Bakman WC - Installation of Water Meters	Water lines need to be moved into customers property lines, in most cases large lots have been split several times and existing lines would need to be separated for individual meters to be installed. On apartment complexes and businesses the plumbing in the ground would need to be located and split to allow for individual services as many lines were put in without being documented on maps or have been misstated in past developments recorded documents.	Н	0	С	Our customers live below the poverty line and would be severely affected if CPUC increases rates to comply with the State Law requiring water meters. In addition we would be able to show great amounts of water conservation by implementing water meters on our Apartment Complexes and business that are currently on flat rate. If we could receive amounts at this time to only comply with water meters for Apartment Complexes and business we would be able to complete this portion with a grant of approximately 2 million.	3,093,750	1,910	8,865 11	Fresno	III	2012
697 2910003	2910003-007	Truckee-Donner PUD, Main	Water Meter Box Retrofit Project	water meters	н	0	С	The District subject to the requirements of AB 2572 regarding reading of water meters and the implementation of volumteric billing. There are approximately 4,000 existing customers where water meter boxes do not exist or must be upgraded to accommodate the installation of a water meter. Once these meter boxes have been upgraded, the District will install new water meters to all full compliance with AB 2572. The District has also issued a Request for Proposals for a consultant to develop a new volumteric rate structure. Upon completion of the project and implemenation of the volumteric rate structure, the District and 20 percent.	10,000,000	12,271	14,300 21	Nevada	I	2009

698 3410011	3410011-007	Galt, City of	Galt Water Meter Installation	The tasks associated with this project would consist of engineering, installation, and inspection of installation of water meters (and replacement of existing laterals where needed) and fixed network communication system, such that all customers in the City of Galt Water System are metered. The vendor/supplier of the meters and fixed network equipment have not been selected. This selection would be based on bids received by the City in response to bid documents. Plans and specifications have not been written, and costs of this task would be covered in the budget for this project.When complete, the system will consist of antennas (associated with fixed network collectors) and a host computer. Signals from the water meters will be sent wirelessly, captured by the collector and sent to the host computer. The data will then be downloaded into the City's utility billing system, thereby reducing the labor cost associated with reading meters. The system will continuously measure flow, and will allow for notification of customers that have a water leak. Other featues could be incorporated to allow for customers to review their water usage daily. These features would encourage water conservation and reduce leaks, helping the City to approach the requirements of 20% water reduction by 2020.	H s	0	C	Almost all commercial customers are metered. In addition, water meters have been installed at all residential units constructed in 2005 or later. However, meters are not in place at over 80% of the residential customers in the water system. In 2008, the City embarked on a Water Meter Implementation Plan, which identified costs associated with a fixed network metering system. This plan has been completed, and construction/installation costs from the report are the basis for the cost estimate. This project would provide funding for installation of water meters at over 6,600 residences. Approximately half are deemed "meter ready", meaning that a meter can be installed with minimal effort. The remaining are deemed semi-meter ready or not meter ready, meaning that replacement of a portion or all of the service lateral will be needed in order to install a meter and meter box. In order to construct these services, roads and/or private landscaping may be excavated. Project budget would cover costs of replacing to existing conditions at the end of the project.	8,600,000	7,872	22,982 09	Sacramento	I	2012
699 1510005	1510005-007	Delano, City of	City of Delano New Water Meters	The City of Delano will install new Automated Water Meters (AWM) to the existing 3,620 unmetered water accounts currently receiving flat rate bills. The installation of meters for the project is expected to result in water savings of 487 arce-ft annually. The project will result in quantifiable and sustained water savings, improved local water management, enhanced leak detection, and accurate measurement of water consumed by customers. In order to find a cost effective and time efficient method of water metering, the City has researched different AWM technologies and found that the Mobile Radio technology, or AMR, uses technology most effectively to minimize labor costs in comparison to the Manual Read, Touch Read and Fixed Network Radio. The City of Delano has chosen to use a residential meter produced by Badger. The specific type of meter chosen is the 1-inch Recordall Cold Water Engineered Polymer Disc Meter, Model 40PN. All the Recordall meters are compatible with a Badger AMR system, with the addition of a transmitter or an encoder register. The Badger system is based upon narrow band communication and utilizes one-way communication. The Badger AMR system will greatly minimize the labor, maintenance and operation costs of Delano's municipal water utilities.	H e e i i	0	c	The City of Delano (City) currently utilizes existing groundwater, as its sole source of water supply. Groundwater is drawn from the Kern County Subbasin aquifer via eleven (11) groundwater wells scattered throughout the City. As population grows and water demand increases, additional wells are being drilled to augment the existing water supply. By 2013, the water supply system will have seventeen (17) active wells.According to survey work done of the 2010 Urban Water Management Plan, there were 8,848 service connections within the City service area. 59 percent of the service connections are metered and 41 percent are unmetered. The combined annual volume pumped into the system was 2,045 million gallons. The City Water System service area population (water users served) was 48,957. The City is a member of the California Urban Water Conservation Council (CUWCC) since 2007 and is a signatory to the Memorandum of Understanding regarding Urban Water Conservation in California. As a CUWCC member, the City is committed to water conservation. Water Conservation practices are implemented within the City's service area with emphasis on Best Management Measures (DMMs) that conserve and increases the public awareness on water conservation and other water-related issues. The City recognizes water conservation and BMPs/DMMs	3,150,000	8,670	53,855 12	Kern	III	2012
700 5710006	5710006-024	City of Woodland	Woodland-Water Meter Phase 3	The project involves the installation of meters on 10 condominiums.	н	0	С	There are about 10 condominium that are yet to be metered, this proect would provide metered connections to these condominiums	900,000	14,065	56,000 09	Yolo	I	2012
701 3410020	3410020-033	City of Sacramento	Complete metering of water system	Meter project	н	0	С	Meter project is necessary to meet the requirements of Assembly Bill 2572 by installing water meters on existing water services within the Cityof Sacramento. This law set a deadline of 100% metering of all residential and commercial accounts by 2015	5,000,000	137,886	407,018 09	Sacramento	I	2010

702 1910067	1910067-044	LOS ANGELES-CITY, DEPT. OF WATER & PC	DW Lower Franklin Reservoir Floating Cover - Replacement	This project removes the existing cover and designs and H installs a new floating cover. The project includes modification to the inlet and outlet structures to provide better cover fit and performance. The project would also install reservoir perimeter fire hydrant system to provide wash down capability for improved maintenance.	0	С	The floating cover at Lower Franklin Reservoir is well beyond its 20 year design life. Maintenance of the cover has become increasingly more difficult as the Hypalon material has degraded to a point that the integrity cannot be maintained by patching. The cover must be replaced in order to maintain water quality standards that protect public health, and to meet State Waterworks regulations which require that all distribution reservoirs be covered. The reservoir was recently inspected by the California Department of Public, Health Drinking Water Program and it was recommended that the cover be replaced as soon as possible. While recent budgetary reductions have pushed this project out 10 years, estimate will be revised to reflect accelerated project schedule.	6,884,127	686,422 4,	071,873 15	Los Angeles	IV	2012
703 1910067	1910067-045	LOS ANGELES-CITY, DEPT. OF WATER & PC	DW Green Verdugo Reservoir Floating Cover - Replacement	This project removes the existing cover and designs and H installs a new floating cover. The project includes modification to the inlet and outlet structures to provide better cover fit and performance. The project would also modify the mixer location to improve chloramine treatment.	0	С	The floating cover at Green Verdugo Reservoir is beyond its 20 year design life. The cover must be replaced in order to maintain water quality standards that protect public health, and to meet State Waterworks regulations which require that all distribution reservoirs be covered. The reservoir was recently inspected by the California Department of Public Health, Drinking Water Program and it was recommended that the design of the new floating cover begin as soon as possible. While recent budgetary reductions have pushed this project out 10 years, estimate will be revised to reflect accelerated project schedule.	124,178,781	686,422 4,	071,873 15	Los Angeles	IV	2012
704 1300555	1300555-001	MITCHELL'S CAMP FAMILY ASSOC.	Mitchells Camp Meter Project	Connection meters so we will better be able to manage H water usage and support water conservation.	0	Ν	We have been told by the CDPH that our well needs to be augmented and storage increased to meet daily demands and fire flow. We cannot regulate water usage by individual customers because we do not have meters for each house. We also fluctuate on the boarderline of exceeding the MCL for arsenic.	50,000	62	80 14	Imperial	V	2012
705 0910024	0910024-002	Glenridge Water Company	Glenridge Water Meter Project	Install approximately 42 3/4" water meter setters with H insulated boxes at or near property line. Since 1992 new construction has required the utility to install 3 meter setters on the new service connection. The installation will include all valves and meters that are low lead, compliance with California Law and NSF 61 non-lead. Meteres would be an acceptable remote type of read either Hersey, Badger or equal. The meter project will require a computer program to allow for "drive-by" data collection. At the office the data will then be converted to a water invoice to the customer.	0	Ν	There are inequalities in the supply of water in a flat rate system. Since the water system has very slow or non-growth there will not be major increases in population. It is a State Law by 2020 to install meters on all connections but there maybe variances for systems 500 connections or less. Water Meters are the best conservation tool available to utilities.Since the electronic remote read meter is the only type to be considered in snow and freezing conditions. The useage would be able to be regularly, bi-monthly, read. Thereby, potentially conserving water and at least customers would pay for what they use.	97,000	43	130 02	El Dorado	1	2011

706 5510001	5510001-008	TUD - Sonora/Jamestown Water System	Water Treatment Plant Regionalization Study	TUD proposes to hire engineering and planning consultants to increase water treatment plant reliability, facilitate compliance with current and upcoming disinfection and log removal regulations, reduce the regulatory burden on the state DHS and TUD, and reduce costs to ratepayers. The consultants will evaluate the possibility of constructing a regional water treatment plant, intended to serve the majority, if not the entire TUD service area. TUD currently owns property of adequate size and situated in a location to facilitate such a treatment plant or plants. The consultants will also evaluate the concept of multiple sub regional water treatment plants, ultimately reducing the number of permitted systems from 14 to approximately 4. The scope of the consultant's analysis will include site opportunities and constraints, cost benefit and constructability of a regional or sub regional plant approach. Raw water quality will be evaluated and an appropriate treatment plant design technology proposed. Deliverables from the evaluation will include identification of the preferred site(s) for the regional/sub regional plant(s), determination of the appropriate treatment plant technology, a preliminary site layout, detailed cost estimates for each option as well as a cost benefit analysis for each. For the selected preferred alternative(s), an Environmental Impact Report will be prepared for CEQA compliance, as well as	I	45	c	The Tuolumne Utilities District (TUD) currently operates 14 separate DHS permitted water systems, 13 of which are served by treated surface water from separate water treatment plants located on the TUD ditch system. The majority of these small independent systems were acquired by TUD from private and mutually owned water companies and special districts which were financially or managerially unable continue system operation due to failing infrastructure and/or drinking water standards violations. The wells serving one of the TUD systems have been diminishing in production and have tested positive for Uranium. The remaining TUD well systems are nearly all in excess of the secondary standard for Iron and Manganese and are diminishing in production capacity. The TUD surface water treatment plants are located on small parcels with no room for plant expansion, currently operate at or above treatment plant capacity and DHS filtration rate standards during the summer months. TUD has routinely requested authorization to exceed DHS maximum treatment plant flow requirements, thus jeopardizing finished water quality and system supply reliability. Limited opportunity exists for connection to adjacent TUD owned systems due to the fact that each adjacent Treatment plant is at or near production capacity. Expansion of each of these plants is required within the next 5 to 10 years to facilitate compliance	500,000	4,342	10,294 11	Tuolumne		2007
707 5510010	5510010-006	TUD - Crystal Falls Water System	New Crystal Falls SWTP	Construct a new SWTP.	I	30	С	The Crystal Falls SWTP operates at filtration rates that exceed the SWTR during peak demand periods.	15,000,000	2,232	5,301 11	Tuolumne	Ш	2007
708 1200671	1200671-007	Benbow W.C.	Water Treatment Plant Clarifier	Install .3 MGD clarfier with surge storage and boost pumps and convert existing pressure roughing filter to multi-media filter.	I	25	с	The existing surface water, direct filtration treatment plant does not have sedimentation or clarification. A single media, roughing filter is the only pre-treatment and is ineffective during the frequent, winter high river levels with associated high influent turbidity.	265,000	101	150 01	Humboldt	I	2009
709 5410007	5410007-002	LSID - Tonyville	Tonyville Water Quality Improvement Project	The District believes that the construction of a new water supply pipeline for the Tonyville System will result in lower disinfection by-products (DBPs). The new pipeline will enable the District to provide unchlorinated water to its treatment plant which should reduce the formation of DBPs. The District does not have, however, supporting data that would establish anticipated DBP levels resulting from changes to its raw water supply and associated pipeline configuration. The District proposes to conduct a 12-month feasibility study to establish probable DBP levels resulting from an unchlorinated water supply. The District proposes to install a temporary pipeline from an adjacent district's irrigation water supply service turnout to the Tonyville Water Treatment Plant for testing purposes. The adjacent district only provides unchlorinated water for irrigation purposes. Elements of the proposed feasibility study consist of: design and construction of the temporary pipeline; monthly testing for DBPs at various locations; daily monitoring for chlorine esidual and flow for CT compliance determinations; routine monitoring of the adjacent irrigation district's water lateral and service turnouts for chemical addition; and a technical report summarizing the study findings. This approach will provide the	Ι	25	c	The Lindsay-Strathmore Irrigation District (District) provides water for domestic and/or agricultural irrigation purposes. The District utilizes imported surface water as their primary water supply. The District has a contract for Class 1 water from the Central Valley Project. The water is delivered via the Friant- Kern Canal. Since the surface water is used for non- potable domestic purposes, in addition to agricultural use, the District is required to provide disinfection. The District chlorinates all of their water supply to achieve disinfection. Chlorination occurs at the District's Friant- Kern Canal turnout and at the District's High Level Reservoir. The District owns and operates a water treatment plant that serves the Tonyville Tract. The Tonyville system serves approximately 50 connections. Surface water travels in the District's conveyance pipelines approximately 50 miles from the District's nearby 12-inch diameter irrigation water main. The District utilizes a 60 gpm (86,400 gpd) water treatment plant to produce drinking water for the Tonyville system. The facility was completed in 1995. The treatment plant is a conventional, packaged	125,000	50	400 12	Tulare		2007
710 1210022	1210022-006	Resort Imprvmt. Dist. #1	Surface water treatment plant improvements	Develop plan and specifications and complete construction.	I	25	С	Need to upgrade water treatment plant facility. System relies on prefiltration to meet disinfection requirements.	935,000	513	1,500 01	Humboldt	I	1998

711 0310021	0310021-007	Amador County Service Area #3/Unit 6	Lake Camanche Surface Water Treatment Plant	This project inicludes the supply transition from wells to 1 surface/aqueduct source water. This alternative includes the following:1) A 2.0 MGD Regional Water Treatment Plant located at South Shore Lake Camanche that would provide service to EBMUD, CCWD, and AWA customer in the South and North Camanche Lake vicinity.2) A regional transmission pipeline crossing Lake Camanche to bring water across the lake to the north shore for service to Camanche Village and EBMUD.3) A transmission pipeline to bring supply water from the lake crossing to Tank 9, which will supply the entire AWA WID #7 by gravity.	2	:5	c	Numerous feasibility studies and engineering reports have been conducted over the past ten to fifteen years by Amador Water Agency, EBMUD & Calaveras County Water District ('CCWD') to either initiate or improve potable water service in the Camanche area of Calaveras and Amador Counties. A conclusion to each of the studies is that the most reliable source and cost effective benefits would be achieved through a new regional surface water supply, 2 MGD membrane water treatment plant at South Shore Lake Camanche, a water supply line from EBMUD's existing Aqueducts and distribution system including a treated water pipeline across the lake to serve North Shore Lake Camanche. This water treatment plant would service areas described below and Camanche WID #7. See the KASL Feasibility Study: Camanche Regional Water System, October 1999, Appendix S and the KASL Preliminary Engineering Report: Camanche South Shore Water Treatment Replacement, December 2000, Appendix T.The community served by AWA has now reached a critical need to secure a reliable water source and provide treatment meeting current and future State Treatment Rules and Regulations. The Water Agency could own and operate the regional WTP, providing retail and wholesale service, which represents a cost effective alternative to the independent upgrade, modification,	1,930,000	723	2,386 10	Amador	III	2009
712 1710001	1710001-006	Clearlake Oaks County Water District	Install Backwash Holding	Install a 400 KW generator with electrical switching	2	25	с	Recycled backwash water to headworks shall be	145,000	1,667	2,458 03	Lake	Ш	2007
713 5510012	5510012-011	TUD - Upper Basin Water System	Ialık Sierra Pines Water Treatment Plant	The proposed project includes the design and I construction of a WTP that would consolidate four water systems, provide for permanent interconnections of adequate volume to supply the needs of two additional public water systems and eliminate four to six WTP's. The new WTP will produce treated water in compliance with all current and future water quality regulations. TUD currently owns property of adequate size and situated in a location to facilitate construction of this project. This new WTP will be an integral part of the water supply for all current customers of the District within the County. This land the start of the TUD ditch water distribution system.	2	15	c	The District owns and operates 14 water treatment plants (WTP) that serve 13,000 treated water customers. The majority of these WTPs are of limited treatment capacity and capability. There are an excessive number of water treatment plants for the number of customers primarily due to the fact that these once independent systems were acquired by TUD from private and mutually owned water companies and special districts which were financially or managerially unable continue system operation due to failing infrastructure and/or drinking water standards violations. Due to the chlorination contact time required under the Enhanced Surface Water Treatment Rule and state maximum filtration rate standards, two of the existing WTP's, Upper Basin and Crystal Falls, do not have capacity to meet the need of current customers and have had to receive State approval to exceed the ten State standards for filter rate in order to meet the needs of existing customers during the summer months. These plants along with Willow Springs and Cedar Ridge do not have the land space and / or the technology to meet currently adopted and proposed standards by the State and Federal government (L2 ESWTR).	7,684,875	1,455	3,446 11	Tuolumne	111	2007
714 5410006	5410006-002	Lindsay, City of	Unfiltered Backwash Water	Redesign and replumb existing raw water supply and l valving to allow finished water to be used for backwashing filters.	2	25	С	Unfiltered surface water being used for backwashing filters at surface water treatment plant.	400,000	2,335	11,450 12	Tulare	Ш	2006
715 0600041	0600041-001	Fouts Springs Youth Facility	Surface water treatment plant improvements	Replace existing raw water storage tank and piping. I Add 50,000 gallon clearwell tank.	2	25	Р	Surface water treatment plant improvements are needed to comply with the Cryptosporidium Action Plan and to treat higher turbidity water.	224,000	1	120 21	Colusa	I	1998

716 5500116	5500116-001	PEPPERMINT CREEK MHP #15	Surface water treatment plant improvements	THE ABOVE ITEMS NEED TO BE INSTALLED TO IMPROVE I THE PERFORMANCE AND RELIABILITY OF THE TREATMENT PLANT TO INSURE COMPLIANCE WITH THE SWTR.	20	C	NEED TO INSTALL A STATIC MIXER, FILTER-TO-WASTE VALVE, BACKWASH METER, PLANT SHUTDOWN FEATURE, REPLACE SURFACE WASH SYSTEM, INSTALL ALARM SYSTEM, AND INSTALL PARTICLE COUNTER.	32,000	89	280 11	Tuolumne	Ш	1998
717 5510033	5510033-004	TUD-Scenic View/Scenic Brook	Phoenix ditch replacement shaws flat pipeline to phoenix rd	t CONSTRUCT A PIPELINE TO REPLACE THE OPEN DITCH I FROM THE SHAWS FLAT PIPELINE TO PHOENIX ROAD.	20	С	THE PHOENIX DITCH THAT SUPPLIES THE WTP IS CONTAMINATED FROM RUNOFF CAUSING THE PLANT TO HAVE DIFFICULTY MEETING OUR DEPARTMENT'S CAP.	147,000	265	625 11	Tuolumne	Ш	1998
718 1710022	1710022-006	Lake County CSA 20 - Soda Bay	CSA# 20 Soda Bay Water System Infrastructure Improvements	The project description includes the installation of a pre-1 treatment clarifier, capable of processing .5 MGD. The clarifier will be located in an existing vacant area at the north side of the water treatment facility, adjacent to the raw water intake piping. The location will allow convienent connection of valves and piping to facilitate the pre-treatment process and disposal of clarifier residuals to the backwash storage ponds. Included in the project is increasing the storage capacity of the backwash storage ponds. Included in the project is increasing the storage capacity of one redwood tank with larger steel tanks, replace the existing chlorine gas disinfection system with a liquid chlorine based system and replace the filter media of the trident package plant units.	20	C	The Soda Bay Water Treatment Facility treats surface water from Clear Lake to drinking water standards for the customers in CSA# 20. The treatment process is significantly challenged by summer algae blooms and seasonal water demand and insufficient storage capacity. The extended treatment and semi-continuous backwash cycles have resulted in a CDPH directive to accomodate increased backwash water. This application for pre-treatment equipment (pre- treatment was omitted in the original design and construction) which will remove organics prior to the water treatment process, solving the need to continuously backwash, eliminating the cause of the excess volume of backwash water, and need for additional backwash water storage. The water distribution and storage system has redwood tanks that leak and insufficient water storage capacity.	1,500,000	596	1,342 03	Lake	Ι	2009
719 1710021	1710021-002	Lake County CSA 21 - North Lakeport	Liquid Oxygen Supply System	The Liquid Oxygen system consists of one steel storage I tank and feed system. The liquid oxygen storage tank (8'x15', approx 3000 gallon steel) will be anchored to a poured concrete slab, located adjacent to the treatment building. Associated pipes, controls, and evaporator unit will be installed to connect the liquid oxygen system to the supply ports on the ozone generators. It is intended that the tank will be equipped with telemetry to enable the liquid oxygen supplier to automatically monitor and re-supply.	20	C	The North Lakeport Water Treatment Facility supplies water for customers within County Service Area #21. The facility treats surface water from Clear Lake to drinking water standards. Part of the treatment process includes ozone treatment. The existing source of oxygen for the ozone generation systems is compressed air. When the compressed air system fails, ozone generation stops, and treatment stops. Regulatory requirements demand an adequate supply of clean heathful water for its' customers at all times. The Liquid Oxygen System will replace the obsolete compressed air system with oxygen to produce ozone at the current installed capacity of 40 lbs/hr., and fully comply with DPH goals and requirements.HEALTH BENEFITS include a reliable supply of oxygen to the ozone generation equipment and treatment process, free from the mechanical burden and potential aerosol contaminents of the air compressor system. The reduced electicity use will be an additional benefit to the environment (reduced greenhouse gases and other contaminents) as well as lower PG&E costs for operations. ECONOMIC BENEFIT includes construction (engineering, equipment supply, and labor to install), and ONGOING economic benefit (supply and delivery of liquid oxygen). This	102,500	1,204	2,868 03	Lake	Ι	2009

liquid oxygen system will benefit internal operations through increased reliability and improve ozone generation efficiency.COMPLIANCE BENEFIT will be

720 5410006	5410006-008	Lindsay, City of	Water Treatment Disinfection By-Product Mitigation Project	While modifying the current gas chlorine treatment process to a chloramine treatment process is a historically proven method of primary disinfection, part of the planning process would be to explore other potential methods of THM compliance. The final desired outcome of the planning process would be identification of the most effective, long term compliance of THM compliance.	20	C	The City of Lindsay has used gas chlorination as primary disinfection for many years and has compiled with the current THM regulation. There has however, been a recent case where the annual average for the Lindsay water system to be out of compliance. This was the second quarter reporting for the Page-Moore area.In preparation of the 2013 Phase II THM Compliance, the City is seeking alternate primary disinfection processes. The City of Lindsay has limited access to water supply. We rely on a long term contract with the United States Bureau of Reclamation (USBR), Wells 14, 15 and 11 and provide the water supply for the City and surrounding areas that are connected to our domestic water system. Our long term USBR contract amount is capable of sustaining City demands but is constantly in flux. Recent allocations to San Joaquin River Restoration, unpredictable drought patterns which have reduced the City contract allothern are immense impacts to a constant, reliable water supply. The USBR contract water is delivered to the City to draw water from the canal. When this occurs, it creates a greater reliance on our very limited groundwater supply. The City's largest and most reliable water supply will soon not meet State regulations. It is the intent of this application to remedy the disinfection by ordouct problem.	585,000	2,335	11,450 12	Tulare		2012
721 5510002	5510002-006	TUD - Ponderosa	Ponderosa Hills UV Installation	The Ponderosa water treatment plant is a conventional I treatment plant with pressure filters. The District has reviewed several options which included replacement of the pressure filters with membrane filters, the addition of ozone, source water protection, GAC and various combinations all of these options. The length of the PG&E and district ditch systems from the South Fork of the Stanislaus River to the treatment plant is over 8 miles and passes through many dozens of private properties, with septic systems, as well as public and private timber lands. The probability of protecting the water quality without piping the entire system is extremely low. A project that would include piping the ditches would be cost prohibitive and an extreme ECQA challenge. The cost for new or additional membrane filter and ozone equipment is greater than UV equipment. The most economical and expedient way to address the increased disinfection requirements of LT2 will be the installation	15	c	The Ponderosa water treatment plant serves approximately 1,430 customers in the Ponderosa Hills area of Tuolumne County. The treatment plant source water originates in the South Fork of the Stanislaus River and is conveyed to the treatment plant though PG&E's and Tuolumne Utilities District ditch systems. The District has recently started testing for glardia and cryptosporidium in its ditches. Glardia has been found in all locatins tested in the District's ditch water and cryptosporidium in the source water for the Ponderosa water treatment plant. In the first five months of testing the source water for the Ponderosa plant has had 4 positive tests for cryptosporidium with results as high as 32 ocysts per sample. This level and frequency of the cryptosporidium tpent will be in bin four for compliance with EPA LT2.	650,000	611	1,461 11	Tuolumne	11	2009

of UV units. There is adequate space and power on the treatment plant site for the new equipment. There is no other water system in the area that this system

could be connected to.

722 2010003	2010003-003	BASS LAKE WATER COMPANY	Willow Creek Surface Water Treatment Plant	In 2005, Boyle Engineering prepared a water treatment I plant expansion feasibility study for BLWC. That study recommended that BLWC construct a new surface water treatment plant and raw water intake to replace the existing WTP. Based on the Boyle report, BLWC is proposing to replace the existing direct filtration Willow Creek Water Treatment Plant with a microfiltration treatment plant located along the northeast corner of Bass Lake. The proposed project would include demolition of the existing WTP facilities, which are located approximately 0.1 mi east of North Fork Willow Creek, and construction of new water treatment plant facilities immediately north of the County Road 432 Bridge at North Fork Willow Creek. New facilities would include a treatment plant building (3250 ft2) housing two packaged membrane treatment units, a 67,200 to 195,100-gallon chlorine contact tank, two backwash tanks, a 75,000-gallon raw water storage tank, a chemical neutralization tank, water intake pipe and screen along North Fork Willow Creek, 10 inch diameter treated water distribution pipeline, wastewater sever pipeline connection, 20 ft wide access road (500 ft length), raw water pump station, and a standby generator. Site work includes grading and paving, site drainage and erosion control upgrades, site perimeter fencing, power and phone utilities (addition of a single pole and transformer), earth retaining walls, water and	15	5	c	The domestic water supply for the Bass Lake Water Company (BLWC) is provided by a direct filtration surface water treatment plant (WTP) and several wells. In order to supply enough water to meet peak demand periods during the summer months, BLWC must operate the WTP at a filtration rate of almost 4 gpm/ft2, which exceeds the 3 gpm/ft2 limit established in the Surface Water Treatment Rule (SWTR). In 1993, the California Department of Public Health issued Compliance Order 03-187 to BLWC requiring BLWC to bring the WTP into full compliance with the SWTR. BLWC has received temporary approval from the California Department of Public Health to operate the WTP at the higher filtration rate while plans are made to bring the WTP into compliance with the SWTR or to construct a new treatment plant.In addition to being out of compliance with the SWTR, the existing WTP utilizes an approximately 1,600 foot long raw water pipeline that is over 60 years old. The unlined steel pipeline traverses extremely rugged terrain, follows a very indirect route, and is in extremely poor condition. BLWC has attempted to repair the pipeline's numerous leaks with pipe clamps, wraps, and plugs, but new leaks appear as soon as the old ones are repaired. A major rupture in the raw water pipeline would quickly leave customers without potable water and fire protection once the treated water storage reservoirs are drained.	3,500,000	989	2,800 11	Madera	Ш	2009
723 5510013	5510013-012	TUD - Columbia Water System	Columbia WTP UV Project	The Columbia water treatment plant is made up of three up-flow clarification units. Each unit is .SMGD. The District has reviewed several options which included replacement of the up-flow clarification units with membrane filters, the addition of membrane filters, the addition of ozone, source water protection, GAC and various combinations all of these options. The length of the PG&E and district ditch systems from the South Fork of the Stanislaus River to the treatment plant is over 15 miles and passes through dozens of private properties, with onsite sewage disposal systems, as well as public and private timber lands. The probability of protecting the water quality without piping the entire system is extremely low. A project that would include piping the ditches would be cost prohibitive and an extreme CEQA challenge. The cost for new or additional membrane filter and ozone equipment is greater than UV equipment. The most economical and expedient way to address the increased disinfection requirements of LT2 will be the installation of UV units. There is adequate space and power on the treatment plant site for the new equipment.	15	5	c	The Columbia water treatment plant serves approximately 3,653 customers in the Columbia and Gibbs areas of Tuolumne County including the Columbia State Historic Park. The treatment plant source water originates in the South Fork of the Stanislaus River and is conveyed to the treatment plant though PG&E's and Tuolumne Utilities District ditch systems. The District has recently started testing for giardia and cryptosporidium in its ditches. Giardia has been found in all of the District's ditch water and cryptosporidium has been found in the source water for the Columbia water treatment plant. In the first five months of testing the source water for the Columbia treatment plant has had 2 hits for cryptosporidium up to 3 ocysts per sample. The level and frequency of the cryptosporidium detection at this location and other locations within the District indicates that the Columbia treatment plant will probably be in bin four for compliance with EPA LT2.	725,000	1,548	3,646 11	Tuolumne	11	2009
724 3310005	3310005-002	Desert Water Agency	Surface water treatment plant improvements	Design and construction of chemical addition, I coagulation, flocculation, sedimentation, filtration, and disinfection surface water treatment facilities and appurtenances.	15	5	с	Chino Creek System: Proposed EPA, Enhanced Surface Water Treatment Rule, will likely render existing surface water treatment facilities in non compliance.	1,700,000	21,676	71,168 20	Riverside	v	1998
725 3110033	3110033-001	Castle City Mobile Home Park	Surface water treatment plant improvements	Build separate flocculation basin and install automatic I Buckwash system.	10	0	с	Will not meet new regulations based on California Cryptosporidium Action Plan. Lack of separate flocculation basin and backwash system is manual.	50,000	200	280 02	Placer	I	1998

726 5510002	5510002-007	TUD - Ponderosa	Ponderosa WTP Reconstruction	The Ponderosa water treatment plant is a conventional treatment plant with pressure filters. The District has reviewed several options which included replacement of the pressure filters with membrane filters, the addition of membrane filters, the addition of ozone, source water protection, GAC and various combinations all of these options. The length of the PG&E and district ditch systems from the South Fork of the Stanislaus River to the treatment plant is over 8 miles and passes through many dozens of private properties, with septic systems, as well as public and private timber lands. The probability of protecting the water quality without piping the entire system is extremely low. A project that would include piping the ditches would be cost prohibitive and an extreme CEQA challenge. The cost for new or additional membrane filter and ozone equipment is greater than UV equipment. The most economical and expedient way to address the increased disinfection requirements of LT2 will be the installation of UV units. There is adequate space and power on the treatment plant site for the new equipment. The best way to meet the long term needs of the area is to combine UV with a new up flow clarification unit. There is no other water system in the area that this system could be connected to.	1 5 5	10	C	The Ponderosa water treatment plant serves approximately 1,430 customers in the Ponderosa Hills area of Tuolumne County. The treatment plant source water originates in the South Fork of the Stanislaus River and is conveyed to the treatment plant though PG&E's and Tuolumne Utilities District ditch systems. The District has recently started testing for giardia and cryptosporidium in its ditches. Giardia has been found in all locations tested in the District's ditch water and cryptosporidium in the source water for the Ponderosa water treatment plant. In the first five months of testing the source water for the Ponderosa plant has had 4 positive tests for cryptosporidium with results as high as 32 ocysts per sample. This level and frequency of the cryptosporidium detection indicates that the Ponderosa treatment plant. will be in bin four for compliance with EPA LT2. Additionally the WTP is old and is need of upgrading. The filters are rusty and the building is rotting. The pant and it's components are near the end of their useful life.	2,200,000	611	1,461 11	Tuolumne	11	2009
727 3310012	3310012-013	Elsinore Valley MWD	Canyon Lake Water Treatment Plant Ultraviolet Disinfection Project	The UV Disinfection Project (Project) consists of constructing two parallel in-line UV Generators with a capacity of 9 mgd in the finished water piping between the filter gallery and chlorine contact tank at the Canyon Lake Water Treatment Plant for primary disinfection. Ultraviolet radiation effectively inactivates common protozoan pathogens such as Cryptosporidium and Giardia and most bacterial pathogens with much lower disinfection byproducts (DBP) formation than chemical disinfection. Following UV disinfection, chloramines will be added as part of a multi-barrier disinfection strategy to destroy viruses and maintain a residual in the system. The Project will ensure compliance with the Stage 2 DBP Rule as UV radiation does not create significant levels of disinfection byproducts levels.In accordance with Elsinore Valley Municipal Water District's (EVMWD) Water Resources and Urban Water Management Plans, EVMWD intends to maximize the local water resources including groundwater and surface water to meet the recent increase in water demands. However, without this project, EVMWD will not be in compliance with the Stage 2 DBP Rule and will have to further rely on imported water from the State Water Project and Colorado River Aqueduct to meet its water demand. Coagulation injection.	1 5 1	10	C	Elsinore Valley Municipal Water District (EVMWD) obtains its potable water supplies from local groundwater, local surface water from Canyon Lake, and imported water from Metropolitan Water District of Southern California. The Canyon Lake Water Treatment Plant (CLWTP), with a capacity of 9 million gallons per day, accounts for approximately 10% of EVMWD's water supply.Canyon Lake, with a storage capacity of 12,000 acre-feet, impounds water from the 750 square mile San Jacinto River watershed. Failing septic systems in Quail Valley have resulted in polluted water in the community and in downstream Canyon Lake. The Riverside County Department of Environmental Health observed in its February 2005 study that there are widespread instances and evidence of septic system failures in the Quail Valley area. The surfacing groundwater in the Quail Valley area also shows high pathogenic contamination.Due to the local water runoff from the San Jacinto Watershed and in particular from Quail Valley into Canyon Lake, total coliform concentrations usually exceed 1,000 MPN during runoff events. Therefore, it is required to increase the chlorine disinfection at the CLWTP to achieve the required additional log inactivation of giardia. One of the byproducts of chlorine disinfection is trihalomethanes (TTHMS) and haloacetic acids (HAAS). These disinfection byproducts (DBP) are DBPR compliance, high TTHM levels.	2,000,000	36,817	121,420 20	Riverside	V	2009

729 1503341	1503341-006	TEJON-CASTAIC WATER DISTRICT	Tejon-Castac Water District DBP Compliance	This project will include a pretreatment system to reduce the DBP formation potential. A Rapid Small- Scale Colum Test (RSSCT) will be performed to evaulate the variability of the raw water and determine the best long term solution. Most probable treatment options will be enhanced coagulation and GAC in addition to the current membrane filtration.	10	Ρ	The problem addressed in this project is DBP formation. The Tejon Castac Water District uses surface water supplied by the State Water Project treated by PALL microfiltration, and 12.5% sodium hypchlorite as a disinfectant. The State Water Project is commonly known for its high TTHM formation potential. Additional problems identified in the project are: no pretreatment, relatively low demand in the distribution system, and a large clear well with extremely long residency time. The drinking water standard violated is the Stage 1 Disinfection/Disinfectant Byproduct Rule.	1,500,000	15	1,000 19	Kern	Ш	2007
730 1503341	1503341-007	TEJON-CASTAIC WATER DISTRICT	Tejon-Castac Water District DBP Compliance	This project will include a pretreatment system to reduce the DBP formation potential. A Rapid Small- Scale Colum Test (RSSCT) will be performed to evaulate the variability of the raw water and determine the best long term solution. Most probable treatment options will be enhanced coagulation and GAC in addition to the current membrane filtration.	10	р	The problem addressed in this project is DBP formation. The Tejon Castac Water District uses surface water supplied by the State Water Project treated by PALL microfiltration, and 12.5% sodium hypchlorite as a disinfectant. The State Water Project is commonly known for its high TTHM formation potential. Additional problems identified in the project are: no pretreatment, relatively low demand in the distribution system, and a large clear well with extremely long residency time. The drinking water standard violated is the Stage 1 Disinfection/Disinfectant Byproduct Rule.	1,500,000	15	1,000 19	Kern	III	2009
731 5500136	5500136-001	BERKELEY CAMP	Surface water treatment plant improvements	INSTALL AUTOMATED BACKWASH SYSTEM, PLANT I SHUTDOWN AND ALARM SYSTEMS.	5	Ν	SYSTEM LACKS RELIABILITY AS IT HAS NO AUTOMATED BACKWASH SYSTEM, SHUTDOWN OR ALARM SYSTEMS.	41,000	15	250 11	Tuolumne	Ш	1998
732 4310027	4310027-007	Santa Clara Valley Water District	Penitencia WTP	Replace filter media and install washwater clarification I processes at Penitencia water treatment plant. (Splitted from proi 05)	0	С	Existing surface water treatment plant needs to be upgraded to comply with crypto action plan.	2,100,000	25	0 17	Santa Clara	II	1999
733 4310027	4310027-005	Santa Clara Valley Water District	Rinconada WTP	Replace filter media and install washwater clarification I processes at Rinconada water treatment plant. Install new filter-to-waste process at Rinconada plant.	0	С	Existing surface water treatment plant needs to be upgraded to comply with crypto action plan.	4,580,000	25	0 17	Santa Clara	II	2006
734 1910087	1910087-012	Metropolitian Dist. of So. Cal.	Robert B. Diemer Treatment Plant Filter Media Replacement	The project consists of removal and disposal of existing 1 anthracite coal and the upper one-half of the underlying silica sand layer in all 48 filter units; furnishing and installing new filter media; and other appurtenant work. Replacement of the manganese-contaminated filter media with fresh media will allow use of biological filtration coupled with ozonation to control DBPs. Only partial media replacement will be conducted. The Diemer filters contain high levels of manganese only in the top anthracite coal layer, due to the lower applied ferric chloride dosages, shorter duration of ferric chloride coagulation, and other plant-specific conditions. Replacement of the manganese-containing filter media with new media will then allow all of the benefits of ozone coupled with biological filtration to be realized with the use of either alum or ferric chloride containing negligible manganese.	0	C	Unacceptably high concentrations of manganese remain on the filter media at the Diemer plant, and, without mitigation, consumers would receive colored water when biological filtration is initiated in 2012. In response to the USEPA's Stage 1 D/DBP Rule, Metropolitan is currently constructing ozone facilities at the Diemer plant; these facilities have a scheduled completion date of early 2012. Upon completion, the water treatment process will include raw water ozonation, coagulation, flocculation, sedimentation, biological filtration and final disinfection using chlorine and ammonia. The oxidation retrofit project is designed to use biological filtration to minimize the presence of many ozone DBPs and to produce biologically stable water. Biological filtration will: (1) reduce the formation of chlorinated DBPs, (2) remove ozone DBPs, (3) reduce the decay rate of chloramines, and (4) reduce the ability of microorganisms to re-grow in the distribution system. Biological filtration Specifically, chlorine is not added to the treatment process until after the filters. When biological filtration commenced at Metropolitan's Mills plant in November 2003, the plant effluent turbidity increased and a number of colored water complaints were received from consumers. Investigation revealed that soluble manganese was	4,000,000	647	0 16	Los Angeles	IV	2009

#### 735 1910128 1910128-010 COVINA IRRIGATION CO.

# Reliability

Temple WTP UV

Mills Treatment Plant

Upgrade

Alternate methods using granulated activated carbon, I Treatment for Regulatory magnetic ion exchange resin, chlorine, ozone, and Compliance and Regional chlorine dioxide have been considered and ruled out, either due to the excessive cost, insufficient space requirements, or an inability to meet regulatory requirements. This construction project to improve the Temple WTP is currently under contract, and is in the permitting and detailed design stage. It is expected that design will be complete and the project will to go to bid in mid-2009. The project will consist of augmenting the existing hypochlorite addition facility, adding a permanent ammonia addition facility, moving the point of chlorination, and a post-filter implementation of UV disinfection facilities. The Temple WTP is intended to be a base-loaded regional plant, and the facilities will be designed for the current plant capacity of 12.5 MGD. The conceptual design calls for one duty UV reactor and one standby UV reactor. This project is a joint effort between Covina Irrigating Company and the Upper San Gabriel River Municipal Water District, which is the MWD member agency in the area and the agency responsible for alternative supplies if the Temple WTP is unable to operate.

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1910087-008 Metropolitian Dist. of So. Cal.

736 1910087

The project consists of constructing structures and Ozone System Reliability facilities to upgrade the ozone system; making connections to existing facilities; testing and commissioning; installation of the Ozonia North America-furnished equipment (see next paragraph); and performing all appurtenant work. In November 2007, Metropolitan's Board awarded a procurement contract in the amount of \$3,403,950 to Ozonia North America. The ozone equipment procurement package includes one ozone generator which matches the three existing units, one power supply unit, one 34,000-gallon liquid oxygen storage tank, one nitrogen injection system, three ambient ozone analyzers, two ambient oxygen analyzers, two ozone contactor control panels, and support equipment. The package also includes testing, installation oversight, equipment start-up, training, and extended on-site services. The equipment is currently being fabricated. The existing Mills ozone generation system was constructed with provisions to easily accommodate additional equipment to increase ozonation capacity. These provisions include space reserved within the Ozone Generation Building for a fourth generator and its power supply unit; space reserved in the liquid oxygen (LOX) tank area for a third LOX tank; sizing of major electrical, cooling, and control systems to support a fourth ozone generator and power supply unit; and gas piping systems sized to convey

treatment plant that treats either local surface water, supplies from the State Water Project (SWP), or blends of the two sourcewaters. The Temple WTP as originally configured used sodium hypochlorite for both primary and residual disinfection, and this is sufficient when treating local supplies. However, when supply constraints limit local supplies, for instance in times of drought or during maintenance activities, the Temple WTP treats supplies from the SWP, for which it was not designed. Due to the high organic matter content of the SWP, very high concentrations of trihalomethanes (THM) are formed, which is a regulated disinfection byproduct (DBP). This scenario was recently realized, and the Temple WTP was forced to shut down to avoid a regulatory compliance problem under the Stage 2 DBP Rule. This event also required surrounding utilities to make up this supply, and due to the structure of MWD's rates, represented a significant cost to these utilities. It is highly likely this supply scenario will be replicated in the future, and it is in fact re-occurring this summer. In order to mitigate the formation of THMs and bring the plant into compliance with the Stage 2 D/DBP rule, an alternate method of disinfection has been sought. The UV disinfection process and a conversion to chloramines for residual disinfection were recommended to solve this problem. This upgrade to the Temple WTP will The existing Mills plant ozonation system is undersized 2,000,000 for the expected ozone dosages required to reliably treat 220 mgd. The existing Mills plant ozone generation

system includes three ozone generators, two liquid

oxygen (LOX) tanks, and related equipment

The Temple WTP is a 12.5 MGD conventional water

5.500.000

647

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Los Angeles

12 0 15 Los Angeles IV	2009
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IV

2009

737 1910087	1910087-006	Metropolitian Dist. of So. Cal.	Henry J. Mills Water Treatment Plant Ozone System Capacity Upgrade	The project scope includes: addition of: a fourth 3,000 ppd ozone generator with power supply unit; a third LOX tank (34,000 gallon) with concrete foundation; a supplemental nitrogen generation system package; additional ambient ozone gas analyzers; power feeds, control system programming, and related accessories; Contactors 3 and 4; extension of influent and effluent conduits; extension of the ozone feed and off-gas piping systems; enlarged chemical feed systems; control system modifications; and sampling system extension. This project will increase the disinfection capacity of the ozonation process to match the 326-mgd capacity of the remainder of the plant at the higher 3 mg/L design ozone dose to meet all Federal and State disinfection requirements.	1 ; e e	0	c	The Mills plant exclusively treats State Water Project (SWP) water. Due to its proximity to the DWR conveyance system, the plant receives East Branch SWP water via Lake Silverwood and Lake Perris. From 2003 to 2005, average total organic carbon (TOC) concentrations at the Mills plant inlet have increased nearly 30 percent, from 3.1 mg/L to 3.9 mg/L in addition, maximum plant inlet TOC levels have increased over 50 percent, from 3.9 mg/L to 6.0 mg/L, over this same period. Increased SWP TOC levels appear to be due to changes in the statewide operation of the SWP system, including increased blending with agricultural sources during transport through the Northern California Delta areas and increased storm water runoff. Metropolitan now experiences increased variability in water quality, particularly in late winter and early spring. These variations are similar to those experienced by other SWP contractors in both Northern and Southern California who have limited raw water storage capacities. Because ozone reacts rapidly with TOC, increased TOC levels require a proportional increase in ozone dosage	30,829,000	647	0 16	Los Angeles	IV	2007
728 2510007	3510007 001	Hollister/Supportane W/TA	Loccalt Surface Water	Is a regulated ozonation disinfection by-product. However, Metropolitan's bromate control method of		0	C	Reducing TOC levels prior to the ozone contactors using	3 700 000	2	25.05	San Ponito		2000
1001155 954	551007-001	rosinster/summyslope WTA	Treatment Plant Disinfection Byproducts Upgrade	Treatment Plant retrofit will add chemical addition of alum coagulant, polymer, and oxidant to the influent side of the existing treatment plant. The oxidized and coagulated water will then flow in a newly constructed detention structure where it will be susequently treater by existing mcirofiltration filters. The Lessalt retrofit wil replace the existing pumps on the influent side of the Lessalt Treatment Plant with variable speed pumps. The effluent side of the Lessalt Treatment Plant will have a new clearwell added to increase contact time and provide a new wet well for new variable speed pumps which will discharge into the existing Fairview and Ridgemark potable water pressure zones. Finally, the Lessalt Treatment Plant will add an emergency generator to supply emergency power to the treatment Plant uing power outages. The Lessalt Treatment Plant is located in the Hollister Urban Area and power outages can last up to 3 or 4 days due to disruptions of the power grid by several active faults in the Hollister area. The Lessalt retrofit will enhance the current intertie between the potable water system of Lessalt, the City of Hollister, and Sunyslope County Water District by increasing the water quality, water quantity, and reliability of all three systems during periods time	d II 2	v		ont meet the upcoming disinfection byproduct rule which is slated to take effect in 2012. The renovation of the Lessalt Surface Water Treatment Plant will allow the Lessalt Potable Water System, the City of Hollister Potable Water System, and the Sunnyslope County Water District System to meet the upcoming disinfection byproduct rule. Additionally, Lessalt upgrade will increase the reliability of the Lessalt Treatment Plant to effectively operate at 3 million gallons per day. Currently the Lessalt Treatment Plant operates at approximately 1.5 mgd during average conditions but is shut down when source waters are impaired or when there are electrical outages. The use of treated water from the Lessalt surface water treatment plant will replace groundwater from wells which exceeds secondary drinking water standards for total dissolved solids in the potable water supplies of Lessalt, the City of Hollister, and Sunnyslope County Water DistrictThe construction of the Lessalt Treatment Plant upgrade will also improve the wastewater quality for the City of Hollister and Sunnyslope County Water District by supplying customers who discharge water to both wastewater systems to discontinue using salt discharging water softeners. The discontinuation of the	5,700,000	z	22.05	Jan Bentu	·	2003

when there are source water quality problems or

electrical disruptions.

use of salt brine discharging water softeners will aid

Sunnyslope County Water District in its attempt to

739 3910006	3910006-006	Stockton East Water District	Construction of Additiona 4 Filters	I The project will consis of the design and construction of I four (4) new filters. The filters will be located at the district treatment plant adjacent to existing sedimentation basin. The filter project is part of a larger project that will consist of the 10 MG clearwell, 4 new filters, and 2 additional sludge lagons. Both the 10 MG clearwell and the additional 4 filters are being constructed to meet regulatory requirements. Both projects are seeking funding under the Economic Recovery program.	0	c	Stockton East Water District wholesales treated water from its Dr. Joe Waidhofer Water Treatment Plant to City of Stockton, California Water Service Company and San Joaquin County. Population served in the Stockton urban is over 300,000.The Dr. Joe Waidhofer Water Treatment Plant currently has 8 dual media filters constructed of 10-inches of sand, 12-inches of gravel, and 36-inches granular activated carbon. When one or more filters is taken out of service for backwash or repair at flow rates of 60 MGD or greater filtration rates exceed 6gpm/sq foot. This project would construct four additional filters to ensure the regulatory limits of 6 gpm/sq foot are maintained. Also, this would provide additional contact time for organics removal.	7,882,300	4	50 10	San Joaquin		2009
740 4600012	4600012-001	Alleghany County W.D.	Treatment Plant Improvments	Make improvements to treatment facility to ensure I continued reliable water supply.	0	с	System not meeting CAP turbidity performance goal of 0.1 NTU. Electronic system for treatment plant needs to be replaced. New turbidimeter, new system pump at treatment plant and need new portable test equipment. Replace membranes.	55,000	55	80 02	Sierra	I	2007
741 4100503	4100503-004	BUTANO CANYON MUTUAL	Reconfigure treatment system to solve Trihalomethane issue & replace storage tanks.	Our fitration plant will be reviewed by an experienced engineer to then be reconstructed to eliminate our Trihalomethane problem. This is our main focus, however, we feel the storage tanks are highly subject to failure and therefore, we want to include them in this project.In addition to any equipment changes that need to be made to solve our TTHM problem, the two existing storage tanks will have to be taken apart and removed from the area. New foundations must be constructed for the two new tanks which will then be built on site and tied to the foundations. This will involve shipping the old tanks out of our canyon and shipping new ones in after the foundation work is completed. This will involve extraordinary circumstances as the road into our canyon can not accommodate large trucks. This project will involve replacing two 60.000 gallon tanks with two 55,000 gallon tanks and some incidental pipe changes to accommodate the new tank specifications. The cost of this project will include engineering, permits, tanks, shipping for old & new tanks, foundations, testing of new tanks, labor, installation, planning, contractor fees and some administrative costs. It may also include the rental of	0	c	We constantly exceed the MCL for Trihalomethanes. This has required our Mutual Water Company to send out public notification every quarter upon receiving the test results.Our two 60,000 gallon water tanks are old and were used when they were installed many years ago. We have had them inspected and they show signs of metal rust and fatigue resuting in leaks. It is our desire to solve our Trihalomethane problem as soon as possible and eliminate the constant fear of a major tank failure. We are a small, private water company and do not have the means to raise the needed amount of money in a timely manner, while maintaining our emergency reserves and funds for the daily operation and maintenance of our water system.	325,000	92	276 17	San Mateo	Π	2009

miscellaneous equipment and/or temporary tanks during the installation.

742 5510030	5510030-002	TUD - Monte Grande Water System	Monte Grande WTP (Willow Springs WTP) Expansion and UV Installation	The Monte Grande water treatment plant is made up of 1 one up-flow clarification units. The plant capacity is .SMGD. The addition of a second unit was planned for in the plant design and would require minimal work for plant expansion. The District has reviewed several options which included replacement of the up-flow clarification unit with membrane filters, the addition of membrane filters, the addition of ozone, source water protection, GAC and various combinations all of these options. The length of the PG&E and district ditch systems from the South Fork of the Stanislaus River to the treatment plant is over 15 miles and passes through many dozens of private properties, with septic systems, as well as public and private timber lands. The probability of protecting the water quality without piping the entire system is extremely low. A project that would include piping the ditches would be cost prohibitive and an extreme CEQA challenge. The cost for new or additional membrane filter and ozone equipment is greater than UV equipment and up-flow clarification unit. The most economical and expedient way to address the increased disinfection requirements of LT2 will be the installation of UV units. The most economical and expedient way to address the	0	c	The Monte Grande water treatment plant serves approximately 538 customers in the Monte Grande, Soulsbyville and Curtis Creek areas of Tuolumne County. The treatment plant source water originates in the South Fork of the Stanislaus River and is conveyed to the treatment plant though PG&E's and Tuolumne Utilities District ditch systems. The District has recently started testing for giardia and cryptosporidium in its ditches. Giardia has been found in all of the District's ditch water and cryptosporidium has been detected in the source water for the Monte Grande water treatment plant. In five months of sampling the level and frequency of the cryptosporidium detection indicates that the Monte Grande treatment plant will be in bin four for compliance with EPA LT2. Test indicate levels as high as 38 ocysts per sample. The same ditch that is the source water for the Monte Grande plant is the source water for the Willow Springs plant which also has reduce treatment capacity due to equipment failures. The Willow Springs plant has been given DPH permission, in the past, to exceed rated filter capacity in order to meet customer demand. The Willow Springs plant would be retired by the expansion of the Monte Grande treatment plant thus removing the need for	1,805,000	73	550 11	Tuolumne		2009
				deteriorating Willow Spring treatment plant is to			future requests to overdrive the filters or funds to make						
				replace it with a second unit at Monte Grande. There is			plant improvements to meet LT2.						
				adequate space and power on the treatment plant site									
743 3810001	3810001-073	San Francisco Regional Water System	Surface water treatment plant improvements	Design and construct ozone facilities for the Hetch I Hetchy supply.	0	С	HH supply may not meet the new DB Rules for Crypto inactivation.	1,205,000	200	600 04	San Francisco	II	1998
744 3810001	3810001-173	San Francisco Regional Water System	Tesla Advanced Disinfection and Chemical Treatment Facility	SFPUC's unfiltered Hetch Hetchy (HH) water supply is 1 currently pH-adjusted using lime for corrosion control and disinfected using sodium hypochlorite to provide at least 3-log Giardia and 4-log virus inactivation. The sodium hypochlorite disinfection occurs at the Tesla Portal site. In addition to these disinfection requirements, the LT2ESWTR requires unfiltered supplies to achieve at least 2-logs of Cryptosporidium inactivation. Additionally, the combined disinfection requirements for Giardia, viruses, and Cryptosporidium must be obtained using two different disinfectants and each disinfectant, by itself, must completely meet at least one of the disinfection requirements. The SFPUC completed a Conceptual Engineering Report (CER) that recommended installing ultraviolet (UV) disinfection for the HH water supply. Additionally, a Chemical Systems CER and a pH Alternative Analysis Report recommended installing carbon dioxide for pH adjustment. The proposed project calls for construction of a new 315- MGD treatment facility (utilizing UV disinfection and a new chemical feed facility (sodium hypochlorite, carbon dioxide, and hydrofluosilicic acid) at the existing Tesla Portal site. The project will also include final design and construction of connections to existing pipelines upstream and downstream of the proposed UV treatment facility and a new operations building. A separate building/enclosure will house chemical storage	0	c	Although the San Francisco Regional Water System has about 600 retail customers, it is a wholesale water system that serves a total of 2.4 million customers in the counties of Alameda, San Mateo, Santa Clara, and San Francisco.Under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), the SFPUC must construct new advanced disinfection facilities for its unfiltered Hetch Hetchy supply in order to inactivate Cryptosporidium inactivation is required by March 31, 2012. The SFPUC will also be improving the reliability of chemical disinfection (sodium hypochlorite), corrosion control, and fluoridation facilities are currently ranked I and K, respecitvely, on the 2008 updated SRF Project Priority List.The SFPUC is requesting a grant of \$20 million for this project.	20,000,000	200	600 04	San Francisco	Π	2009

### 745 2110005 2110005-006 Bolinas Community PUD

Planning & Feasibility The planning and feasiblity study will consist of a 1 Study: Upgrade BCPUD comprehensive engineering analysis of the BCPUD's Water Distribution System water distribution system to identify, plan and prioritize system-wide improvement projects. This analysis will include, but not be limited to, a scrutiny of the district's numerous dead-ends and evaluation of possible interties, among other things, to facilitate the district's implementation of a comprehensive flushing program to reduce present chlorine disinfection byproduct exceedences below the federal and state MCLs. The analysis also will include the development of a prioritized schedule for pipeline and fire hydrant replacement (with specific projects planned and described) with the goal of significantly reducing the system's chronic leaks and unaccounted-for water losses The study will include all necessary environmental documentation for the identified system improvements.

746 0510005 0510005-004 C.C.W.D., West Point

1710008-005

Nice Mutual Water Company

747 1710008

West Point WTP Filter Project will add 0.5 million gallons per day of redundant I Compliance Project treatment capacity. The treatment process will use a packaged system purchased from a vendor. The District's bid package contains water quality performance requirements and details for connecting to the existing treatment plant. It will be up to the vendor to recommend specific treatment processes and equipment necessary to meet the performance specification, as well as meeting DPH approvals. The Project does not expand capacity nor requires additional land. All construction will be minor and onsite. The project qualifies for a NEPA exclusion and CEQA exemption. The bid package is in draft form and awaiting notification of fund availability for finalization and bid advertising. The District expects a 30-day bid neriod. Construction would start one month after bid opening.West Point's distribution system requires extensive leak repair and other efforts that use most of the available budget. Grant funding of this filter redundancy project is the only viable funding source at this time to complete the project. CCWD is seeking funding to assist this recognized low-income community with a significant Native American Indian population meet its water system's Health & Safety and Fire Protection needs. Increasing the community's ability to provide a high quality water supply while meeting adopted fire flow standards will increase the potential Evaluate plant condition, recommend improvements

Surface water treatment Evaluate plant condition, recommend improv plant improvements and construct improvements.

serving the Mesa area and other serving the downtown and Gospel Flats areas; there are four pressure regulators, each of which is in need of replacement. There are approximately 3,500 linear feet of distribution piping under paved roads and approximately 16,000 linear feet of piping under unpaved roads. The system consists of a mixture of AC, steel and PVC piping of different dimensions; as a result of the age and condition of these pipes, the district regularly experiences significant leaks and has an annual unaccounted-for water loss of more than 10%. Similarly, many of the approximately 80 fire hydrants on the system are nearly 50 years old, are leaking, and are in need of replacement. The distribution system has numerous dead-ends due to the fact that a large portion of the district is located on an ocean-bluff mesa which is eroding at a rate of 1-2 feet per year. Because of the numerous dead-ends on the system and the district's chronic water shortages, the district does not have a regular flushing program; we believe these conditions are contributing to the district's on-going The existing WTP consists of a 1.0 mgd Microfloc contact filtration process. The current backup filter is a

pressure treated system that does not produce

compliant drinking water. When plant filters go down or

are offline for maintenance, water exceeds MCLs and

District must issue boil water notices. The California

DPH issues an out of compliance notice in each annual

inspection report due to no backup filter for treatment.

The BCPUD water distribution system is a gravity-fed,

piecemeal system assembled over the last 80 years.

consolidation of two formerly-existing utility districts

that each served different sections of the community.

The distribution system has two pressure zonea, one

The present district was formed in 1967 via the

300.000

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1.200 18

Marin

2007

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650,000 556 1,400 10 Calaveras III 2009

Plant needs evaluation to identify components in need of improvements to meet CAP, including 55-yr old pressure filters and other aging equipment and

500,000 1,059 2,500 03 Lake II 1998

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С

structures.

С

748 2310007	2310007-017	North Gualala Water Company	CT Compliance - "The Mains"	Two (2) new treated water storage tanks to be constructed immediately after surface water treatment plant to provide contact time requirement. Associated alarms, controls, monitoring/recording devices, and necessary distribution piping must also be installed to make an entire functioning system. The project is at an existing site, which must have some demolition of existing facilities and rearrangement of the connection piping in order to accomodate the new construction.	I	0	с	Surface water filtration plant can not meet CT Compliance requirements due to insufficent treated water storage volume and chlorine contact time before entering distribution system. Inspection violation letter dated October 28, 2008 by CDPH instructed correction and CT compliance by Novem,ber 28, 2008.	10,132,220	1,033	2,595 03	Mendocino	I	2011
749 5310001	5310001-011C	Weaverville C.S.D.	East Weaver Water Treatment Plant 2009 Improvements	The East Weaver WTP is one of three surface water treatment plants within the WCSD. East Weaver Creek can have unusually high turbidity spikes during normal runoff periods. CDPH has noted that the sedimentation basins need to be optimized to improve turbidity removal. In addition, there are a number of filtration monitoring and control improvements to bring the facilities into compliance with the Vulnerability Assesment Mitigation Plan, and emergency power improvements for treatment reliability. Proposed improvements include:1. Optimization of coagulant addition will be accomplished through the use of a streaming current monitor/controller, static mixer, adjustable speed coagulant dosing pumps, and individual filter tubidimeters with chart recorders. Additional filter improvements to include surface wash, new filter control panel, and electrical controls.2. To improve security at the WTP a chlorine leak detector and automatic shut-off valves will be added to the gas chlorine system and security cameras will be added outside the facilities.3. To improve reliability at the WTP an emergency power generator will be added with automatic transfer switch. Expansion of the existing building will be required to accommodate the generator and improvements mention.		0	C	The East Weaver WTP is one of three surface water treatment plants within the WCSD. East Weaver Creek can have unusually high turbidity spikes during normal runoff periods. CDPH has noted that the sedimentation basins need to be optimized to improve turbidity removal. In addition, there are a number of filtration monitoring and control improvements to bring the facilities into compliance with the Vulnerability Assesment Mitigation Plan, and emergency power improvements for treatment reliability.	500,000	1,577	3,554 01	Trinity	I	2009
750 2810004	2810004-001	St. Helena, City of	Aeration of Tank1 & Tank 2	Install a Pax Mixer @ Tank #1 and Tank #2. This will:Get rid of Thermal Stratification and dead spots within the tanks.Maintain a free Cl2 residual in all of the tank volume of waterImprove DBP results for TTHM & HAA5Save labor, It won't require manipulation to improve water quality.It will increase Cl2 in the system.The units themselves are \$29,800/unit. The Mixers can be installed by Aqua Tech for \$2,850/tank and \$2,850 for training. The City of St. Helena can install the conduits and mount the electrical boxes needed for installation		0	c	Tank #1 is located @ our Surface Water treatment plant north of St.Helena. It is a 1.4 MG storage reservoir and is used provide storage for the water distribution system and to obtain contact time for chlorine residual. It 1985 it was converted to a top fill. A consultant working on our sanitary survey said that aeration could improve our HAA5 testing results. In 2006, USEPA promulgated the Stage 2 Disinfection By Products Regulation (DBPR). Up to that time the Cities Surface Water Treatment Plant has been able to barely comply with the Stage 1 Disinfection By Products regulations requiring testing of 4 sample sites in the distribution system. Compliance was based on a running average of all the sites and was performed quarterly. The new Stage 2 DBPR regulation compliance is based on a four- quarter running annual average concentration @ each sampling location rather that a system wide running annual average. Also we had to add two sites to the four that were high in HAA5s and THM concentrations. Applying our THM and HAA5 data for the last 6.5 years to the DBPR Stage 2 regulations we would be out of compliance @ 5 out of six sites for HAA5s. Tank #2 is a 2.7 MG steel storage reservoir installed in 1993. Do to its size and the fact that it has a combined inlet and outlet makes it difficult to maintain a high enough Free CI2 residual in the tank. We have	71,000	2,448	6,006 03	Napa	Ι	2011

751 2810004	2810004-002	St. Helena, City of	Louis Stralla WTP Granula Activated Carbon (GAC) Adsorption Process	r The project would replace existing filter media with Granular Activated Carbon.18 "of anthracite coal would be replaced in the two conventional filters @ the Louis Stralla Water Treatment Plant with GAC.Existing filter surface washers would be replaced with an air scour system to ensure adequate cleaning of the GAC.USEPA describes GAC adsorption as the best available technology for DBP control.It is estimated that installing GAC in the filters would provide an additional 20% of TOC removal.		0	c	In 2006, USEPA promulgated the Stage 2 Disinfection By Products Regulation (DBPR). Up to that time the Cities Surface Water Treatment Plant has been able to barely comply with the Stage 1 Disinfection By Products regulations requiring testing of 4 sample sites in the distribution system. Compliance was based on a running average of all the sites and was performed quarterly. The new Stage 2 DBPR regulation compliance is based on a four-quarter running annual average concentration @ each sampling location rather that a system wide running annual average. Also we had to add two sites to the four that were high in HAASs and THM concentrations. Applying our TTHM and HAAS data for the last 6.5 years to the DBPR Stage 2 regulations we would be out of compliance @ 5 out of six sites for HAASs.In June 2008 the City had a study performed by West Yost Associates to investigate alternative disinfection byproduct (DBP) control strategies and provide preliminary design criteria, cost estimates, and an implementation plan. As a result of this investigation, WA recommended that the City retrofit a granular activated carbon (GAC) adsorption process into the Louis Stralla Water Treatment Plant filters rather than installing GAC adsorption process will reduce the levels of DBPs in the water supply and help the City to	907,780	2,448	6,006 03	Napa	Π	2011
752 1510053	1510053-004	ANTELOPE VALLEY E KERN WTR AGY	AVEK Rosamond Water Treatment Plant DBP Control Project	Modifications to the AVEK'S Rosamond Water treatment plant will allow the system to remain in compliance when LRA TTHM regulations come into effect. Ozone disinfection combined with deep bed biologically active GAC filters are expected to help lower current levels of TOC and TTHM levels as much as 20%. In times of more difficult water quality, the GAC in the filters can be changed out frequently to provide better absorbtion of TOC. Filters will be modified with sample taps to allow staff to monitor GAC absorbtion rates and thus the need/frequency to change out the GAC media. Additional chemicals that will be added as part of this change are cautstic soda (for Ph control), calcium thiosulfate (for ozone quenching) and a liquid oxygen system (provide oxygen for onsite generation of ozone). Also included are the tanks and pumps needed for the new chemicals. Structures that are part of this project include a checmical feed building, ozone generator building and an ozone contactor. Disinfection residual will be provided by either free chlorine or chloramines. This project is expected to benefit a population of approx 60,000 people.		0	c	AVEK's Surface Water Treatment Plant in Rosamond has had violations of the current TTHM MCL (system averaging) requiring violation notification of AVEK retail purveyors. The water source for the plant is the State Water Project which has high TOC levels especially in times of drought. This combined with current free chlorine disinfection and long residence times in the distribution system will make modifications to the treatment plant necessary in order to be in compliance with upcoming LRA (Local running Average)MCL's for TTHMs.	12,562,600	14	11,548 19	Kern	11	2009
753 3610005	3610005-001	LAKE ARROWHEAD CSD	Surface water treatment plant improvements	Reconstruct Cedar Glen Treatment Plant, undersized main and transmission facilities in accordance with new master olan	I	0	с	Inadequate water treatment capacity, undersized distribution system.	10,000,000	8,269	30,000 13	San Bernardino	V	1998
754 4110025	4110025-005	North Coast County Water Dist	Surface water treatment plant improvements	Add second contact clarifier and ozonation system.	I	0	С	Need to upgrade water treatment plant to meet proposed microbial treatment standards.	1,000,000	11,743	38,390 17	San Mateo	П	1998

755 0710008	0710008-002	City of Pittsburg	Water Treatment Plant Influent Stream modification	Pre-design has been completed. CDPH permitting, design and construction are not started. Draft CEQA ha been prepared.	1 15	0	C	Modification of the WTP influent streams. New raw water sources blending configuration and potentially use of Chlorine Dioxide. Combining the flows from all the raw water sources prior to flash mixing will allow uniform water quality throughout the treatment process, and allow Pittsburg to gauge dosage requirements more efficiently. The new configuration will meet the requirements of the Federal Filter Backwash Recycle Rule for recycle streams and the goals of the Department's Cryptosporidium Action Plan (CAP). In addition, the proposed configuration will improve the flocculation and coagulation process and reduce settled and filtered water turbidities.	4,160,000	16,041	62,000 04	Contra Costa	Π	2012
756 3310005	3310005-001	Desert Water Agency	Surface water treatment plant improvements	Design and construction of chemical addition, coagulation, flocculation, sedimentation, filtration, and disinfection surface water treatment facilities and appurtenances.	1	0	С	Snow and Falls Creek System: Proposed EPA, Enhanced Surface Water Treatment Rule, will likely render existing surface water treatment facilities in non compliance.	6,200,000	21,676	71,168 20	Riverside	v	1998
757 3610018	3610018-003	Cucamonga Valley Water District	LWMWTP Surface Water Treatment Facilities Upgrades	The upgrades include construction a 24 inch CML&C rawater main connecting the existing Day & East Canyon surface water main to the LMWTP. The proposed alignment runs approximately 3,150 feet from Etiwand Avenue to Wilson Avenue to LMWTP and would allow high quality surface water from Day and East Canyon to be blended and treated with MWD water at LMWTPTh upgrades will also include the construction of a UV system to be used to meet primary disinfection requirements of 0.5-log to 2.0-log inactivation of Giardia. The upgrades will also include the construction of two 8 MG finished water reservoirs. Additional required upgrades include basin covers, GAC feed pum station and contactors, and a treated water pump station. The total cost of the required improvements to meet the Stage 2 disinfectants/Disinfection By-Product future rule is \$33.5 million.	w I la o le n lp t	0	C	The Cucaronga Valley Water District (District) will be required to meet the future regulation of Stage 2 disinfectants/Disinfection By-Product (Stage 2 D/DBP) Rule. To continue to be in compliance with current pending and future water quality regulations, the District has planned upgrades to existing District treatment facilities. The District owns and operates three water treatment plants: Lloyd W Michael (LMWTP), Royer-Nesbit (RNWTP) and Arthur H Bridge (ABWTP). LMWTP can treat up to 60 million gallons per day (mgd) and utilizes surface water from the State Water Project (SWP) imported by Metropolitan Water District of Southern California (MWD). RNWTP can treat up to 11.5 mgd and utilizes a mixture of SWP water and flows from local canyons. ABWTP operates solely on high quality surface water which does not include the same operating issues associated with inclusion of SWP water.Based on recommendation provided in the District's "Surface Water Treatment Facilities Master Plan" and to adequately meet the timeframes required to meet the current pending regulations, it is proposed to design build the required upgrades to the LIMWTP.	33,500,000	46,667	185,534 13	San Bernardino	v	2009
758 0110005	0110005-010	East Bay MUD	Surface water treatment plant improvements	Treat reclaimed supernatant. Evaluate the recycle streams including those with potential to be recycled to the headworks of a plant. Ensure that treatment would include construction of identified improvements.	l o d	0	С	Water Treatment Plant Solids Facilities Improvements - Supernatant is inadequately treated, has the potential of violating proposed microbial MCL. Existing solids handling systems are deficient in capacity at several WTP's.	7,342,000	386,065	1,300,000 04	Alameda	II	1998
759 5304209	5304209-001	Junction City School	Filter rennovation	Replacement of filter media.	I	0	Ρ	Spikes in turbidity measurements when filter starts up after service interruptions. Some of the filter media is deteriorated and needs to be replaced.	10,000	1	100 01	Trinity	I	2006
760 5510005	5510005-003	TWAIN HARTE COMMUNITY SERVICES DIS	TR Sherwood Forest	Install 10,000 feet of new 6-inch diameter PVC water lines and necessary appurtenances.	l	25	С	Many of the water lines in the Sherwood Forest service area are in close proximity to septic tank-leachfield areas. Also, low pressure and water supply problems are experienced due to inadequate distribution lines.	1,000,000	1,530	2,568 11	Tuolumne	Ш	2003
761 2000511	2000511-001	MD#85 VALETA MUTUAL WATER COMPA	NY Construct New Well or WTP	Construct a new well or nitrate treatment facilities.	ſ	20	С	The well has elevated nitrate levels. One sample collected in February 2005 had a nitrate result of 46.1 mg/L. However, 6 subsequent samples were below the nitrate MCL. The well also produces an inadequate supply of water.	863,000	19	45 11	Madera	Ш	2007

762 4910028	4910028-002	Sweetwater Springs CWD - Monte Rio	Water quality protection project	Install and replace transmission and distribution system to prevent contamination and to improve water pressure. Install and upgrade water storage facilities.	ſ	20	С	Low water pressure (lines may be subject to backsiphonage), lack of adequate water storage and water quality problems.	3,700,000	1,061	3,000 18	Sonoma	Ш	1998
763 4910028	4910028-003	Sweetwater Springs CWD - Monte Rio	Project 1	Install 60,000-gallon tank and replace 1-inch mains with 6-inch mains.	J	20	с	Inadequate storage and undersized, leaky water mains suseptible to intrusion from old septic systems.	1,120,000	1,061	3,000 18	Sonoma	II	2006
764 4910028	4910028-006	Sweetwater Springs CWD - Monte Rio	Project 4	Install and replace 7,000 feet of distribution line	J	20	С	Leaky, old, under sized water mains in areas of failing	1,011,000	1,061	3,000 18	Sonoma	Ш	2006
765 4910028	4910028-005	Sweetwater Springs CWD - Monte Rio	Project 3	Construct 60,000-gallon tank and 3,900 feet of 6-inch water main	J	20	С	Leaky, old, undersized tank and mains in area of failing sentic	909,000	1,061	3,000 18	Sonoma	Ш	2006
766 4910028	4910028-004	Sweetwater Springs CWD - Monte Rio	Project 2	Install 5,800 feet of 6-inch water main and connect customers served by old mains.	1	20	с	Leaky, old, undersized mains in area of failing septic.	1,026,000	1,061	3,000 18	Sonoma	Ш	2006
767 4910004	4910004-002	Sweetwater Springs CWD - Guerneville	Water quality protection project	Install and replace transmission and distribution system to prevent contamination and to improve water pressure. Install and upgrade water storage facilities.	ſ	20	с	Low water pressure (lines may be subject to backsiphonage), lack of adequate water storage and water quality problems.	2,000,000	2,497	6,000 18	Sonoma	II	1998
768 0410007	0410007-002	Paradise Irrigation District	Replace distribution system	Replace 213,000 feet of pipeline.	l	20	с	The District's distribution system has extensive leaks. Paradise is the largest community in CA without a sewer system. Septic tank effluent is found in trenches.	16,000,000	10,098	26,299 21	Butte	I	1998
769 1800512	1800512-002	Clear Creek CSD-Westwood	Water quality protection project	Improve spring source	١	15	с	System had fecal contamination due to flooding or animal intrusion into spring box, but this only happened once in January 1995. Not recurring.	50,000	160	400 02	Lassen	I	1998
770 5400934	5400934-002	PONDEROSA CSD	Water quality protection project	Investigate cause/source of coliform - \$50,000; Correct problem or drill new wells - \$150,000	J	10	с	Coliform contamination of two hard rock wells (currently providing chlorination of the water). One well is within 150' of individual septic tank and leach fields.	200,000	116	232 12	Tulare	Ш	2001
771 5510007	5510007-003	DEL ORO WATER COMPANY - STRAWBERRY	( Strawberry District - Pipeline Replacement Project	The proposed project would entail construction of approximately 20,000 lineal feet of pipeline, which will meet all current and up to date CDPH standards of today.	J	10	С	The existing water distribution piping in the Strawberry District service area is extremely deteriorated. The pipeline was installed many years ago and is in drastic need of replacement as evidenced by multiple leaking points, extensive corrosion, and a unprotected, shallow buried depth.	1,500,000	373	330 11	Tuolumne	III	2009
772 1910153	1910153-003	SOUTH MONTEBELLO IRRIGATION DIST.	Replacement of Wells No. 1 & 2 with New Well No. 8	District wants to destroy two wells that may be influencing our Well 3 and contributing to an Arsenic problem that required us to notified our customers that we exceeded MCL (13pm- MCL 10pm) and to adopt a blending plan with our Well 5. We are currently installing a packer in Well 3 to increase our travel time in that well to comply with the CDPH 6 month travel time requirement. District would also like to drill a new well (8) next to our tanks and away from the settling basins (and the influence of recycle water). This would be a new modern well designed to mitigate Arsenic. The well (8) would also meet the six month travel requirement. The district intents ultimately to retired our old wells and replacement with new, modern well out of the settling basin area and this would be a first step toward that. We need the new well to provide redundancy and improve our reliability to fill our tanks with water. This project has been approved by our Board. A CEQUA exemption has been requested, and plans drawn up by our engineers. The new wells will go on land already own by the district. All we need to begin is funding.	ſ	10	c	Currently, South Montebello Irrigation District is requesting funds to construct a new well to improve water quality and meet federal requirements for Arsenic. Also, California Department of Public Health is requesting the district to submit a long term plan to restore Wells 3 and 5 to provide at least 6 month travel time before the recharged water in the Rio Hondo Spreading ground reaches the wells. In May 2008, on a routine check, the District collected a sample from well 3 that exceeded the revised federal Maximum Contaminant Level for Arsenic and issued a public notification. The district voluntarily blended the water pumped from well 3 with the ground water pumped from well 5. In October 2008, CDPH issued the district a Permit Amendment for Arsenic blending and 4-log virus inactivation treatment at Well 3. This permit allows blending water produced by Well #3 with water produced by Well 5 to reduce the Arsenic level in the water served to the customers. These two wells are the primary source of water supply to our storage thanks. Well 3 is currently down for inspection and service. Inspections findings indicate the well is in need of repairs and new equipment. Well 5 is the main pumping source to the district storage tanks since Well 3 is down. The district is in need of a redundant Well to cover any unexpected emergencies and ultimately to orelace wells in the settling basin. This new well will feature better	2,150,000	2,364	7,880 22	Los Angeles	IV	2009

773 1600240	1600240-001	RUBALCAVA WATER SYSTEM	Rubalcava Water System Pipeline	Replace service line from well to commercial and residential users, approx. 350 feet using piping of an approved material. This includes excavation of a trinch of sufficient depth to bury the new pipeline, with appropriate connections to the existing users' water intake lines and the wellhead. If possible, install also anti-siphon valve(s) to prevent backflow of any waters to the well tank.	I	10	Ν	Replace old, leaking 350 foot galvanized iron pipe from wellhead to several users including a residential dwelling house, a restaurant/bar and retail truck parts company. Wellhead has tested positive for coliform bacteria in the past, perhaps from backflow of contaminated water. Violations by Kings County Environmental Health Department have been corrected, so far, by addition of chlorine bleach to water supply. However, this seems to be at best a temporary resolution to the problem.	18,000	5	25 12	Kings	Ш	2007
774 1900785	1900785-001	MITCHELL'S AVENUE E MOBILE HOME PAR	K Water quality protection project	REPLACING COMPLETE WATER SYSTEM, VALVES, J ADDITIONAL 5,000 GAL TANK. REMODEL AND UPDATE PUMP HOUSE AND EQUIPMENT.	I	5	с	SYSTEM HAS HAD POSITIVE COLIFORMS. SEWAGE TREATMENT PLANT 1 MILE UPSTREAM AND A NEARBY SEPTIC TANK AND SEEPAGE PIT (WITHIN 200 FEET) MAY BE CAUSING CONTAMINATION OF THE WELL.	50,000	24	35 16	Los Angeles	IV	1998
775 1910087	1910087-007	Metropolitian Dist. of So. Cal.	Water quality protection project	Relocate below grade vacuum air release valves from J below grade to above grade. Provide blowoffs with backflow protection	I	0	С	Potential Cross-connection in the distribution system	55,000,000	647	0 16	Los Angeles	IV	2002
776 2701498	2701498-001	HARBOR VIEW WA	Well Relocation	Drill new well and/or install holding tanks (three 5000 J	I	0	С	The well source is in close proximity to a septic tank.	20,000	25	75 05	Monterey	Ш	2006
777 2100508	2100508-002	MUIR BEACH COMMUNITY	Muir Beach CSD Sunset Way water line replacement	The project will replace approximately 2800 linear feet J of existing 4" PVC that serves as the main water distribution line along Sunset Way in Muir Beach.Our initial choice is to use 6" HDPE, as we have used that successfully in other parts of the system that have been upgraded. Estimated replacement costs are \$100 per linear foot.The project would entail coordination with roadwork to be done on Sunset Way, as we need to bury the new water line to a depth greater than 30". The project will also entail re-connecting the residential connections to the new line, and installing new shut-off valves at strategic locations.	1	0	С	Current Water Distribution Line along Sunset Way was installed in the 1970s and consists of 4" PVC. At most locations the line is buried to depths of less than 2 feet and in some cases less then 1 foot, and is clearly visible by the side of the road in a ditch also intended for storm drainage. The service line experiences numerous leaks, and with the additional factor there are numerous septic systems in the area, we are very concerned about possible contamination from stagnant water or septic runoff should a backflow condition occur. The projects goal would be to replace the existing line with 6" HDPE and bury the line down to depths of greater than 30".	400,000	148	350 18	Marin	Ι	2009
778 3110031	3110031-003	Ward Well Water Company	Ward Well School/Residential Well Consolidation	If funding is available, the adjacent mutual water J company, Ward Well Water Co., would add these five parcels to their system. Ward Well would run a 6" or 8" main to area and connect the school and residences. This would also result in local fire hydrants.According to Ward Well water Co., the project would consist of running 1,800 feed of main, school and residential hook- ups, fire hydrants and survey, design and permitting. Additional monitoring equipment would be required.	I	0	С	Project would consolidate state small water system that has substandard well source.	425,000	224	375 02	Placer	I	2009
779 4710002	4710002-005	City of Dunsmuir	Dunsmuir Water System Improvement Project-Bush Street Main Replacement	Project components include design and construction. J 1 The 1994 Master Water Plan and 2010 draft Preliminary Engineering Report have identified the following problem areaBush Street Water Main \$165,000	1	0	с	The City's 1994 Master Water Plan (MWP) investigated supply, storage, distribution, and internal pumping facilities, and recommended immediate, near-term, and long-term improvements. City completed all of the recommended immediate improvements, but none of the near-term improvements. These improvements are now ten years beyond the time in which implementation was originally recommended. As such, many deficiencies, including inadequate system pressures and fire flows, currently pose health and safety risks. The Bush Street water main is located in the same trench, and in some cases below the existing sewer main. When the water main is depressurized during leak repairs, significant public health risks exist.	165,000	1,285	1,923 01	Siskiyou	I	2012

780 0300037	0300037-001	LAKE AMADOR RECREATION AREA	Water quality protection project	Pipe treated water from the Amador Water Agency's Mokelumne River source to this water system. AWA ha applied for funding for a project to bring a quality supply of water to the area and wholesale it to existing purce	J as g	0	С	Source water is from an extremely impaired source strongly influenced by a waste water discharge	1,000,000	73	2,000 10	Amador	Ш	2000
781 3310036	3310036-004	Western MWD - Murrieta Division	Construct New Well	Design replacement well in new location. Construct ne well.	L we	0	С	Well located in close proximity to large concentration of septic tanks - increasing nitrate levels.	100,000	2,446	6,305 20	Riverside	V	2004
782 5510001	5510001-007	TUD - Sonora/Jamestown Water System	Sonora Water Quality Improvement Program	TUD proposes to replace one thousand (1000) water service laterals ranging in pipe size from 3/4 inch to 6 inch. The service lines would be replaced from the District main to the customer's property line. The District will then implement a private water service line replacement program to encourage property owners to replace, at their expense, the water service line from the District's meter to the residence or business. Blow offs and hydrants will be added to the TUD system at intervals and distrances to allow for adequite system flushing.	l so v	0	С	Water delivered in the business core of the City of Sonora and surrounding residential areas is constantly plagued with terrible taste, odor and color casued by rusty pipes, high iron and manganese and breakthrough of iron and manganese films. There are over 230 dead ends in the Sonora system with very few blow offs or fire hydrants to allow for adequate flushing of the system. The level of disinfection byproducts in the Sonora system is increasing to levels near violation due to the high degree of sediment and organics and the lack of flushing capability. Customer complaints of colored, smelly or dirty water caused by 100 year old service lines average between 150 and 200 per year. Service lines failure is occuring on a regular basis, causing widespread service outages and potential backflow conditions from leaky water service lines in the same trench as sewer service laterals.	1,500,000	4,342	10,294 11	Tuolumne	Ш	2007
783 0410011	0410011-004	Del Oro Water CoParadise Pines	Del Oro Water Company - Paradise Pines District - Replacement Pipeline Project	The existing mainline pipe will be abandoned and approximately 5,000 feet of 8" pipe will be installed as replacement in conformance to all applicable standard and within public right-of-way.	J a Is	0	С	The existing mainline piping that serves the Paradise Pines District has shown a marked deterioratoin over the last several years due to the increasing age of the mainline. The system has experienced several catastrophic cracking failures along portions of the pipe which has caused substantial flooding. The existing mainline pipe does not conform to AWWA standards, and is not NSF 61 rated. Since the pipe was installed many years before the region had developed, residential homes have been built above of the piping and a large sewage leechfield exists over a long section of the pipe.	750,000	4,752	11,405 21	Butte	I	2009
784 3410704	3410704-006	SCWA Mather-Sunrise	Well Replacement	Design and construct new well to replace well.	J	0	С	Well has been abandoned because of proximity to a sanitary sewer	250,000	4,330	15,903 09	Sacramento	I	2006
785 1010029	1010029-001	CITY OF SANGER	Water quality protection project	Install ~33,000 feet of new water mains.	L	0	С	Very old, deteriorated 4" cast iron pipelines. Many sections of these lines ruptured in January 2000 resulting in water outages and a boil water advisory required by DHS.	2,000,000	5,989	25,404 11	Fresno	Ш	2000
786 1910028	1910028-002	CRESCENTA VALLEY CWD	Well Rehabilitation	Design and construct four (4) replacement wells. Rehabilitate four (4) existing wells with new casing liners and gravel pack.	J	0	С	Aged wells experience random coliform bacteria episodes.	1,500,000	8,133	38,000 15	Los Angeles	IV	2006
787 2110002	2110002-004	Marin Municipal Water District	Water quality protection project	To erect continous barbed wired fence around the reservoir.	J	0	С	No fencing - cattle have direct access to reservoir.	620,000	60,599	190,800 18	Marin	Ш	1998
788 4901277	4901277-001	Bucher Water Company	System Upgrade	install c-pad, raise casing, install vents and adequate disinfection facilities	J	0	Ρ	Well construction is inadequate	100,000	12	30 18	Sonoma	Ш	2003
789 5400882	5400882-001	PLEASANT VIEW SCHOOL	Tie in with Poplar CSD	Interconnect with Poplar CSD water system and abandon well.	J	0	Ρ	School's well is within 50 feet of Poplar CSD's wastewater disposal ponds. Potential for contaminant migration to School's well.	230,000	9	527 12	Tulare	Ш	2002

790 1206002	1206002-002	Palomino Estates M.W.C.	Water Quality Monitoring Equipment Project	The project will install a Surface Water Treatment Plan Monitoring and Recording System in accordance with CDHS Drinking Water Department requirements. The system will include the following:a) Influent turbidity monitoring and recording() Effluent turbidity monitoring and recording() Effluent turbidity monitoring and recording() Effluent theore residual monitoring and recording() Effluent temperature residual monitoring and recording() Filter effluent flow monitoring and recording() Minimize waste volume and materials() Minimize waste shall be provided to monitor and record the raw water shall be provided to monitor and record the parameters will be capable of storing at least 5 years of raw data and reports. The new system will enable the water company to meet the CDPH monitoring and reporting standards.	al m d ne	25	C	The Palomino Estates Water Company currently has no automatic monitoring equipment. Chlorine levels and turbidity are monitored manually on a daily basis. The water system operates disinfection facilities but lacks reliability features, alarms, constant chlorine residual and turbidity analyzers. These deficiencies result in non- compliance with drinking water standards.	47,800	19	64 01	Humboldt	1	2009
791 5200504	5200504-004	City of Tehama	City of Tehama Water System Monitoring and Control	We have had our system analyzed to see what equipment would need to be installed to allow off site monitoring and control. Equipment would be added to allow offsite monitoring of: water level, pump flow, system pressure, power, chlorine residual, communication between the two wells, HOA switch position, generator including battery voltage, fault, and transfer switch position. Equipment to be installed at the two sites would be: 30' poles with antennas, cables conduit, control panels, door sensors, chlorine sheds with concrete pads, 120V receptacles for chlorine pumps, ventilation fans for chlorine shed, pressure transducers, well level transducers, 4-20mV output for existing flow meters, Stenner Chlorine Pumps and Hacl Chlorine Analyzer. This equipment would allow our current operator or an off site operator to continually monitor our wells and water. This would provide a labor savings by reducing or eliminating man-hour trips to the well sites for inspection and routine maintenanci visits. It would allow water quality security by monitoring the water system and alarms on any chang in operator-assigned conditions. It will allow chlorine monitoring in real time with adjustments to be made b internet. The chlorine system would automatically shu down in event of catastrophic chlorine levels. All equipment connected to the system can be operated	K d s, h s se e vy tt	25	C	With limited staff and funds, we need to have the ability for more constant surveillance over our water system. Currently, it is too labor intensive and expensive for our small system to monitor our two wells on a daily basis. Our little city floods on a regular basis. When flooding occurs, we are not able to access the wells withour wading through waist high water which is sometimes quite swift and a real safety issue. We need to be able to monitor and make chlorine adjustments without physical presence. There have been times when one of our wells has shut down without our knowing about it until checking the well site physically. We need to be able to monitor both well sites without having to physically be present at the sites. It is important to be able to monitor both well sites. It is important to be able to monitor both well sites. It is important to be able to monitor both well sites without having to physically be present at the sites. It is inportant to be able to monitor due que and causing the pumps and controls to go down. We have been told that it has probably shortened the life of our equipment. As we had no historical record of the power input, we could not bill the utility for repairs. Our water operator is 71 years old with no one else in line. We need to be able to install equipment that would allow the system to be monitored from anywhere with an internet connection so that we could have someone from another nearby water system oversee our system if and when necessary. We have MOU's with two nearby small	78,200	192	435 21	Tehama	1	2009
792 5305107	5305107-001	So Trinity Unified School Dist.	Disinfection enhancement	Install new flow-paced chlorination system.	К	25	Ρ	Chlorination system is not flow-paced and does not	10,000	4	200 01	Trinity	I	1998
793 0707588	0707588-001	BIG OAK MOBILE HOME PARK WATER	Resolve coliform problems	Connect to city water.	к	20	с	Problems with Coliforms.	105,000	65	156 04	Contra Costa	Ш	2006
794 3310016	3310016-001	Hemet, City of	Disinfection enhancement	Unknown - possible nitrogen block - acid cleaning - redrilling.	К	20	С	Well developing potential bacteriological problem, unknown degree of contamination. Mandatory chlorination is required. Improvments needed for contact time and reliability.	750,000	8,667	20,047 20	Riverside	v	1998

795 1010007	1010007-025	FRESNO, CITY OF	Water Supply Disinfection - Construction	This project is for the construction of 14 permanent chlorination facilities. These facilities include a secured enclosure to house the necessary equipment and chemicals, chemical metering pumps, tubing and associated plumbing to inject the chlorine solution into the well water prior to distribution in water mains.	к	20	С	As a result of several water samples having bacteria detections, the State Department of Health Services (DHS) mandated the disinfection of the water system. To comply with this mandate, the City's Water Division, after approval by the DHS, devised and initiated a Coliform Compliance Program by injecting 12% chlorine solution (sodium hypochloride) in the distribution system.	1,034,000	128,152	457,511 11	Fresno	Ш	2009
796 3710036	3710036-001	Borrego WD	Disinfection enhancement	Installation of gas chlorinators at Wells 8, 10, 12, and	к	15	с	Inadequate disinfection facilities to treat raw	130,000	2,017	2,535 14	San Diego	v	1998
797 2410006	2410006-001	DELHI CWD	Disinfection enhancement	INSTALL NEW CHLORINATION FACILITIES.	к	15	С	THE EXISTING HYPOCHLORINATORS AT THE FIVE WELL SITES DO NOT HAVE ADEQUATE RELIABILITY FEATURES.	200,000	2,254	5,548 11	Merced	ш	1998
798 1810001	1810001-001	City of Susanville	Bagwell Springs Chlorine System Upgrade	To install a power line to Bagwell Springs so the high pressure gas chlorination system can be replaced by a gas chlorination system operated under vaccum. Installing power is required to run a vaccum pump due to the pipeline not having sufficient pressure to produce a vaccum to run a vaccum feed system. The power supply will also allow the installation of scada, leak detection equipment and monitoring systems on site.	к 2	15	С	To upgrade the Bagwell Springs pressurized chlorination system to a gas chlorination system operated under vacuum and install safety detection equipment on site. Annual DHS inspection report deficiency item number 2 dated December 5, 2006	75,000	3,599	9,137 02	Lassen	I	2007
799 1010027	1010027-002	REEDLEY, CITY OF	Domestic Water Well Chlorine Residual Analyzers	This project will purchase and install a Chlorine Residual Analyzer at each of the City's 8 domestic water wells and two new 1.5 million gallon water towers and install a Supervisory Control and Data Acquisition (SCADA) system to monitor and control the disifection of the City's water distribution system. The SCADA system will be able to monitor the wells at all times and provide the City Staff with alarms if and when the residual chlorine in the system is outside acceptable parameters. The SCADA system will also provide City staff the ability to react to such fluctuations in the residual chlorine in the system and adjust the injection rate remotely from one central location. These improvements to the City's water system will proivide for better monitoring and control of the chlorine injected into the system, producing a much more consistent level of disinfection and reducing costs to the City for chlorine. This project will provide for a much more efficient control of the City's water distribution system and a better quality product being delivered to the residences, schools, businesses and industries that utilize City water.	ĸ	15	c	Currently the City has no Chlorine Residual Analyzers for any of the City's wells. The City, in accordance with State requirements, the City tests each well on a weekly basis. This is insufficient control of the water system disinfection for a delivery system that produces and delivers 1.959 billion gallons of water per year with peak flows of 266 million gallons per month (in September) to a minimum flow of 94 million gallons in (January).	845,000	6,619	25,584 11	Fresno	11	2009
800 5101007	5101007-001	Country Village North MHP	Country Village North MHP - Well replacement	Two approaches are possible:1. Deepen the existing well from about 80 ft and provide casing to a different aquifer (est. to be at 120 ft) or,2. Drill a new well aprox 120 ft deep, in close proximity to the existing one. The costs would be associated with the drilling, testing and reconnecting the 7 1/2 HP submersible pump to the pressure tank.	к	10	С	The current well is about 80 ft deep. Since the early 1990's, usually once a year, a water test comes back showing total coliform present. Follow up test come back as absent. As a precaution I Chlorinate the system. I would drill another well to a deeper aquifer and negate the reason for Chlorination. Based on other wells in this area I estimate the depth would be at the 120 level.	50,000	18	34 21	Sutter	I	2009

801 1200518	1200518-001	Riverside CSD	Riverside CSD Reliabiity Project	Green Non CEQA projects:Continue replacement of meters (75 still need to be replaced)Install 4 main line meters to help with leak detection Purchase Leak Detection Monitoring Equipment Remove and Replace Existing Generator and Gas Tank with Propane Standby Three Phase generator. This includes new pad for propane tank and a propane tank. Purchase safety equipment so that operators can enter confined spaces without risk to person. This includes items such as 4 gas detection meter and calibration tools, tripod lifeline systems, full body harness, respirators/blower and hose, gas portable to be used at remote site etc.System update . Remove obsolete Lookout program (SCADA) and replace with new Clear Scada and Telepace telemetry upgrades. Upgrade server to be able to accept these upgrades and allow for two users . Allow for Internet Explorer interface to page operator when low levels or power outage occurs. Allow for intermet Explorer interface to page operator when low levels or power outage occurs. Allow for minside source well room to a lean too addition outside main pump house. Presently we are exposing SCADA wiring to chemical fumes which is disintegrating system and will eventually corrupt electronics. Move all corrosive and flammable storage from pump house to lean too building attached to pump house. This requires new construction.Purchase corrosive and		10	c	Riverside CSD problem is reliability. Lack of reliability exists at many levels. Software, Potential contamination of system due to lack of back flow device instillation(s) outdated meters, lack of safety equipment to allow operator(s) access for repair(s) in confined spaces, high manganese levels with our back up well. (#6) and lack of leak detection equipment to find problems. Potential for erosion of SCADA system due to fumes from location of clorniator system. And finally a obsolete WWII surplus generator that at best has seen it's last days that needs to be replaced with one that is below the Haz Mat County Requirements for storage and one that will provide on demand power to run our source wells and equipment when power is off, which in Humboldt County happens frequently. One half of our requested amount would be considered NON CEQA - GREEN PROJECTS, The other half 95,000.00 is the cost to install a Green Sand Manganese Filtration system and purchase the land to put the system on. The CEQA impact of this would be minimal and could be completed, in our opinion within the time perimeters of the awards.Our current emergency paging software ( Lookout ji s obsolete. Support has been outsourced to China via e mail only. Not an acceptable situation as e mail response is is not guaranteed in a timely manner. Frequently it is our customers who tell us there is no water. Due to low water levels or pressure levels we	242,000	98	293 01	Humboldt	1	2009
802 3610009	3610009-004	BIGHORN - DESERT VIEW WATER AGENCY	Chlorination Facilities Reliability Project	Upgrade chlorination system components including K dispensing equipment, monitoring and recording devices as well as climate and security control apparatus for increased reliability.	ς 	10	с	The disinfection facilities at the agency are deficient in the following ways: No SCADA to monitor residuals, intrusions, or runaway conditions, all chlorination equipment 100% manually operated with once a day, limited supervision, handheld monitoring equipment upgrades warranted, facility enclosures are primitive providing less than adequate storage temperatures (temp. variation enclosures >115 F to 20 F), security to chlorination equipment, staff continuing education on Preventative Maintenance. In addition, three production wells are not equipped with discharge to waste valves and piping which also decreases efficiency of the chlorination system and therefore posses risk to system contamination.	100,000	1,903	5,000 13	San Bernardino	v	2009
803 1910079	1910079-006	LYNWOOD-CITY, WATER DEPT.	Emergency Potable Chlorination System	Project :Purchase a trailer mounted emergency K chlorination system for as needed chlorination of sections of the water system.	< compared by the second se	10	С	Existing Condition:The City of Lynwood Water System has presently six operating water wells, a two million gallon capacity concrete subterranean storage reservoir with a booster pump station and one MWD water supply connection. Each of the well sources and the booster pump station have used gas chlorine for disinfection of the water supplies pumped. The chlorination systems have all been recently been changed over to use liquid chlorine. The State Public Health Services Department has advised the City operators, the Utility Services Division, that the water system was of a size 10,000 plus connections in a City of 65,000 persons, that the Division should have an emergency chlorination trailer that could be put into service in an emergency for localized chlorination of sections of the water system as needed to comply with the requirements of the Health Department. No public notification is required.	90,750	9,035	73,212 22	Los Angeles	IV	2009

804 1900007	1900007-004	CALIFORNIA CONSERVATION CAMP # 14	Provide new chlorination system and secured structure to protect system	Install new chlorination system and secured building to protect the system.	к	10	Ρ	A Boil Water Order was issued on October 8, 2008 due to positive testing for both total coliform and fecal coliform. The chlorination system on the site should be replaced with a modern system. Well is in close proximity to the San Francisquito Creek and to the sentir chak and leach lines	150,000	1	95 16	Los Angeles	IV	2009
805 1900901	1900901-003	FIRE SUPPRESSION CAMP 19	Add chlorination system and secured structure	Design and install a chlorination system to be housed in a concrete, secured shed.	n K	10	Ρ	The small community water system is under the influence of surface water. The system needs a permit but Dept of Public Health will require a treatment system prior to issuing the permit.	150,000	1	125 16	Los Angeles	IV	2009
806 1503341	1503341-001	TEJON-CASTAIC WATER DISTRICT	Improve Chlorine contact Time	Construct discharge line from well to tank.	к	10	Р	Inadequate chloring contact time.	40,000	15	1,000 19	Kern	Ш	2007
807 5000277	5000277-001	VALLEY HOME SCHOOL PIONEER	Disinfection enhancement	We isolated the north well from the potable water conveyance system by shutting it off and disconnecting it from the water storage tank. We were required to trench in a new 2 1/2" water line last May. This temporarily solved the problem, but we will have to reconfigure our piping schematics, put in more back- flow prevention devices, and possibly a new separate storage tank for the north well, so as to create enough pressure to be able to adequately water the school grounds while not contaminating the school site's potable water system.	ĸ	5	Ρ	During the past year we were found to be in violation of the California Domestic Water Quality Monitoring Regulations by testing positive for coliform bacteria. We currently have two wells in close proximity to one another which feed into one storage tank which, in turn, serves the entire school site its potable water. We were ordered to shut these wells down and use bottled water only until the source of the contamination was found. With the help of an outside service vendor the north well seemed to be the source of the continual contamination problem. We also had to have our food service individually wrap each lunch serving for the students and staff as well as bringing in hot water for cleaning after each meal service until the contamination was completely cleared from the system. Title 22, California Code of Regulations 64426.0 & 64426.1	10,000	1	26 10	Stanislaus	III	2007
808 1502317	1502317-001	KERN CO P&R-GREENHORN MT. PARK WA	TE Disinfection enhancement	REPLACE 2,000' OF PIPELINE. DRILL A NEW WELL	к	5	N	NEEDS RELIABLE DISINFECTION EQUIPTMENT. DISTRIBUTION PROBLEMS - OLD PIPELINE. A CAMPGROUND AT THE SITE HAS BEEN CLOSED FOR SOME TIME DUE TO COLIFORM CONTAMINATION	65,000	52	200 19	Kern	Ш	1998
809 4310027	4310027-004	Santa Clara Valley Water District	Disinfection enhancement	Clearwell modifications to increase the disinfection time.	К	0	с	Disinfection process needs improvement.	1,377,000	25	0 17	Santa Clara	П	1998
810 2700536	2700536-003	CORRAL DE TIERRA ESTATES WC	Disinfection enhancement	Install an automated chlorination system and provide for back-up chlorination.	к	0	С	Existing chlorination system is not reliable.	10,000	16	45 05	Monterey	Ш	1998

811 2701278	2701278-005	RANCHO CHAPARRAL MWC	Distribution Line Replacement/ System Under Influence of Surface Water	The project is to replace two miles of supply and distribution lines. The supply line is 2" in diameter and one mile long having an elevation gain of 900 feet. The replacement will be schedule 40 steel and withstand 500 lbs of pressure at the well head. The four returning distribution lines of approximately an additional mile will be 2" diameter and will be of sufficient size to meet miminal requirements of household water systems.	ς Ο	c	Rancho Chaparral Mutual Water Company is in vioation of the surface treatment rule, CCR, Title 22, Sec. 64652. The lack of a filtration/treatment plant along with aged distribution lines are responsible for this violation. The fires in Big Sur have contributed to increased contamination of Big Sur River source water revealing as much as a probable 256 count of e-coli. The system is currently has a letter of commitment for Proposition 50 funds (project number P50-2701278-081) to build a treament plant and replace rusting buried water tanks. The grant does not include replacement of approximate two miles of 40 year old rusting and leaking supply and distribution lines. The system is now injecting chlorine for disinfection and in so doing has uncovered difficulty in maintaining a consistent residual chlorine level due to the large amount of rust in the piping. The overall success of treatment is also threatened by the increasing holes in the lines that can allow contamination to occur when water pressure is lost during power outtages which plague Big Sur in winter months. In addition, although we are not classified as a "Disadvantaged Community" a closer look shows much difficulty in raising monies for this project due to the fact that eight of the sixteen members have incomes below the medium household income.	295,000	17	48 05	Monterey	1	2009
812 1900599	1900599-001	VALHALLA WATER ASSOCIATION	Pumphouse Upgrade with Automatic Disinfection & Monitoring	This project will upgrade the top of the well casing so K that it rises 18"above the well-head slab, and upgrade the well-head seal to form an impenetrable barrier to water that might otherwise seap from the well-head slab into the well casing. The Pump house will be expanded to include an additional 30 square feet of floor space to accommodate a 30-gallon tank and injection-pump assembly for direct injection of sodium hypochlorite solution into the water stream flowing from the well pump to the distribution storage tanks. The assembly will include a continuous chlorine analyzer and control module to moderate the injection pump for achievement of a specific residual chlorine level.	ς Ο	с	Since August of 2009, the primary well has tested positive for coliforms on a consistent basis. The system was placed in a DO NOT DRINK status in December of 2009. In April of 2010, the water tested positive for fecal coliforms as well as high Nitrate (as N). The coliforms are most probably caused by aquifer contamination. The source of fecal coliforms was traced to a defective well-head seal which allowed rinse water to seap into the well. The source of the high Nitrate (as N), measured over 2100 ppm, is believed to be from additional contamination of the aquifer during the heavy rains of January and February 2010. These nitrate levels have significantly decreased as of August 2010.The well has never been set up for routine disinfection, and this has been a concern for several years, even before these latest water test results which violate the Safe Drinking Water Act at several points.	40,000	17	48 16	Los Angeles	IV	2011
813 3900558	3900558-001	RANCHO SAN JOAQUIN WATER SYS	Disinfection reliability	DRILL NEW WELL. INTERCONNECT WELL 1 WITH WELL K 2 PRESSURE TANK AND INSTALL AUXILIARY POWER. OTHER = DESIGN AND CONSTRUCTION.	K 0	с	FREQUENT POSITIVE FINDINGS REQUIRE RELIABLE DISINFECTION FACILITIES.	500,000	51	141 10	San Joaquin	Ш	2006

814 4900630	4900630-003	Austin Creek Mutual (Springhill)	4-Log Virus Inactivation System for Back Up Well	Installation of a 4-log virus inactivation system. Installation of 60 feet of 10" PVC pipe doubled back on itself in a serpentine fashion between the well and the pump house to provide adequate contact time for the chlorine and water. The contrator will lay the pipe on compacted base and bury it to avoid trenching the area. For automatic monitoring of chlorine residual, the contractor will install an automatic chlorine residual analyzer and related devices to shut off the well and summon the water operator if the residual drops too low or rises too high. The automatic residual analyzer will require a dedicated phone line.	к	0	С	Current well 01(state ID # 4900630-001) was drilled in 1959. Back Up well 02(state ID # 4900630-004) was drilled in June 2008. The Back Up well was drilled in preparation for the time when the current well will no longer be functional. The California Department of Public Health has advised Austin Creek Mutual Water Company-Springhill that we must install a 4-log virus inactivation system before we can use the Back Up well. The reasons for the extra monitoring are: 1. The Back Up well is only 30 feet deep with a 10 feet sanitary seal. California Well Standards specify a minimum 50 feet annular seal.2. Raw well bacteriological samples show Total Coliform results ranging from <1.0 to 26.5 MPN and E. coli from <1 to 1 MPN.3. The Microscopic Particulate Analysis showed low levels of plant pollen and rotifers. The Back Up well is inactive and the Permit Application process for the Back Up well is incomplete. We are not authorized to use the Back Up well until the 4-log virus inactivation system has been installed and approved.	10,000	61	150 18	Sonoma	U	2011
815 4300560	4300560-002	Green Mountain Water Company	Disinfection enhancement	Install chlorination system, low pressure staging tank,	к	0	с	Existing disinfection control system needs to be	17,000	49	190 17	Santa Clara	Ш	1998
816 3900724	3900724-001	ELKHORN ESTATES WATER SYSTEM	Disinfection enhancement	<ul> <li>STUDY CAUSE OF COLIFORM CONTAMINATION AND, IF NECESSARY, DRILL A NEW ONE.</li> </ul>	К	0	С	GUENT COLIFORM POSITIVES REQUIRE RELIABLE DISINFECTION FACILITIES.	450,000	70	200 10	San Joaquin	ш	1998
817 4510002	4510002-011	Mountain Gate C.S.D.	Engineering, Installation & Programmingof a SCADA System	Engineer, Install and Program a SCADA System. The locations for the project include the Beaver Island Pumping Station, Bridge Bay shore box, booster station, filter plant, storage tanks, and the district office. Programmable logic controllers will be installed at each check structure with a radio modem for transmitting data to the control stations at the filter plant and the MGCSD office.	ĸ	0	с	The District currently utilizes the time-consuming practice of sending staff to monitor and collect data along the District's System. In its 2009 Annual Inspection Report the CDPH is requiring that the District develop better methods for monitoring its System.Continuing to monitor and collect data from the system using staff time keeps the District from adequately providing its water customers with other necessary upgrades to its system.	221,471	664	2,500 02	Shasta	I	2011
818 1510002	1510002-003	BORON CSD	Disinfection enhancement	CHLORINATION FACILITY FOR TWO WELLS	К	0	С	NO DISINFECTIN OF GW TO MEET FUTURE GW	10,000	839	2,500 19	Kern	Ш	1998
819 5610005	5610005-002	MEINERS OAKS CWD	SWTP Monitoring and SCADA Alarm system	The project will include building a new 10 ft by 15 ft building on a concrete pad adjacent to the SWTP. The flooded SCADA equipment will be rehabilitated to include monitoring the alarms for the system; alarms for high and low chlorine levels and turbidity notification interface; tank level and low pressure alarm to provide early warning of system pumping or distribution failure.	ĸ	0	С	The monitoring station and SCADA equipment alarm system is currently located near the SWTP in a temporary large freight shipping container. The equipment is inoperable due to flooding of the container. The system needs a permanent secure building to house a rehabilitated SCADA system, Turbidity and Chlorine monitoring and recording equipment.	150,000	1,283	4,000 06	Ventura	IV	2007
				equipment will be upgraden as the conting equipment will be upgraded to unclude chart recorder and data logger with software, and secured in the new building.										
820 5010009	5010009-001	Keyes Community Services Dist.	Disinfection Upgrade	REPLACE WITH ON SITE CHLORINE GENERATORS. OTHER = DESIGN AND CONSTRUCTION.	к	0	с	REPLACE HYPOCHLORITE FEED PUMPS PURCHASED FOR OCCASIONAL, NOT FULL TIME, USE.	80,000	1,472	4,575 10	Stanislaus	Ш	2006
821 4910027	4910027-004	Sonoma State University	Domestic Water Chlorination System	Removal of the existing T2 Chlorinator (approx. 10 years K in age) from the potable water control building located within the Corporation Yard including HAZMAT disposal. Install SD feet of new 1" CPVC piping and fittings for new system requirements, upgrade electrical power supply from 110VAC to 220VAC, install new sensors to existing Allen-Bradley monitoring system which will allow monitoring of water condition including chorlination and total dissolved solids and alarm reporting to Police and Plant Operations with automatic shutdown in the event of chlorination system failure.	0	c	The Unviersity relies on self operated, owned and maintained well water for the campus. The current chlorination system is no longer supported by the manufacturer and replacement parts are not available. If the system was to fail, the University would shut down and the on-campus residents would have to be relocated. Violations would be not providing proper water disinfection and most likely violation of California Code of Regulations Title 22 Sections 66-4421-64426.5.	100,000	1,100	6,000 18	Sonoma	Π	2008	
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822 4910027	4910027-005	Sonoma State University	Ultraviolet Purification Water Treatment System	The campus is proposing to install a Barrier SUN Series System, SUN8E-HO Type 304. The project includes pouring of concrete slab at Well No. 2A which will , installation of 8' chain link fence approximately 20' x 30', install electrical 208VAC 3-phase power. Intercept existing pipe from the well, install new UV light system, install monitoring and alarm system, install water piping to the existing system and lab testing, etc. This system would provide the necessary sanitizing of the water s well as the redudency and auto shutdown to prevent system contamination in the event the UV system failed.	0	c	The existing well water from Wells No. 2A is consistently positive for total coliform since development. Due to the contamination, the water supply cannot be used for potable water which places the campus at risk if one of the other wells should become contaminated or otherwise fails. The system would treat the water before entering the existing domestic water system. The Office of Drinking water has verbally approved this approach assuking the coliform does not clear. The well shaft has been sanitized multiple times and heavily flushed to attempt to clear without success. Non compliance in this area violates California Code of regulations Title 22 Section 64421-64426.5.	110,000	1,100	6,000 18	Sonoma	Π	2008	
823 3310036	3310036-005	Western MWD - Murrieta Division	Install Chlorine analyzers 8 alarms	Identify, design, purchase and install chlorine analyzers K and alarm systems.	0	С	System lacks chlorine residual analyzers and appropriate alarms.	50,000	2,446	6,305 20	Riverside	v	2004	
824 2910023	2910023-007	Nevada ID - Lake Wildwood	Disinfection reliability	Add chlorination equipment. Involves design and K construction.	0	С	Inadequate chlorine residual downstream of pump station.	25,000	3,137	7,090 21	Nevada	I	2006	
825 1010023	1010023-003	ORANGE COVE CITY OF	Orange Cove SWTP Expansion and Storage Improvements	As discussed in the Problem Description section of this DPH Pre-Application The three primary issues to be addressed per this request are: Issue 1:1. The existing SWTP does not have sufficient redundancy capacity to reliably provide potable water in case of filtration equipment failure and maintenance and also meet current population growth demands. Issue 2:2. The SWTP disinfection facilities do not meet current safety standards and equipment throughout the plant shows clear signs of aging. Issue 3:3. Problem with leakage of the 140 acre feet SWTP off canal storage ponds creates a danger of water shortage during times of Friant Canal Authority canal maintenance and dewatering. The Canal Authority canal maintenance and dewatering. The Canal Authority canal maintenance and dewatering. The Canal Authority is the primary supplier of potable water to the community. The City does not have any back up well capacity. The City does not have any back up well its growing demands for potable water. The Kennedy Jenks Facilities Concept Study (May 2007) provides the following recommendations to address the Issues #1 and #2 above. A copy of the Facilities Concept Study (May 2007) is on record with the Fresno office of DPH. RECOMMENDATIONS:1. Installation of 2,100 gpm additional filtration capacity in the location of demolished sludge beds.2. Installation of intake pumping and chemical storage and feed capacity for an additional 2,100 gpm filtration capacity.3. Install two	0	C	The City of Orange Cove (OC) is ranked among the 5 poorest communities in California. Per the 2000 Census, City MHI is 522,357, 44% of the population lives below the poverty level; with a 25% unemployment rate. OC is an extraordinarily poor community. The OC Surface Water Treatment Plant (SWTP) has a current capacity of 2,100 gpm or 3,000,000 gpd. It was installed in 1974 and completed in 1996. The City has experienced rapid growth and now reflects a 10,000 population. Thus, current water demand often surpasses the available treatment capacity. The OC SWTP requires additional redundant treatment capacity, to address the City's increasing demands. Should elements of the current treatment process fall out of service, due to maintenance or failure, the City's water supply is threatened. In addition, outdated SWTP chemical storage and feed equipment has the potential to create a safety hazard; and filtration and pumping facilities require significant maintenance. The existing gas chlorine system does not include provisions for leaks or chemical spill containment. Modification of the SWTP facilities is eccessary in order to supply reliable potable water to the community. The primary required modifications deal with the capacity of filtration system. Currently, two different conventional treatment trains provide a maximum of 2,100 gpm of treated water, which is no longer sufficient to meet growing	12,500,000	1,503	8,500 11	Fresno	Ш	2009	
826 1510018	1510018-001	ROSAMOND CSD	Disinfection reliability	CYCLE TESTING FOR SOURCE OF BACTERIOLOGICAL K CONTAMINATION. OTHER - DESIGN AND CONSTRUCTION	0	C	NEEDS RELIABLE DISINFECTION EQUIPTMENT WELL CONTAMINATED WITH BACTERIOLOGICAL CONTAMINATION	25,000	4,593	10,633 19	Kern	Ш	2006	

827 4110011	4110011-004	Coastside County Water District	Water Treatment Plant Chemical Systems and Control Improvements	Denniston Water Treatment Plant:1. Remove existing chlorine gas-related equipment and facilities.2. Install new on-site hypochlorite generation equipment and appurtenances.3. Install new hypochlorite feed pumps and associated controls.4. Remove existing and install new caustic soda storage tank, pumps, and piping.5. Remove existing and install new potassium permanganate storage tank, mixer, pumps, and piping.6. Remove existing and install new polymer metering pump and piping.7. Install new polymer storage tank.8. Remove existing and install new in-line flash mixer9. Remove existing and install new in-line flash mixer9. Remove existing and install new in- flex for the storage tank, feed pump and piping.11. Construct containment for all new storage tanks.12. Miscellaneous structural, valve, piping, electrical, control improvements.Nunes Water Treatment Plant1. Remove existing chlorine gas-related equipment and facilities.2. Install new on-site hypochlorite generation equipment and appurtenances.3. Install (2) new hypochlorite storage tanks.4. Install new phypere feed pumps, and piping.6. Remove existing polymer feed equipment and install new polymer solution mixing, storage, and feed systems.7. Construct containment for all new storage tanks.8. Miscellaneous structural, valve	r,	0	c	CCWD operates two water treatment plants, the Nunes WTP, completed in 1982 and expanded in 1994 and the Denniston WTP, completed in 1972. Both plants need significant updates to chemical storage, feed and control systems in order to ensure safety, compliance and reliability. The need for improvements is underscored by three incidents of water quality violations in recent years: a chlorination requirements violation at Nunes in 2005 and turbidity (2006) and chlorination violations (2008) at Denniston. The scope of the plant improvements plan is based on a 2006 Camp Dresser & McKee study which included regulatory compliance evaluation and plant operations assessment: 1.) Need to replace chlorine gas with liquid hypochlorite for disinfection in order to comply with California Accidental Release Program and San Mateo County Environmental Health Services Division requirements.2.)Need to replace chemical storage and feed systems to meet health, safety, and environmental requirements. improve plant reliability.3.) Need to configure Denniston NTP for automated shutdown and automated filter-to-waste in order to ensure water entering the distribution system meets standards at all times. Lack of such control resulted in water quality violations in 2006 and 2008.4.) Need to upgrade process monitoring and control systems at both plants for improved reliability.	3,200,000	6,893	16,900 17	San Mateo		2009
828 4310028	4310028-005	San Jose State University	Water Distribution System Improvements Phase 1	The project includes the upgrade of the SJSU disinfection system, installation of disinfection chemica storage facilities and improvements to mechanical systems for improved reliability	K al	0	с	The San Jose State University (SISU) Public Water System (PWS) serves a population of between 10,001 and 100,000 and is intertied to the San Jose Water Company's PWS that serves more than 100,000. The source water for SISU is the Main Campus Well #2. The current disinfection system is obsolete and inadequate and results in periodic water quality events. In 2008, Main Campus Well #2 was successfully rehabilitated necessitating further upgrades to mechanical systems to increase system reliability.	313,149	1,000	30,000 17	Santa Clara	11	2009
829 3410021	3410021-003	San Juan Water District	San Juan Disinfection Safety	Installation of a scrubber is the industry standard for protection against chlorine releases.	К	0	с	Disinfection system does not have the necessary safety equipment. One-ton containers of liquid chlorine do not meet safety requirements for secondary containment.	750,000	10,240	33,792 09	Sacramento	I	1998
830 4210016	4210016-001	Golden State Water Company - Orcutt	Disinfection enhancement	Replace the motor center and provide automatic controls.	К	0	с	MF Well 05 lacks needed reliability features for proper disinfection of the well water.	50,000	10,846	35,212 06	Santa Barbara	IV	1998
831 4210016	4210016-002	Golden State Water Company - Orcutt	Disinfection enhancement	Provide controls for the well site.	К	0	С	Evergreen Well 02 lacks needed reliability features for proper disinfection.	50,000	10,846	35,212 06	Santa Barbara	IV	1998
832 1910043	1910043-001	GLENDALE-CITY, WATER DEPT.	Disinfection enhancement	PROVIDE RELIABLY DISINFECTED WATER	К	0	С	NITRIFICATION PROBLEMS, INABILITY TO MAINTAIN DISINFECTANT RESIDUALS.	500,000	33,275	207,157 15	Los Angeles	IV	1998
833 4310011	4310011-041	San Jose Water Company	Replace 20 chlorine analyzers at ground water stations	This project will replace 20 chlorine analyzers that are a the end of their useful lives. Chlorine analyzers are necessary to accurately monitor and control sodium hypochlorite feed systems.	at K	0	с	Chlorine analyzers are necessary to accurately monitor and control sodium hypochlorite feed systems. The existing analyzers at the 12th St., 17th St., Bascom, Breeding, and Buena Vista ground water stations have reached the end of their useful lives. This includes a total of 20 analyzers.	187,800	219,571	998,000 17	Santa Clara	II	2009

834 1910067	1910067-036	LOS ANGELES-CITY, DEPT. OF WATER & PO	IW LAAFP - UV Project	The LAAFP Disinfection Contact Tank is a rectangular 9.5 million-gallon partially buried concrete tank designed to provide the required contact time for disinfection of the LAAFP flows using free chlorine. The tank will be an approximate 300 ft. by 150 ft. with sufficient baffling to create a 5 pass configuration. Approximately 800 ft, of 144-inch diameter reinforced concrete pipe will connect the tank to the LAAFP Outlet line and the distribution system. Chlorine injection points will be located both upstream and downstream of the tank. The contact tank will provide the necessary time to achieve disinfection of ammonia to form the chlorampines. In an extreme case, such as the filter plant operation at maximum capacity with cold water, then an operational change will be required in addition to the contact tank.		0	C	Currently, the disinfection requirement is typically achieved at the Los Angeles Aqueduct Filtration Plant with ozone treatment. When the ozone system is out of service, chlorine is used to meet the requirement. The Department of Water and Power is planning to convert to a chloramine residual disinfectant to reduce disinfection byproducts and comply with the Stage 2 Disinfectant/ Disinfection Byproducts Rule. Following the chloramine conversion, when the ozone system is out of service there would be times when the contact time requirements will no longer be achievable prior to the water reaching the first customer.	50,589,181	686,422	4,071,873 15	Los Angeles	IV	2009
835 1502244	1502244-001	SEMI TROPIC SCHOOL WATER SYSTEM	Disinfection upgrade	TIE INTO ANOTHER SYSTEM FOR DOMESTIC WATER USE AND USE EXISTING WELL FOR LANDSCAPE IRRIGATION. OTHER - DESIGN AND CONSTRUCTION.	К	0	Ρ	NEEDS RELIABLE DISINFECTION EQUIPTMENT WATER QUALITY TASTE AND ODOR PROBLEMS. STUDENTS AND PARENTS COMPLAIN	20,000	6	320 19	Kern	Ш	2006
836 3301083	3301083-001	Caltrans, Brookside Rest Area	Disinfection enhancement	Upgrade system.	К	0	Ν	Hypochlorinator pump fails every two to three months.	10,000	1	1 20	Riverside	V	1998
837 1900992	1900992-001	BIG OAKS LODGE	Disinfection enhancement	BUILD A 5000 GAL. HOLDING TANK, DEEPEN THE WELL, INSTALL A LARGER PUMP, PRESSURE TANK, AND AN AUTOMATIC CHLORINATION SYSTEM.	к	0	Ν	OCCASIONAL COLIFORMS. NO HOLDING TANK AND CHLORINATING SYSTEM.	10,000	1	25 16	Los Angeles	IV	1998
838 2110304	2110304-001	CSP - Marconi Conference Center	Disinfection enhancement	Replace wood storage tank with 125,000 gallon concrete ground tank. Replace water lines from sprins and well to treatment facility.	к	0	Ν	Antiquated, unreliable chlorimation equipment.	300,000	11	120 18	Marin	II	1998
839 3301082	3301082-001	Caltrans, Whitewater Rest Area	Disinfection enhancement	Upgrade system.	К	0	Ν	Hypochlorinator pump fails every two to three months.	10,000	1	6,000 20	Riverside	v	1998
840 4900822	4900822-001	Mount Taylor Mobile Home Park	Consolidation with City	either upgrade their treatment or consolidate with the City of Santa Rosa	L	45	с	high manganese exceeding secondary standard & health-based action level	60,000	22	60 18	Sonoma	Ш	2004
841 1010035	1010035-003	DEL REY COMMUNITY SERV DIST	New Municipal Well No.8	The project would be constructed in two phases:Phase 1: Drilling of a 6-inch-diamater test well to a depth of approximately 700 feet in northwest Del Rey by the casing hammer method of drilling. The test well would provide water quality and quantity information to be used for the design of the production well.Phase 2: This phase would include the drilling and equipping of the production well. The production well would be constructed to produce a minimum of 1,500 gallons per minute. The 16-inch-diamater production well would be equiped with a vertical turbine pump and motor, discharge piping, chlorination and electrical equipment within a secured enclosure (building), a hydropneumatic tank, an emergency standby generator, and other related site devellopment improvements. A 10-inch- diameter pipeline would be constructed for approximately 1,500 feet to connect the new well to the distribution system.		25	C	The Del Rey Community Services District (District) currently operates a water system that is supplied by three active groundwater wells (Well 4, 6, & 7) and two standby wells (Well 3 & 5). However, only Wells 6 and 7 are reliable drinking water sources since Well 4 can only be used intermittently due to recurrent bacteriologic contamination events and due its close vicinity to a previously contaminated site. Well 3 & 5 produce water with DBCP and Uranium above maximum contaminant levels. Past water quality sampling results for Well 4 showed positive for total coliform for two consecutive testing cycles on April 07 and June 07. The well has since been maintained to prevent this bacteriologic contamination but is still prone to such conditions as the well is not adequately equipped to follow appropriate flushing procedures. Also, District is afraid to use this Well 4 on a regular basis due to concerns of drawing down the groundwater levels in this area near an abandoned lead battery recycling site in southeast Del Rey. The site has been mitigated by the owner as required by the RWQCB but there are still concerns with regards to possible contaminants. The three active wells are the District's only water sources to meet the community's drinking water supply, fire flow and emergency needs. Only Well 7 is equipped with a backup generator to supply the community in case of power outages (very common in summer	1,140,000	402	1,100 11	Fresno	II	2009
842 1910002	1910002-001	AMARILLO MUTUAL WATER COMPANY	Air-stripper for 800 gpm well	Treat water with air-stripper.	L	25	С	Water from 800 gpm well for population of 3000 has PCE/TCE at times above MCL.	300,000	609	3,134 07	Los Angeles	IV	2002

843 5310001	5310001-012	Weaverville C.S.D.	East Weaver WTP Disinfection Upgrade	The proposed project would eliminate the use of gas chlorine and convert to UV radiation, or ozone depending on CDPH review, as the primary disinfectant. Sodium hypochlorite would be used as the secondary disinfectant. The District is currently undergoing ARRA/SDWSRF funded improvements. This project could be included under the West Weaver WTP 2009 Improvements in order to expedite the project.	L	25	C	The Weaverville CSD has a roccurring problem with disinfection byproducts. The three surface water sources are treated using approved alternative technologies and turbidity standards are typically always met. Disinfection through gas chlorination causes several problems: The District has spent a considerable amount on follow-up testing TTHM & HAA55 \$8,000. +/-The California Air Resources will require a Risk Management Plans on all three treatment plants. Trinity County Certified Unified Program (CUPA) fees continue to rise. Last year the District paid over \$8,000 in CUPA regulatory fees. Trinity County does not have a Hazardous Material Response Team and our liability carrier does not want our employees to attempt regulation require a minimum of two responders in moon suits and two responders with less protection for decontamination of the moon suit responders. This is requires more staff for the District.	264,000	1,577	3,554 01	Trinity	I	2009
844 5310001	5310001-014	Weaverville C.S.D.	West Weaver WTP Disinfection Upgrade	The proposed project would eliminate the use of gas chlorine and convert to UV radiation, or ozone depending on CDPH review, as the primary disinfectant. Sodium hypochlorite would be used as the secondary disinfectant. The West Weaver WTP is currently undergoing improvements through ARRA/SDWSRF funding. If the District were to receive funding for the disinfection improvements, the current contract could be modified to include these improvements. The estimated project cost may also be reduced if the disinfection improvements can be added under the current contract.	L	25	С	The Weaverville CSD has a reoccurring problem with disinfection byproducts. The three surface water sources are treated using approved alternative technologies and turbidity standards are typically always met. Disinfection through chlorination causes several problems:The District has spent a considerable amount on follow-up testing TTHM & HAAS5 \$8,000. +/- The California Air Resources will require a Risk Management Plans on all three treatment plants. Trinity County Certified Unified Program (CUPA) fees continue to rise. Last year the District paid over \$8,000 in CUPA regulatory fees. Trinity County does not have a Hazardous Material Response Team and our liability carrier does not want our employees to attempt repairs to eliminate any major release because regulation require a minimum of two responders in moon suits and two responders with less protection for decontamination of the moon suit responders. This is requires more staff for the District.	230,000	1,577	3,554 01	Trinity	I	2009
845 5310001	5310001-013	Weaverville C.S.D.	Trinity River WTP Disinfection Upgrade	The proposed project would eliminate the use of gas chlorine and convert to UV radiation, or ozone depending on CDPH review, as the primary disinfectant. Sodium hypochlorite would be used as the secondary disinfectant. This project could be included into the current ARRA/SDWSRF funded West Weaver WTP 2009 Improvements in order to expedite the project.	L	25	C	The Weaverville CSD has a reoccurring problem with disinfection byproducts. The three surface water sources are treated using approved alternative technologies and turbidity standards are typically always met. Primary disinfection through gas chlorination causes several problems:The District has spent a considerable amount on follow-up testing TTHM & HAA5s \$8,000. +/-The California Air Resources will require a Risk Management Plans on all three treatment plants. Trinity County Certified Unified Program (CUPA) fees continue to rise. Last year the District paid over \$8,000 in CUPA regulatory fees. Trinity County does not have a Hazardous Material Response Team and our liability carrier does not want our employees to attempt repairs to eliminate any major release because regulation require a minimum of two responders in moon suits and two responders with less protection for decontamination of the moon suit responders. This is requires more staff for the District.	280,000	1,577	3,554 01	Trinity	I	2009

846 5410010	5410010-006	Porterville, City of	Wells #2 & #21 - treatmer for nitrate near mcl	tt Design/construct a 1,500-gpm membrane filtration plant and blend the treated water with Wells 2 and 21. This will result in 3,000 gpm of usable water. The wells are located near the proposed water treatment plant site	L	25	с	Wells 2 and 21 (1,500 gpm) are shut down because of nitrates that exceed the MCL. The City is water short and therefore plans to construct a 1,500-gpm surface water treatment plant.	4,500,000	14,562	51,467 12	Tulare	Ш	2004
847 5410010	5410010-008	Porterville, City of	Well #L-4 treat for nitrate standby well	; Design and construct wellhead treatment facilities.	L	25	с	Well L-4 exceeds the nitrate MCL and is shut off. The well produces about 600-gpm.	800,000	14,562	51,467 12	Tulare	Ш	2004
848 5410010	5410010-009	Porterville, City of	Wellhead Treatment for	Design and construct wellhead treatment facilities.	L	25	с	Well L-6 exceeds nitrate MCL and is shut off.	725,000	14,562	51,467 12	Tulare	Ш	2004
849 3910012	3910012-007	City of Stockton	Wellhead arsenic removal	Install ion exchange treatment for arsenic removal.	L	25	С	Arsenic concentration exceeds MCL.	1,200,000	46,119	158,113 10	San Joaquin	Ш	2003
850 3910012	3910012-004	City of Stockton	Arsenic removal project	Install wellhead treatment to remove arsenic from six	L	25	С	Arsenic concentration in six City wells requires	2,700,000	46,119	158,113 10	San Joaquin	Ш	2002
851 1700695	1700695-001	High Valley Ranch	High Valley Ranch Well Replacement and treatment plant expansion	Development of a second water source well at 250-500 feet will provide high quality aquifer water with a dequate quanity for drinking and eliminate iron and coli contamination. Instalation of 4,000 feet of new lines will replace oudated and inadequate distribution lines, stop line breakage, leaks and contamination from outside sources. A package water treatment unit will enable us to provide safe drinking water, moniter quality and meet the requirements of the Safe Water Drinking Act. Instalation of a 150,000 gallon storage tank and replacement of exististing tank will reduce the risk of contamination. A flow meter will moniter the water supply. Developing a secondary aquifer source well at greater depth will increace water quality and availability. The planned instalation of wind produced turbines will ensure financial solvency for the district and be ecologically beneficial. The water district will be no longer dependent on bottled water, will meet the fire safe water storage requirements and be able to meet DHS regulations.Our project is ready to go June of 2009, greatly needed and includes the following:Installation of miproved monitoring equipmentinstallation of spillway ariation system to strataRevitalization of Spillway ariation system to tt - Update of Planning and Feasibility study of Treatment and Consolidation options District & Community meetings to review Project. CEQA/NEPA- Design of Project to meet East Niles CSD requirements	L 5 1	25	N	DHS non-compliance with safe water drinking standards on existing well with surface coli contamination. Water is supplied in volcanic geographical area with high iron content at existing depth, frequent coli contamination on gravity flow system. Non-profit non community water system has inadequate water storage capacity, and deterorating source piping and didtribution lines. A secondary aquifer source should be developed to improve water quality and quanity.Water storage tanks are old and small at 10,000 gallons and should be replaced with 150,000 gallon tank to meet safety requirements and provide adequate clean water. Currently 20 hook-ups require new lines and filtration system replacement. Our treatment facility is outdated and we require a package water treatment facility to meet the mandates of the Safe Water Drinking Act. There is no water available from nearby utilities. We also wish to install wind turbines to lower electrical consumption of pumps. Caqpital resources are limited. Lake County is a rural low income county. In past years there have been no County resources for this project.Lake water lab reports dated 6/00/08- 1/00/09 list frequent cliform bacteria in both raw an TX present. Method MF 9222ABC . Current compliane for the California Code of Regulations are at risk. Bottled water is currently being used for drinking Code violation - Bacteriological water sampling failure, high iron content Athal's new well has levels of 1,2,3-Trichloropropane in the water supply.This chemical has no MCL but is under consideration for establishment of a Safe Drinking Water Standard & MCL. This community is low-income (2000 US Census Tract 62.01, Block Group 1 with a MHI	400,000	10	50 03	Lake	11	2009
				Annexation of project area- Project bids- Project construction to upgrade Athal storage, well & distribution system and build a 9/10 mile transmission line to connect to East Niles CSD water system at Doney Street & Weedpatch Highway	,			of \$27,465) and needs grant funding to affordably correct their drinking water problems.						
853 1500555	1500555-001	MUSTANG MUTUAL WATER SYSTEM		WATER TREATMENT OR CONNECT TO ANOTHER SYSTEM	L	20	С	DBCP AND EDB > MCL; as of 1/2000 source meets DBCP and EDB MCL; reranked to L	200,000	50	200 19	Kern	III	1998

854 5400957	5400957-004	WEST GOSHEN MUTUAL WATER CO.	Water Quality & Reliabilit	y The project would initially be a planning/feasibility study. West Goshen has hired engineers to perform cursory studies of their capacity and adequacy of facilities, but they have not been able to afford in-depth analysis of the best solution for their challenges. Consolidation could be an option and it would be analyzed in the course of the feasibility study. Possible alternatives other than consolidation include well rehabilitation and/or drilling a new well, along with an upgrade to the distribution system.	ſ	20	c	West Goshen is located in northern Tulare County, an area that is well-known for contamination of its groundwater aquifers by nitrates. West Goshen's water has long been in excess of half the MCL for nitrate, and recently its backup well exceeded the MCL for nitrate with 50 parts per million. Their primary well is still below the MCL, at 36pm, but this number has been climbing. There have also been a number of bacteriological violations for total coliform.It is hoped that one or both wells could be rehabilitated to select for the best water available; however, both wells are aging and the primary well has some collapse in its casing. Additionally, capacity in the system is insufficient for fire flow in the existing community and the board of directors has been forced to institute a moratorium on new connections.	750,000	69	200 12	Tulare	Ш	2012
855 5500125	5500125-005	MOTHER LODE MOBILE ESTATES	Mother Lode Mobile Estates TUD Public Water Connection Project	The project is to supply public water via TUD to the Mobile Home community eliminating the dependency on the current single souce well and improve both wather quality and flow. By implementing this project, we firmly believe that the complaints from our tenants would dramitically reduce and there would not be a need for additional filtration systems at individual mobile sites. It would eliminate the secondary water quality standard concerns with the existing water source in relation to Iron and Manganese, as the TUD supply is treated and disinfected prior to distribution. In summary, because of the size of the population served and other system requirements, the TUD water supply is subject to more rigorous testing and treatment requirements, has a larger reserve in the event of droughts, and a more readily available source. The project entails establishing a connection from TUD to the parks existing water system; re-plumb approximately 2000 lineal feet of transite pipe converting it to PVC and install individual taps at each unit within the park.	L	20	c	We are an 89 space Mobile Home community, of which 74 spaces draw their water from a single source well. The water is contained in a 2000 gal pressure tank and distributed out to the tenatns. As documented in our 2011 Consumer Confidence Report, we were found in violation of secondary drinking water standards for Iron and Manganese. In order to secure a waiver for future monitoring for these constituents, we performed a survey of the residents asking if they were willing to pay for iron and manganese reduction/sequestration treatment or connection to public water by Tuolumne Utilities District (TUD) or whether they prefer to avoid the cost of treatment and live with the current water quality situations. Provided that at least 64% of our residents are at a MHI of =< \$31,800, the cost to move to public water or even reduction treatment was not something the tenants could absorb; therefore, they voted to live with the current water quality situations. Dreidue the effects of Iron and Manganese, there continues to be complaints from a few tenants on the smell and color of the water. In addition to the water quality issues, in the event of an emergency, we do not have a secondary hook up to public water. This leaves the park and its tenants vulnerable to water outages and possible contamination during emergency hook-ups, as well as, a substandard	559,462	85	225 11	Tuolumne	II	2012
856 1510004	1510004-001	Casa Loma Water Co, Inc.	Replace high PCE source	Construct new well or connect to California Water Service-Bakersfield	L	20	C	PCE exceeds MCL in one of two system wells. Well is needed to meet demand. Public notification conducted	500,000	215	600 12	Kern	Ш	2002
857 3600270	3600270-001	Golden State Water-Mor Del Norte		Construct treatment facilities	L	20	с	per Compliance Order. Uranium approaching MCL	150,000	174	870 13	San Bernardino	v	1998

858 1010042	1010042-012	MALAGA COUNTY WATER DISTRICT	Well #8 Construction	The project consists of design and construction of a new L well to avoid contaminants and connection to the water distribution system.	20	c	Water quality from Well No. 5 exceeds the maximum contaminant level (MCL) for DBCP as defined in Section 64445.1(c)(5)(B) of Title 22, California Code of Regulations. The MCL is 0.2 and the well produces water in concentrations that exceed 0.3 microgm/l. This well has been placed on "standby" status pursuant to direction from the Department of Public Health dated June 19, 2000. The Malaga County Water District is reliant groundwater as the water supply source. Two of the District's wells have been placed on "inactive" status due to contamination which severely restricts the District's ability to reliably provide water to its residential, commercial, and industrial customers. The Malaga County Water District has experienced bacteriological problems with Well No. 1. Well No. 1 is presently out of service. Well No. 4 has been enhanced with GAC treatment facilities; however, the use of this well is limited as the electroconductivity of the source water is high after treatment and leads to violations of the Waste Discharge Requirements at the Wastewater Treatment Plant. Presently Malaga County Water District is reliant upon two water supply wells. One of the supply wells has had mechanical failures in the past and a fire in the electrical cabinet. The Malaga County Water District is therefore susceptible to water shortages without a replacement well.	1,240,000	472	900 11	Fresno		2009
859 1510011	1510011-004	Buttonwillow CWD	Buttonwillow Well #1 Replacement	The rural, low-income, farmworker community of Buttonwillow (Median Household Income of \$28,370) must replace a community well that is contaminated with Iron, Manganese, TDS and Conductivity above the State and Federal Maximum Contaminant Level (MCL) Consolidation is not possible due to the 8 or 10 mile distance to the nearest large water supplier. The most cost effective solution is to drill a new +/- 400 foot deep well with 18 inch casing, a pump, electrical system and connection to the water system. The contaminated well will then be destroyed. The District will need to obtain a new well site for the well.	20	с	The Buttonwillow County Water Districts' well #1 has been taken out of service due to high levels of Total Dissolved Solids (TDS) of 1,100 ppm vs the MCL of 500- 1,000-1,500 ppm, Turbidity of 5.0 NTU vs 4.0 NTU, Sulfate of 310 ppm vs an MCL of 250-500-600 ppm, Color of 20 vs an MCL of 15, an Iron level of 0.51 vs an MCL of 0.3, a Manganese level of 0.23 ppm vs an MCL of 0.05 ppm and Electrical Conductivity (EC) of 1,600 umho/cm vs the MCL of 900-1,600-2,200 umho/cm. This well needs to be abandoned to prevent contamination of other District wells. A replacement well needs to be built.	700,000	444	1,266 12	Kern	Ш	2007
860 1610001	1610001-008	Armona Community Services Dist	Well 2 Backup Water Supply	The project would consist of installing a transmission L main between the existing Well #2 and the proposed Well #3. The water from Well #2 would be conveyed to the Well #3 treatment plant for treatment. Water from Well #2 would serve as a backup water supply in the event that Well #3 goes out of service. The project would also include a second pipeline from Well #3 to Well #2 to fill the existing storage tank to maintain use of the tank and generator as a backup water supply.	20	С	All of the District's water sources exceed the 10 ppb Arsenic Standard. We do not have a source that meets the current Standard. The District is in the process of implementing a project to replace Well #2 with a new well (Well #3). However, no backup water supply is available for the District's water system. This project will provide backup water supply.	1,750,000	1,179	3,239 12	Kings	III	2009

861 1510019	1510019-009	Shafter, City of	Arsenic Treatment Systen at Well #11	An expedited pilot study analyzing the available and accepted Arsenic removal technologies will be conducted. The system deemed the most cost-efficient and practical will be designed and developed at the well site. The well is located at an existing City park site so there is sufficient space to construct any of the accepted removal systems. Given the increased hydraulic demands for pumping water through new vessels and discharge piping for any of the systems, an upgraded pump and motor will be needed to maintain adequate flows and pressures. A new SCADA-equipped control cabinet is also necessary to efficiently manage and monitor the well's performance. The City has staff engineers and planners to expedite the design and permit process. The construction schedule is being pushed back to the Fall of 2009 because it is generally less risky to take a well offline for maintenance and improvements during the low demand periods.	2	20	c	City Well #11 (Source PS Code 28S/25E-16N02 M) has seen its Arsenic levels sharply increase over the past five years. The levels have reached as high as 10 parts per billion which is the latest maximum contaminant level adopted by the State. The cost of constructing Arsenic removal systems would require a severe rate increase for residents already living in a region with double-digit employment and a rapidly declining economy.	2,250,000	3,863	15,609 12	Kern	Ш	2009
862 1510019	1510019-010	Shafter, City of	TCP Granulated Activated Carbon Treatment System	The City conducted a pilot study at one of its wells to L so confirm that granulated activated carbon (GAC) can readily treat for TCP. Upon this confirmation, the City awarded a construction project to have its first full-scale GAC system operational by the summer of 2009 at City Well #14. The cost of this first GAC system is expected to reach \$600,000. This system consists of two ten-foot diameter GAC vessels plus over 200 feet of new above- ground discharge piping and numerous valves for proper flow control. The well will ultimately pump water through the vessels and into an existing above- ground storage tank. There are six additional well sites that will likely be required to have similar GAC systems in place once the MCL is adopted by the State.	2	20	c	Shafter first started detecting a contaminant referred to as 1,2,3-Trichloropropane ("TCP") in its water supply in the Mid-1990s. It's currently unregulated but the State Public Health Department has adopted an Action Level (AL) of 5 parts per trillion (ppt). All of our seven active groundwater wells generally have levels that exceed this amount but are not 100 times higher which would lead to the State asking to have a water source taken offline. The State has reported that a Maximum Contaminant Level (MCL) is imminent and that it could be as low as the current AL. The City is working towards Citywide treatment for TCP but the water system's capital improvement and operations reserves can not fund the necessary infrastructure without very severe rate increases. The City's customer base has a median income of less than \$30,000 and is within an area of double-digit unemployment with a rapidly declining economy.	5,000,000	3,863	15,609 12	Kern	III	2009
863 1510019	1510019-007	Shafter, City of	Well 16 Construction and TCP Treatment Project	The City has already awarded the construction of a L granulated activated carbon (GAC) treatment system at one of its well sites. The existing submersible well motor and pump at Well 6 is not hydraulically equipped to handle the discharge pressure required to pump water through a similar GAC system. Due to this hydraulic issue and the overall age of the well, the City is proposing to drill a new well at the same site to a depth that will produce the lowest levels of TCP which could be as low as 1,110 feet. A new well house, hydropneumatic tank and new discharge piping will also be required to connect the well to the GAC vessels and, ultimately, to the distribution system. A new multistage pump and variable frequency drive motor assembly is also a component of this project. Well 6 would be assigned a designation of "Well 16".	2	20	С	The City's existing Well No. 6 (Source P/S Code No. 285/25E-10R03M) was constructed in the Mid-1950s and is the oldest active well in the system. It routinely has levels of 1,2,3-Trichloropropane ("TCP") that exceed the Action Level (AL) for this contaminant. However, it hasn't reached levels that are 100 times higher than the AL which would leave the State Public Health Department to recommend taking the source offline. The State has notified the City that a Maximum Contaminant Level is imminent and it could be as low as the AL. The City would like to work towards Citywide treatment for TCP but the likely cost of up to \$1,000,000 per well to actually do this is realistically cost prohibitive for our customer base that has a median income of less than \$30,000 and is in region that is suffering from double-digit unemployment and a rapidly declining economy.	2,700,000	3,863	15,609 12	Kern	Ш	2009

864 5410010	5410010-013	Porterville, City of	Replacement Wells	Well #1 - The City has already drilled , installed casing 1 and ran water quality and water quantity tests. The well installation of pumps, electrical panel, SCADA monitoring to the City's main computer panel and miscellaneous piping from the well drilled to 700 ft. Well owner is interested in selling the well of the City's water grid. Well #2 - Existing Ag well drilled to 700 ft. Well owner is interested in selling the well to the city. Water quality and water quantity tests have been performed. The well has excellent quality water and produces approximately 1,300 gallons/minute. The City has submitted "as built" plans and water tests to DHS for review and approval to convert the Ag well to a municipal domestic well. DHS has informed the City that the well is a good qualit ywell but must be sealed to approximately 50 - 100'. If the city acquires the well, the pumps will be replaced, electrical panel upgraded and the new ell will be connected to the city's SCADA monitoring system. Well #3 - The City has acquired a well site and is preparing plans & specifications to drill and install casing. If funding is realized, the City will move ahead with the all phases of construction.	L	20	c	The City has approximately 3 to 4 water wells with nitrate levels in excess of 45 mg/l. This project will replace the nitrated wells. The problem did not require public notification because the nitrated well water was blended with the City's overall water production but more importantly, the City's monitoring protocol identified the "bad" wells early on. The City's approximately 30 excellent producing wells was sufficient to satisfy the City's water needs with the exception of 2 months out of the year. During the months of July and August, the City experiences lower pressures than normal. The nitrated wells have been been turned off and will not be used again. The City is surrounded by residential lots located in the County and these residential lots are served by small private water companies. The City is aware that many of these water companies. The City is aware that many of these water companies not an aposition to allow connection of these private water companies to the City's water system until the areas are annexed and the water company assist in funding a portion of a new well.Many of the private water companies have asked the City to purchase or accept their water system so that they can receive City water. City policy requires that a portional cost of a new well be orne by the private water company, that full water connection fees be paid and	2,500,000	14,562	51,467 12	Tulare	11	2009
865 5410010	5410010-010	Porterville, City of	Well #10 treatment PCE near mcl	To equip the well with wellhead treatment facilities, I either GAC or airstripping.	L	20	с	Well 10 produces water containing PCE that exceeds the MCL of 5 ppb.	650,000	14,562	51,467 12	Tulare	Ш	2004
866 5410010	5410010-011	Porterville, City of	standby Well #12 treat for PCE	To equip the well with wellhead treatment facilities, either GAC or airstripping.	L	20	С	Well 12 produces water containing PCE that exceeds the MCL of 5 ppb.	650,000	14,562	51,467 12	Tulare	111	2004
867 3400101	3400101-006	HOOD WATER MAINTENCE DIST	Hood System Improvement - Construction of a Groundwater Treatment Plant, and a Storage Tank/Pump Sta	The proposed Hood System Improvement project includes two elements: (a) Install a skid-mounted manganese removal plant for the removal of manganese to less than 10 ug/l. Feed water will be from Well No. 20. The designed treatment capacity will be of 400 gpm. (b) Construct a 50,000 gallon storage tank with 1000 gpm in booster capacity. The propsoed project will help the town to meet the minimum fire flow requirement, and will have the capability of delivering about 1350 gpm which is a vast improvement over the existing 725 gpm.	L	15	С	Groundwater is the sole drinking water source for the residents located in the town of Hood. The two drinking water supply wells (Wells No. 19 and 20) have been found to contain manganese at levels ranging from 230 to 310 ug/l. A treatment plant for the removal of manganese is needed for the compliance of the state Secondary MCL requirementof 50 ug/l.In addition, the total water production rate from these two wells is 750 gpm and is below its current fire flow requirements, construction of storage tank and pump station is needed.	840,000	30	100 09	Sacramento	I	2009
868 4900546	4900546-001	Hawkins Water Co-Cal Water Service (PUC	) Iron and Manganese	ATEC treatment for Fe and Mn; new backwash and I pressure tanks	L	15	С	Fe and Mn exceed standard; organic contaminants; arsenic near MCL	499,000	51	150 18	Sonoma	Ш	2007

869 4900688	4900688-001	Journey's End Mobile Home Park	Well intertie and manganese treatment pla	There appears to be two alternatives for domestic L n water, continue with operation of the existing wells or connect to City water. Fire protection improvements could only be provided by the City. The domestic water alternative that retains the existing wells requires the installation of 2-inch water mains in most of the driveways in the park. A few extra loops in the water main layout are shown and recommended to improve system reliability and flexibility. The installation of meters for each space would be neccessary. The domestic water alternative that connects to City water requires the installation of a 3-inch water service line from the City water main in Mendocino Avenue and 2- inch mains that would distribute water to every space. No water main loops are shown but could be added to improve system reliability and flexibility. The installation of meters is recommended. Options that are a combination of both alternatives are possible, as well.For long term stability, intertying with the City water system is recommended.	15	C	Water from both park wells contains manganese at levels above the secondary limits set by DHS Secondary Drinking Water Standards. The park recently installed water treatment systems that have shown to reduce the manganese to acceptable levels; unfortunately, manganese that previously settled in the distribution system continues to be a water quality problem. When first inspected in 2003, Exceedance of a Chemical MCL was distributed, no longer in effect, and though manganese levels are currently below unacceptable levels, it takes considerable effort and cost to keep them that way. An additional problem is that distribution system pipelines that are currently in use include above ground pipes, underground pipes, some pipes from the original system, some pipes that remain from the water softening distribution system and some pipeline additions installed to interconnect the two well distribution systems that were originally separate systems. As a result, there is no certainty to which valves in the distribution system are effective in isolating specific areas of the park. Another significant complication is that underground gas and sewer pipelines are located in close proximity to underground water pipelines and most of these are located along the fence lines at the back end of spaces where access is very limited. Also, water pipelines and conduits for electrical lines are located above ground on fences at	1,522,962	161	180 18	Sonoma	Π	2009
870 0707613	0707613-001	WILLOW MOBILE HOME PARK	M-28 Required Compliance and RO System Improvements	1. New Containerized RO Water Treatment PlantA new L containerized RO Water Treatment Plant (WTP) will be constructed to replace the existing building and treatment facilities. This will essentially provide a new plant, using the existing filters.2. Seismic Restraints/Pipe SupportSThe RO skid is not seismically restrained and seismically restrained. In the event of an earthquake, significant damage may occur, resulting in an extended plant outage. Anchor clips will be added to secure the RO skids, lateral bracing addet to the pipe supports, and flexible couplings between unit processes and additional pipe supports installed. 3. Reservoir StabilizationThe existing foundation for the 20,000-gallon reservoir may be inadequate to resist overturning in the event of an earthquake. Needed improvements include grout stabilization of the soil under the tank slab to increase soil resistance to the slab, and additional anchor clips on the tank to prevent existing booster pump will result in loss of water supply and basic fire protection to the residents. A backup pump and motor will be added.5. Blending/Acid Elimination (RO Bypass Line)The RO system bypass line for stabilizing RO permeate with well water was not installed as part of the original	15	C	The District's Reverse Osmosis (RO) water treatment facility has deteriorated over the years and no longer meets OSHA standards. Reliability of the system has also decreased over time. This has resulted in call outs during the night and a high level of attention to maintain operation of the system. The system is operated through a contract with Diablo Water District (DWD). Notice has been given by DWD that they will terminate the maintenance agreement unless improvements to the system (especially the structure housing the unit) are made in a timely manner. They have cited safety issues and an increase in the time their staff must spend keeping the system running. A 1995 study by the engineering firm CDM was updated in 2006 and again in 2008 identifying improvements necessary to improve reliability and safety. These include replacing the structure housing the RO unit; installing seismic restraints; anchoring the 20,000 gallon reservoir; sealing the abandoned well; installing emergency power, telemetry, and other monitoring instrumentation. These improvements will drastically improve safety and reliability for both the plant operators and the water customers. Diablo Water District will terminate its maintenance agreement unless these extensive improvements are made. No other qualified operator has been identified. There is limited capacity in this small water district for rate	1,101,000	120	350 04	Contra Costa	Π	2008
871 5110007	5110007-003	Sutter Community S.D.	well replacement	A new well will be drilled 50 feet from the existing well, L therefore we can use the existing well house and Tesco equipment, pump, etc. This well replacement is being done due to arsenic levels slightly higher than EPA standard. The existing well was not drilled correctly and will be destroyed. This is the most cost effective solution, we have looked into Arsenic removal treatment which is very costly to install and for yearly operations and maintenance.	15	С	Due to EPA Arsenic regulations our Well #2 has been on stand-by by DPH for over one year. Sutter CSD needs to drill a new well to continue adequate water supply to the community.	300,000	1,025	2,885 21	Sutter	I	2009
872 4010005	4010005-002	OCEANO COMM SERVICES DIST.	New Well and rehab Well	Drill a new well and rehabilitate Well #6	15	с	Well #6 production dropped by 50%. Well 4 and 5	1,025,800	1,987	7,600 06	San Luis Obispo	IV	2007

produce water with high selenium and blend

6

873 1010001	1010001-004	BAKMAN WATER COMPANY	DBCP Well #13 & #8	We would like to install two Model 10 Adsorption L Systems. One system will be on Well #13 and the other will be on Well #8. The system consists of two ten feet diameter, ASME pressure vessels that contain 20,000 pounds of virgin GAC each. Each location will require Pressure Switches, bladder tanks and chlorine buildings for safe storage of the chlorine tanks. To comply with current regulations we will need to install chlorine analyzers' and chart recorders. With blackouts in our area we loose four wells due to the fact that they are on the same PG&E grid. If we are able to bring these two well back on line we will be able to use these wells during the brownouts. In just this last year we have had three power outages in the Clovis and Balch area taking down two wells with GAC on them for more than the 6 hours, thereby requiring the testing for Nitrate before being able to bring the well back online. We our median House Hold Income at 533,985 and so many foreclosures in our district we are unable to proceed on these much needed wells as our rate payers can not shoulder any rate increases.	15	C	We have two wells that exceed the DBCP 0.2 ug/L MCL. Well # 13 test reflect a 0.67 ug/L and Well # 8 reflect a 0.90 ug/L.	750,000	1,910	8,865 11	Fresno	Ш	2008
874 1010001	1010001-003	BAKMAN WATER COMPANY	Nitrate Well #6	We would like to blend Well # 6 with Well #15. Well #6 L is locted off of Olive on Minnewawa and Well # 15 is located on Olive approx. 500 yards from each other. We would intall a pipeline to connect the two wells. Installation of a pulse output transmitter with digital indicator and 8" water meter. Included are 8" 150 PSI Welding Saddle Meter 1000 PGM Indicator/100 gallon totalizer, TR06-1-S pulse outpurt transmitter 10 PPS @ 100 GPM, INS2 digital indicator totalizer 100 GPM indicator/100 gallon totalizer, enclosure, lock out relay, lot wiring material, lot plumbing material.	15	c	We would like to blend Well # 6 with Well #15 to reduce the level of Nitrate. The last testing of Well # 6 was 83 mg/L, the MCL for this chemical is 45 mg/L.	80,000	1,910	8,865 11	Fresno	Ш	2008
875 4010011	4010011-009	MORRO BAY WATER DEPARTMENT	Chorro Valley Nitrate Treatment	The City of Morro Bay has been looking into obtaining L ion exchange nitrate treatment trains to treat the Chorro Valley well water. These treatment trains will allow the City to ensure safe drinking water during periods of reduced deliveries in State Water Project, as well as during shutdown of State Water Project, The City would purchase the ion exchange nitrate treatment trains and install and operate them from the location of the current well #16. The treatment trains will treat the water from the ground water wells and reduce nitrate levels to below the MCL. The project will consist of preparing the site, purchasing and installing the treatment equipment, extending a sewer line to the well site, and installation of associated apparatuses.	15	с	The City of Morro Bay operates 6 groundwater wells in the Chorro Valley as the historic source of water. The water from the wells has high nitrate levels that exceeded the MCLs. The Department of Public Health has ordered us to inactivate these wells impacting our ability to provide adequate water supply. This impact is especially acute during periods when the State Water project has reduced deliveries. In the future the City will receive lower water deliveries from State Water and will have no choice but to use the Chorro Valley well water. In preparing for this rapidly approaching eventuality the City intends to provide ion exchange nitrate treatment.	500,000	5,425	10,270 06	San Luis Obispo	IV	2009

876 1910161	1910161-003	PARK WC - LYNWOOD	Well 9D Arsenic and Manganese Treatment Plant	Park Water Company (PWC) proposes to install a wellhead coagulation/filtration treatment plant on their Well 9D to reduce existing levels of Arsenic and Manganese to meet State maximum contaminant levels (mcl). The plant will be designed to treat a maximum flow of 1,250gpm. Through extensive pilot testing on the water produced from this well and the existing site constraints, the treatment plant is designed to be a 3- cell horizontally mounted sand filter over a subterranean backwash tank. The Arsenic and Manganese will be oxidized through the addition of Chlorine, and Ferric Chloride will act as the coagulant. A pump will be installed to remove the filter backwash effluent, and the effluent will be disposed through a force main sever to a local sever connection. The treatment plant will also require the addition of a control panel and link to our existing SCADA system.		15	C	Park Water Company (PWC) drilled Well 9D in 1999/2000. At the time, the water quality met the maximum contaminant levels (mcl). However, with the new mcl for Arsenic at Jug/L and the mcl for Manganese at 50ug/L, our well does not meet the standards. Quarterly water quality monitoring from Well 9D shows a range of Arsenic from 9.7 to 11ug/L with an average of 10.5ug/L. For Manganese, the range is 46.3 to 57ug/L with an average of 52.3ug/L. Because of these water quality concerns, Well 9D is on standby status and is not used as a water supply source. PWC is utilizing their purchase water connection CenB-25 to meet average day demand and Well 4B to meet peak water demand.PWC drilled Well 4B in 1952 and it produces about 720 gpm. The average day demand for this water system is 1,285 gpm, and the maximum available flow from CenB-25 is 5,625 gpm. The groundwater wells are PWC's CDPH designated emergency alternate sources of supply. In the case of CenB-25 being unavailable, we would utilize our wells to meet customer demands. With Well 9D being on standby, we are unable to meet average day demands for this water system solely through the use of Well 4B. With a treatment plant installed at Well 9D and outage at CenB-25, we could fully utilize our wells and	2,164,000	4,392	17,124 22	Los Angeles	IV	2009
877 3610008	3610008-009	BIG BEAR CITY CSD	Equip well #38 , and Abandon Well #3	Project Description: Equip well #3B with a verticle turbine pump that will produce approximately 1,050 gallons per minute and connect to the existing fluoride blending reservoir. Install a standby generator, and construct a well building. Destroy well #3 building and permanantly abandon the well. The District anticipates this project will increase water production by 650 to 750 Gallons Per Minute and reduce the threat of TCE in the water system.	L	15	C	Well #3 has been contaminated with TCE @ 20.0 ug/L (State MCI is 5.0 ug/L). Well #3 pumps directly into a fluoride blending reservoir. Well #3 is 50 years old, does not have a sanitary seal that meets current standards.Well #3 currently yields 300-400 GPM. The District currently has Well #3 locked out of service pending approval af a VOC blending plan with the CDPH. Even with approval of the blending plan Well #3 will only be used on a limited basis. Well #38 was drilled in 2000 to replace Well #3 and yielded 1,050 GPM at the time it was drilled. Due to elevated fluoride levels 7.5 mg/L (state MCL 2.0 mg/L) and our lack of low fluoride sources to blend with at the time well #38 was not equipped for production. Additional low fluoride producing wells have recently been added to the blending system to allow Well #38 to be blended down to below the State MCL for fluoride.	275,000	6,356	25,000 13	San Bernardino	V	2009
878 2410005 879 2410001	2410005-001 2410001-001	LOS BANOS-CITY ATWATER, CITY OF	uranium treatment	Construct IX treatment system for uranium CONSTRUCT A TEST WELL AND PRODUCTION WELL TO REPLACE WELL NO. 10 AND PERFORM REMEDIATION WORK ON WELL NO. 20	L L	15 15	c c	Violate primary standard for uranium in Well 8 WELL NO. 10 EXCEEDS THE EDB MCL AND WELL NO. 20 EXCEEDS THE MANGANESE MCL.	600,000 605,200	12,277 6,721	27,635 11 28,100 11	Merced Merced	 	1999 1998
880 3610055	3610055-008	YUCAIPA VALLEY WD ID-A&2	potential radon treatment	Review treatment options, construct treatment facilitie	s L	15	С	Anticipated violation of radon MCL for four wells	750,000	2,312	40,654 13	San Bernardino	v	2002
881 5610046	5610046-003	UNITED WTR CONS DIST		Construct RO plant at El Rio facility, 25 mgd.	L	10	с	Sulfate levels which exceed the proposed MCL and/or action levels	18,500,000	16	0 06	Ventura	IV	1998
882 5610046	5610046-004	UNITED WTR CONS DIST		Design and construct a skid mounted nitrate removal	L	10	С	Wells exceed an itrate MCL at times. Well is blended with	1,500,000	16	0 06	Ventura	IV	1998
883 1500585	1500585-004	OASIS PROPERTY OWNERS ASSOCIATION	high Nitrate in Standy Wel	Plant for one went for blending. Treatment or consolidation with neighboring water system.	L	10	с	Nitrate in excess of MCL in standby well.	1,000,000	36	100 19	Kern	Ш	2007

884 1700595	1700595-001	Cal 20 Village	Cal 20 Village - New Well	The DPH inspected the Cal 20 Village system in Augu 2007 and on September 10, 2007 sent a letter to Cal signed by Bruce Burton, PE. The letter requires Cal 2 to provide an acceptable standby water supply, to address treatment deficiencies, increase treated wat storage, and to complete a cross connection control program. The source water includes MTBE above the MCL and 1.4 mg/L of manganese. The letter also requires standby generators at the treatment plant a the wellhead, and improvements to the treated wate system booster pumps to prevent the distribution system pressure from dropping to zero during power outages. Cal 20 engaged the services of Gilmore Engineering (GE) in November 2007 to provide the necessary engineering services. Cal 20 and GE have begun the work required to comply with Bruce Burto letter. A new well approximately 1,200 feet away fror the existing well is being developed and tested. Because there is no location within the service area f a new well to avoid the MTBE plume, MTBE treatmer included for the new II.To summarize, the followir improvements are required: 1. New well, pump, pumphouse, electrical service, access road2. New pipeline and signal conduits. New manganese remov filter to replace the existing filter, which is not remor manganese4. GAC filter system to remove MTBE5. N	st L 20 20 er ind er er or or t is is ing al ing ew	10	C	The DPH inspected the Cal 20 Village system in August 2007 and on September 10, 2007 sent a letter to Cal 20 signed by Bruce Burton, PE. The letter requires Cal 20 to provide an acceptable standby water supply, to address treatment deficiencies, increase treated water storage, and to complete a cross connection control program. The source water includes MTBE above the MCL and 1.4 mg/L of manganese. The letter also requires standby generators at the treatment plant and the wellhead, and improvements to the treated water system booster pumps to prevent the distribution system pressure from dropping to zero during power outages. Cal 20 engaged the services of Gilmore Engineering (GE) in November 2007 to provide the necessary engineering services. Cal 20 and GE have begun the work required to comply with Bruce Burton's letter. A new well approximately 1,200 feet away from the existing well is being developed and tested. Because there is no location within the service area for a new well to avoid the MTBE plume, MTBE treatment is included for the new well. To summarize, the following improvements are required: 1. New well, pump, pumphouse, electrical service, access road2. New pipeline and signal conduit3. New manganese removal filter to replace the existing filter, which is not removing manganese. CAC filter system to remove MTBE5. New storage tank and associated piping and	655,000	92	150 03	Lake	Π	2008
885 5610021	5610021-001	WARRING WATER SERVICE INC		storage tank and associated piping and valves6. New	1	10	c	valves6. New treated water booster pumps7.	150.000	483	1 700 .06	Ventura	IV	1998
005 5010021	5010021 001				-	10	c .	Action level for sulfates.	150,000	100	1,700 00	Ventura		1000
886 3610105 887 1510007	3610105-001 1510007-004	GOLDEN STATE WATER CO - APPLE VLY N FRAZIER PARK PUD	ORTH Frazier Park Water Well Project	Construct intertie to increase source capacity The design and construction of a test well/new community well with pumps, storage and pipelines to connect to the existing water system. The new well provide clean water. The old well will be abandoned The Frazier Park Public Utility District is the largest water system in the area. There are no nearby water systems to consolidate with.	L D Will r	10 10	C C	Inadequate storage per WW Stds, The Frazier Park Public Utility District's Monte Vista Well is contaminated with Fluorides in excess of the State Maximim Contaminant Level (MCL) of 2 ppm. This well has Fluoride levels of 2.2 ppm. This shallow (165' deep) well is in the floodplain and has been flooded in the past. The District needs to obtain CDPH Prop 84 grant funds to design and build a test well/new well, related storage and waterlines to connect to the District water supply. The old well will be destroyed. MCL Violated: Fluoride MCL = 2 ppmMonte Vista well Fluoride level: 2.2 ppm	120,000 700,000	679 1,362	2,240 13 2,348 19	San Bernardino Kern	V III	1998 2008
888 5010021	5010021-001	Denair Community Services District	Denair Community Services District Well Number 1 Replacement Project	Denair Community Services District is totally depend on ground water to supply residential, commercial, a industrial customers located in the District. The loss Old Well 1 due to excessive nitrates has created a potential fire, safety, and health problem. Reconstruction of the well will allow the District to better manage the water system and provide for additional redundency in the water system and to he the water system meet capacity requirements in pear water usage periods.	ent L nd of Ip k	10	С	Old Well Site 1 exceeded Nitrate levels and was abandonded.	750,000	1,294	3,225 10	Stanislaus	III	2009
889 5010021	5010021-008	Denair Community Services District	Denair Community Services District Well Number 2 Replacement Project	Denair Community Services District is totally depend on ground water to supply the residential, commerci and industrial customers located in the District. The loss of Well 2B due to radiological contamination alo with Well 1 due to excessive nitrates has created a potential fire, safety, and health problem. Reconstruction of the well will allow the district to better manage the water system and provide for additional redundency in the water system help the distribution system meet capacity requirements in pr water usage periods.	ent L al, ng eak	10	С	The purpose of this application is to acquire funding to replace a well that Denair CSD had to abandon due to excessive radiological contamination. The old well was identified as Well 2B.	750,000	1,294	3,225 10	Stanislaus	III	2009

890 1510053	1510053-003	ANTELOPE VALLEY E KERN WTR AGY		INSTALL AMMONIA FEED SYSTEMS AT ONE WATER L TREATMENT PLANT	10	С	CONTROL FUTURE THM'S WHILE ACHIEVING REQUIRED	187,500	14	11,548 19	Kern	Ш	1998
891 2410005	2410005-003	LOS BANOS-CITY	Well #15 Arsenic Mitigation	The project will begin with a study that will help identify L the best treatment system needed to get Well #15 back in service. The options that will be reviewed will include Well Head Treatment or blending with the existing water system. Upon the results of this study, staff will have plans developed to incorporate the recommendation. The final step would be to construct the needed treatment mechanism and have Well #15 put back in service.	10	С	Well #15 has been on stand-by for several years due to arsenic levels that are above the MCL of 10 PPB.	1,100,000	12,277	27,635 11	Merced	111	2009
892 1510029	1510029-005	Vaughn WC INC	Noriega Storage Tank and Booster Pumping Plant	L facilities that exceed the MCL for arsenic. However the operation and maintenance costs as well as the waste handling make well head arsenic treatment an undesirable alternative. The project will involve the construction of a new water supply well in an area that a well not requiring treatment is believed to be attainable. A 1,000,000 gallon welded steel storage tank and booster pumping plant will be constructed to provide peaking source capacity that will replace the capacity lost from the two wells. The well will fill the storage tank in off-peak hours for electricity and the booster pumping plant will operate during peak hour periods to take advantage of time of use pumping. A well site, 160-ft by 160-ft, has already been obtained. The well will be connected to fill a 1,000,000 gallon welded steel storage tank. A booster pumping plant will convey water from the storage tank to the distribution system and be automatically controlled based on system pressure.	10	C	Vaughn Water Company serves the Rosedale Community in Kern County, California. The system relies solely upon groundwater for its water supply. Two existing water supply wells in the system have arsenic above 10 ppb and thus exceed the chemical MCL. These two wells account for a total supply of 2,000 gpm. This is 10-15% of the total system supply. The system cannot meet peak system demands without this capacity. The operating and maintenance costs associated with arsenic treatment are also cost prohibitive as determined from pilot tests and demonstration tests utilizing ion exchange, adsorption, and coagulation-filtration. In addition, there were times during the testing of the treatment system when the contaminant still exceeded the chemical MCL due to breakthrough. These wells will be shut-in and made inactive as a result of arsenic concentrations exceeding the MCL. During peak hour system demands the water system has experienced pressures in the high 20's and received numerous customer complaints. With the two wells described above off-line, system pressures will be even lower and are expected to drop below 20 psig and be out of compliance with State regulations.	2,300,000	8,931	28,100 12	Kern	III	2009
893 3610036	3610036-025	City of Chino Hills	Installation/Operation of Arsenic Removal Equipment at Chino Hills Well#15	L Drinking Water State Revolving funds to purchase and install a 1,200 gallon per minute (GPM) Arsenic Removal System to bring potable water from existing Well #15 online by complying with Title 22, Chapter 15 requirements. The City plans to purchase, install, and operate a Coagulation-Filtration (CF) Treatment System that will treat 1,200 GPM with a minimum of sludge waste product. Plans call for a single horizontal vessel with five separate filtration cells. Coagulation filtration is an environmentally-friendly approach that produces no brine waste, eliminates the need for media regeneration or replacement, and offers both a low equipment cost and a low operating expense. Backwash water and sludge filtrates will be recycled to plant headwords. The estimated efficiency of the system proposed (as measured by water out/water in) in most case is 99.998 percent. The waste product is a sludge consisting mainly of iron and arsenic. The proposed coagulation filtration treatment system will be fully automated. A Programmable Logic Controller (PLC) will monitor and control the operation of the system, which will employ analog and digital instrumentation and valves to determine the proper operating sequence, indicate failures, display current process variables, and notify operators of critical alarms. Coagulation filtration regures no media or	10	C	This project will address high levels of arsenic in a groundwater well owned and operated by the City of Chino Hills. The City of Chino Hills Water Division provides water services to approximately 23,000 customers who include residential, non-residential, government and reclaimed water accounts. The Water Division derives its water from five sources, which is a blend of purchased water and the City's own groundwater wells. Collectively, the five sources provide the City with a current capacity of 41 million gallons per day (MGD). Overall, the utility manages over 250 miles of water mains. Currently, Well #15 does not comply with Title 22, Chapter 15, Section 64431 regulations, which sets the State's acceptable Maximum Contamination Level (MCL) of arsenic allowed in potable water at 10 parts per billion. Well #15 is producing water with arsenic levels averaging 72 parts per billion. According to the California Department of Public Health (CDPH), ingestion of arsenic can pose a risk of cancer and other health issues such as vascular effects or skin effects. California recently revised the arsenic MCL to 0.010 mg/L, effective November 28, 2008. The same criteria have been in effect at the federal level since January 2006.Well #15 is currently "shut down" and not being utilized as part of the City's potable water system. The well can produce upwards of 1.7 million gallons per day	1,000,000	18,927	55,000 13	San Bernardino	v	2009

894 1510031	1510031-003	Bakersfield, City of	Well 1 through 5 Arsenic Treatment Project	This project will include the installation of filter vessels, media, piping, monitoring equipment and other facilities for treatment at each of the well sites.	L	10	С	This project will provide treatment at each of the wells for arsenic and 1,2,3 trichloropropone. Each of these wells are approaching or exceed the 10 ppb average arsenic level as required USEPA and CA DHS drinking	3,250,000	32,703	132,736 12	Kern	III	2009
895 1510031	1510031-002	Bakersfield, City of	3 Million Gallon Water Storage Facility	This project will constuct a 3 Million Gallon reinforced concrete tank and booster pump facility. The project will be tied-in to existing infrastructure to maintain system production requirements.	L	10	с	This project will blend groundwater wells in order to meet the 10ppb average arsenic level in accordance to USEPA water quality standards. It will also incraese water supply capacity due to drop in groundwater levels.	3,150,000	32,703	132,736 12	Kern	Ш	2009
896 3410020	3410020-027	City of Sacramento	Well 164	Project will study treatment methodologies, then design, construct/purchase, and install treatment system at well site.	L	10	с	Arsenic levels at Well 164 exceed the new MCL	400,000	137,886	407,018 09	Sacramento	I	2002
897 4400660	4400660-002	RANCHO SAN ANDREAS		Properly destroy abandoned well in vicinity of source. Design and construct nitrate removal treatment system.	L	5	С	High nitrates in source water in excess of MCL.	10,000	50	200 05	Santa Cruz	Ш	1999
898 4400558	4400558-001	SAN ANDREAS MUTUAL WATER CO	Well replacement and back-up generator	A new well is to be drilled, replacing the old one with a deeper seal (at 250 ft) which will lessen the amount of nitrates to below federal and state allowed legal limits. Will need to close/seal the old well. Replacing the generator with a modern generator that meets present environmental requirements.	L	5	с	Well to be replaced is old with shallow seal hence has nitrate issues (above acceptable legal limits) and thus needs to be replaced. Present Generator is over 50 years old and is not reliable nor does it meet the present environmental standards.	200,000	131	350 05	Santa Cruz	II	2009
899 4110020	4110020-002	Palo Alto Park Mutual Water Company	Iron and Manganese Removal System	This project will consist of installation appropriately sized iron and manganese filters for about 700 gpm along with backwash and backwash water disposal system and appurtenances. This will allow greater system flexibility.	L	5	с	Existing Well No. 7 has elevated iron and manganese constituates in the water. The discharge from this well must be blended with other well water to reduce the concentrations to acceptable levels. This is an operation problem for the water system and requires much manpower to assure compliance with CDH Requirements.	750,000	652	2,500 17	San Mateo	II	2009
900 3610062 901 2610001	3610062-012 2610001-004	RUNNING SPRINGS WATER DISTRICT MAMMOTH CWD	MCWD Groundwater Treatment Plants: Corrosion Control and Arsenic Compliance	Construct treatment facilities In order to achieve compliance with the Arsenic and Lead and Copper MCL rules, Mammoth Community Water District (MCWD) proposes to make modifications to the treatment processes of Groundwater Treament Plants #1 and #2, and the Lake Mary Surface Water Treatment Plant. Initial design proposals and cost estimates have been developed to achieve compliance with the Lead and Copper Rule per the recent Corrosion Control Study. MCWD proposes to add an aeration system to adjust the ph of the plant effluent in order to stabilize the distribution system to achieve compliance with Lead and Copper Rule MCLs. The Department of Public Health has initially approved this treatment alternative as recommended in the Corrosion Control Study. Additionally, MCWD has retained the services of HDR engineering to evaluate the Best Available Treatment options for arsenic removal to achieve compliance with SDWA arsenic MCLs. HDR has already completed evaluation of the Treatment Plants' existing water quality and is currently developing proposals for treatment alternatives. Preliminary design of selected arsenic removal is expected by April 2009. To achieve the most cost-effective and timely implementation, MCWD will incorporate both the ph control and arsenic removal improvements into a single design and construction contract.With ER funding, this project can be "shovel-ready" by November, 2009.	L	5	c c	High Radon in several sources Mammoth Community Water District (MCWD) Groundwater Treatment Plants #1 and #2 are experiencing treatment failures resulting in arsenic levels as high as 13 ppb. In the past, Treatment Plants #1 and #2 have remained in compliance with the maximum contaminant level (MCL) of 10 ppb with quarterly averaging of test results. However, the California Department of Public Health (CDPH) has now required MCWD arsenic maximum contaminant levels to be below 10 ppb at all times. CDPH is also requiring MCWD to begin Teir II public notification of the exceedence of the arsenic MCL. Additionally, MCWD customers have seen a continued exceedence of the Safe Drinking Water Act (SDWA) Lead and Copper rule. CDPH has mandated that MCWD implement the results and recomendations of a recent Corrosion Control Study to achieve SDWA compliance for the Lead and Copper Rule. MCWD has already given Teir II public notification to District customers regarding non- compliance with the Lead and Copper Rule.	140,000	3,160 3,666	6,713 13 8,214 13	San Bernardino Mono	VVV	1998 2009

902 2710001	2710001-002	Alco Water Service	Construction of Water Blending Facility	To reduce Arsenic, blending is a prefered mitigation strategy, being a "zero treatment option", as per the EPA's Arsenic Mitigation Strategies. Alco currently has 5 active wells that are below the State and Federal MCL of 10 ppb. In order to blend the waters from these 5 active wells with the higher-arsenic concentration waters of the 3 standby wells, Alco will be constructing a blending facility that has a capacity to adequately blend all 8 sources. After the blending facility, the water that will be provided to Alco's customers will meet State and Federal standards for Arsenic.	L	5	C	Alco currently has 3 wells that, due solely to Arsenic levels exceeding the 10 ppb MCL (State and Federal), have been designated as standby groundwater sources. Specifically, before being designated as standby sources, the Boronda Well's (source code 2710001-012) most recent Arsenic level was 21 ppb, the Las Casitas Well's (source code 2710001-011) most recent Arsenic level was 22 ppb, and the Nogal Well's (source code 2710001-013) most recent Arsenic level was 17 ppb. These sources have a combined production capacity of 6,399 gpm. The building of this project will allow Alco to blend these sources with other sources that are below the Arsenic MCL so that the combined total flow after blending will be less than the Arsenic MCL of 10 ppb.	4,500,000	8,624	27,901 05	Monterey	Ι	2009
903 3700912	3700912-001	YMCA CAMP MARSTON/RAINTREE	Camp Marston Storage/Water Main Improvements	Qualified professionals have indicated the need to sandblast the inside of 60k tank, radiograph metal thickness, and install NSF approved spray liner on entire tank. Install appropriate filtration system, booster pumps, plumbing, and backwash settling pond to ensure iron and manganese removal to acceptable levels. To correct dead end issues, install 1650 ft. of 6 in. water main with two more fire hydrants to allow for proper flushing of system as well as fire protection completion of water main loop.	L	5	Р	Current 60k water storage tank is degrading rapidly with extensive rust eating at several seams. Water in this area is extremely aggresive and we continually exceed the recommended levels for Iron and Manganese from all three wells. Last reading taken was 17,000 ugl. on iron and 110 ugl. manganese. Turbity was 138 ntu. Extensive dead ends in system contribute to possible exceedence of mcl's of various pathogens.	300,000	27	310 14	San Diego	V	2009
904 4310027	4310027-002	Santa Clara Valley Water District	Stage II DDBP compliance	Solution to the problem requires the construction of a settled water ozone system using LOX as feed gas and sulfuric acid and hydrogen peroxide for bromate control, with fine bubble diffusion ozone contactors followed by GAC filtration.	L	0	С	Stage II DDBP compliance needed.	58,000,000	25	0 17	Santa Clara	II	2006
905 3610019 906 4310027	3610019-001 4310027-003	SAN BERNARDINO VALLEY WD Santa Clara Valley Water District	Stage I DDBP Compliance	Basin wide treatment and distribution facilities Need to change the current treatment to one using	L	0 0	c c	TCE, PCE and nitrate contamination in basin Stage I DDBP compliance needed.	20,000,000 7,400,000	4 25	0 13 0 17	San Bernardino Santa Clara	V II	1998 2006
907 4810015	4810015-001	TRAVIS AFB WTP - VALLEJO	Travis Air Force Base Water Treatment Plant Upgrade	ferric chloride as the primary coagulant. Project includes addition of intermediate ozone, pretreatment process improvements, washwater recovery pond replacement, and operations building modification . Pretreatment process improvements include, new rapid and flash mixing, an additional stage of flocculation, and modification of the existing sedimentation basins. Preliminary design work is complete. Project is in final design stage. Design is fully funded	L	0	c	Project is an upgrade to an existing 7.5 MGD surface water treatment plant. Upgrade addresses plant disinfection and disinfection byproduct formation deficiencies. Addresses projected difficulties meeting Stage 2 DBP formation.	7,000,000	1	3 04	Solano	II	2009
908 1500398	1500398-002	FRONTIER TRAIL HOMEOWNERS ASSOC, IN	NC Frontier Trails, Stand-by Well Relocation	Frontier Trails "Stand-by" water well is too near the Kern River. The wells water tests reflect the effects of surface water and its turbidity levels are above acceptable standards. Frontier Trails property is such that we cannot relocate the well to acceptable standards without a purchase of new propery, the engineering, contracting, inspection and drilling of a new well with the relocation of new utilities and controls.	L	0	с	Frontier Trails currently owns a "grandfathered" Stand- by well for emergency water distribution. The well is within 75 feet of the Kern River at a depth of 40 feet. Regulations indicate that the wells' location, it's turbidity levels and the effects of surface water require removal, repurchase of new land and relocation of the well.	55,000	36	40 19	Kern	Ш	2008
909 1502545	1502545-001	SCHWEIKART WATER SYSTEM	Elevated DBCP	RUN 2 MILES OF 12" MAINLINE AND CONSOLIDATE TO VAUGHN WATER COMPANY. OTHER - DESIGN AND CONSTRUCTION	L	0	С	DBCP EXCEEDS MCL; as of 1/2000 source meets DBCP MCL and was reranked to L	260,000	8	50 19	Kern	III	2006
910 5602130	5602130-001	SOLANO VERDE MUTUAL WATER CO	Deterioration of water quality	Construct a water line to import water from Callegaus	L	0	С	Well has nitrate failure along with iron & manganese and turbidity problems Standby Well.	1,600,000	38	50 06	Ventura	IV	2000

911 4200804	4200804-002	WALKING M RANCHES ASSN.	Walking M Water System Improve Drinking Water Quality	The well committee specified the following L requirements: Select one of three possible well sites recommended in an existing geological report. After permitting by the County of Santa Barbara, drill the well at the site selected using a local well drilling and pump company. The well head shall be fitted with a lockable fitting which permits water sampling. Other County requirements for a well of this size shall be compiled with. Connect the well to the existing water storage and treatment installation with 6 inch PVC piping. The well depth is projected to be between 800 and 1000 feet deep with a projected maximum output of 120 GPM. Approximately 4225 feet of 6 inch PVC piping with a shutoff value and two check values is required for connection to the storage tank. The well site area of approximately 100 x 150 feet shall be fenced to prevent intrusion by cattle or other farm animals. An all weather access shall be secured to prevent tampering, entry of foreign material or vertical migration of any contaminants. Local contractors and suppliers are immediately available for all subcontracted work and supplies. An association member with previous experience managing a well installation for the association will manage this project.	L	0	C	The Walking M Water Association has been distributing water to its association members since 1967. One of two wells now in operation was recently tested and shown to be exceeding Primary Drinking Water Standards for Turbidity and Secondary Drinking Water Standards for Turbidity and Secondary Drinking Water Standards for Color and Iron; further, the cost to treat sulfides from this well has become excessive. A study by a qualified consultant in 2008 projected that a cost of \$230,000 would be required to provide a water treatment facility for this well which could solve all treatment facility for this well which could solve all treatment facility for this well which could solve all treatment facility for the water distributed to association members does not exceed Drinking Water Standards. Because of blending requirements, we were able to use this well for only 16% of our water needs during 2008. Summer usage during June through August requires that both wells be available. It is our desire to be able to use each well for 50% of our water needs and be fully compliant with Drinking Water Standards. If it were necessary to take the second well offline to conduct preventive or corrective maintenance, distributed water could then exceed some Drinking Water Standards. Because of the high cost to change water treatment methods as proposed	183,000	17	54 06	Santa Barbara	IV	2009
912 2701959	2701959-002	TIERRA VISTA MWC	Arsenic Filtration and System Rehabilitation	Tierra Vista Mutual Water Co. proposes to refurbish the L 3 steel storage tanks with Eco friendly liners. This would eliminating the need to replace the existing tanks and reduce the environmental impact of their removal. Replace 3,000 feet of deteriorating 2" supply line.Install equipment to remove Arsenic using a process known as co-precipitation and filtration. Liquid ferric chloride and liquid sodium hypochlorite (chlorine) are injected into the water and the Arsenic is oxidized and adsorbed on the precipitated iron hydroxides. The precipitated hydroxides including the arsenic are removed from the water through a pressure filter containing a catalyzing filter medium sand coated with manganese dioxide. The filter is periodically backwashed to remove the precipitated solids and this sludge is accumulated in disposable cartridges which are stored for disposal in accordance with county and state regulations.Grade, install proper drainage and lay down a layer of base rock to eliminate the continual erosion of the tank site access road.	L	0	C	Tierra Vista Mutual Water Co. is a small incorporated water system with 17 connections. The system relies on one groundwater well for production. At present the system has no disinfection or filtration. Raw water is pumped to storage and then distributed. The system is 26 years old and has not been properly maintained. The following is proposed:Recent raw water monitoring indicates that Arsenic exceeds the MCL of 10ug/l at about 14 ug/l. Our local regulator is the Monterey County Health Department. They have indicated that all systems exceeding the Arsenic MCL must reduce this contaminant to less than 10ug/l. The Road access to the 2-15,000 gallon storage tank site needs to be refurbished and the ongoing erosion controlled. The three storage tanks need to be replaced or refurbished and the 3,000 foot distribution line from the well to the storage tanks needs to be replaced.	275,000	19	57 05	Monterey	Ι	2009
913 0510004	0510004-001	C.C.W.D. Sheep Ranch	Sheep Ranch treatment plant	Replace mixed media filtration with membrane filter. L Modify disinfection to use ozone or UV as primary disinfectant.	L	0	С	Current plant has reached capacity, has difficulty treating high turbidity waters and cannot meet proposed DBP regulations.	640,000	48	100 10	Calaveras	III	2002

914 1502670	1502670-002	Fairview Water Company, LLC	Fairview Water Company	Fairview Water Company, LLC. Is seeking professional L	0	С	The drinking water problem that this project will	500,000	84	100 19	Kern	111	2008
			Nitrate and Perchlorate	services to make water quality and operational capital			address is Chemical contaminates (Nitrates &						
			Corrective Action	improvements in an effort to provide reliable high			Perchlorates levels) in excess of the mg/Ls and/or						
				quality water at competitive prices by providing project			trending towards being in excess of the mg/Ls, drawn						
				management, assessment, evaluation, design,			from 3 well sources. The drinking water sources						
				equipment, materials, fabrication, permitting,			impacted are wells 1, 2, & 3 that supply the totality of						
				installation and testing.Scope of Owner's Engineer			the potable water for the Fairview water company,						
				Services shall include but not be limited to:   Contracting			serving 80 connections. The level of contaminates for						
				with an Owner's Engineering firm on an as-need bases			the wells are as follows;Well 1 – (Production volume						
				to support Fairview Water Co., LLC. To develop and			120 GPM)• Nitrates CCR 2006 36.3 mg/L• Perchlorates						
				implement an:o Interconnection Plan: Develop a			Quarterly sample collected sometime in Mid May from						
				feasibility study and evaluate a mainline			Well 01 (PS Code: 1502670-001) showed perchlorate at						
				interconnection with local water agencies; Stallion			6.3 ug/L, above the MCL of 6.0 ug/L Well 2 –						
				Springs CSD; Bear Valley CSD; Tehachapi Cummings			(Production volume STANDBY 240 GPM) • Nitrates CCR						
				Valley Water Company. If found feasible, scope of work			2006 48.7 mg/L• Perchlorates September 07 initial						
				may not be limited to interaction with local and state			testing requirement, perchlorate at 16.0 ug/L, above						
				agencies, entering in negations with the viable water			the MCL of 6.0 ug/L • Well 3 – (Production volume 200						
				company, perform engineering, acquire necessary			GPM)• Nitrates CCR 2006 26.6 mg/L• Perchlorates						
				permits and easements, procure materials and			Less than .03 mg/LThe drinking water standard,						
				installation of interconnection o Water Blending Plan:			regulation and/or directive are found in California Code						
				Develop an approved engineering Blending Plan for			of Regulations, Title 22, Division 4, Chapter 15 Article 4,						
				perchlorates and nitrates. Perform design, procurement			§ 64431, which states in part;"Maximum Contaminant						
				and installation of equipment and controls.o Water			Levels – Inorganic Chemicals.(a) Public water systems						
				Storage Plan: Perform water storage needs assessment,			shall comply with the primary MCLs in Table 64431-A as						
				design, procurement and installation of additional			specified in this article."Table 64431-A list the						
				storage capacity.o Well Refurbishment Plan: Perform an			Maximum Contaminant Level, mg/L for Perchlorate and						
				assessment and engineering study to determine the			Nitrate as follows; Chemical Level mg/LPerchlorate						
915 3/00169	3400169-002	SPINDRIFT MARINA	Arsenic Removal	Determine if the existing oxidation filtration system is	0	c	Arsenic appears to be above the MCL in the source	25.000	25	100.09	Sacramento		2008
515 5400105	5400105 002	SHADALLANA	Arsenie Kenioval	adequate to remove arsenic from the water. Prenare a	0	c	water	25,000	25	100 05	Sacramento	·	2000
				detailed technical report and operations plan. Install a			Hote.						
				totalizing flowmeter, conduct water monitoring on the									
				treated side of the existing system if not completed									
				before funding is available									
				berore funding is available.									
916 1500314	1500314-001	Del Oro Water Co. (for, Country Estates)	Excess TDS - Country	Construct multiplezometer monitoring well, construct	0	с	Existing water supply system does not meet the 1500	600.000	91	364 19	Kern	ш	2004
			Estates	and equip a new well based on W/Q results from the			mg/l upper secodary drinking water standard for total	,					
				monitoring well			dissolved solids.						
917 0707576	0707576-002	PLEASANTIMES MUTUAL WATER CO	Elevated manganese	Treatment L	0	С	High Manganese content in the water.	100,000	190	380 04	Contra Costa	П	2002
918 5601117	5601117-011	SENIOR CANYON MUTUAL WATER CO	Standby Well - Nitrates	Drill a new well in the area to replave the high nitrate L	0	С	Existing standby well high in nitrates, has to purchase	150,000	240	450 06	Ventura	IV	2006
				well			water from Wholesaler which is expensive						
							•						

919 4400502	4400502-007	TROUT GULCH MWC	Well # 1 (Norman Hill) Manganese Filtration Plan	Contract for engineering services to determine best- t value facility for re-charge slurry removal and disposal. Design magnese removal facility and re-charge slurry handling system.Procure and install manganese removal system and re-charge slurry handling system. A quotation has been obtained for a Manganese Filtration Plant at S80,000. However, this quotation assumed that slurry disposal would be done via a local sewer connection.All funded projects may be combined into one or two larger projects to facilitate administration, oversight and review.	0	C	This well was drilled in 1934 on a dedicated parcel of the Forest Glen subdivision. It was sole water source for Mar Vista Water Company (MVWC) for at least 40 years until Meadow Ranch subdivision, with its own well, was added to the company in 1987. Although a cross-connection has been installed, each well normally supplies only its portion of the system. Trout Gulch Mutual Water Company (TGW), a customer-owned corporation, purchased the assets of MVWC on July 1st, 2008. The Norman Hill well has been in continuous service and production capacity is believed to be adequate to meet entire system needs, but this has not been tested for periods longer than a few days. The Meadow Ranch well has been a sand producer, has severe well casing perforation occlusion and its production capacity has dropped from 150 gpm in its early years to 41 gpm now. Forced conservation is required to keep consumption within available Meadow Ranch well production this year. The Meadow Ranch well can scarcely supply its own part of the system, about 1/3 of the connections, so it is not a useful replacement or even back-up for the Norman Hill well.Norman Hill well manganese level was 17 times MCL in 2007. The most recent test result from April 18, 2008 of 0.95 is 19 times the MCL. The PUC/California State DEH/Santa Cruz County DEH have ordered MVWC to take corrective measures. See: PUC Water Division	90,000	171	584 05	Santa Cruz	Π	2008
920 5400824	5400824-001	SULTANA C.S.D.	Sultana CSD Safe Drinking Water Project	The proposed project is to acquire land, drill a test well L and then drill a production well with storage facilities that would be tied into the community's water system.	0	C	The Sultana Community Services District serves the small Tulare County community of Sultana with drinking water. The District currently has two operable water wells. One of these wells, Well #2, exceeds the Maximum Contaminant Level (MCL) for DBCP. The most recent test on this well indicated a DBCP level of 0.56 ppb, over twice the MCL of 0.20 for DBCP.	1,000,000	180	650 12	Tulare	Ш	2007
921 1510026	1510026-001	CWS - UPPER BODFISH WATER SYSTEM	Elevated Uranium	DRILL AND EQUIP A NEW WELL AND/OR INSTALL L TREATMENT FACILITIES SUCH AS AERATION AND NANO- FILTRATION AT EXISTING FACILITIES. OTHER - DESIGN AND CONSTRUCTION	0	с	WELL EXCEEDS EXCEEDS TOTAL ALPHA AND URANIUM MCL	300,000	281	790 19	Kern	III	2006
922 3710009	3710009-002	Descanso Community WD	filtration plant	Design and installation of 150 gpm capacity L iron/manganese filtration facilities at each of two well sites.	0	с	Source water iron and manganese exceeds MCL.	500,000	313	870 14	San Diego	V	2002

923 1010042	1010042-008	MALAGA COUNTY WATER DISTRICT	Replacement Well for We	Il The project consists of acquiring a new well site, drilling L a test well, design and construction of new well, connection to the water distribution system, and abandonment of Well No. 3.	0	С	Water quality from Well No. 3 exceeds the maximum contaminant level (MCL) for DBCP as defined in Section 64445.1 (c)(5)(B) of Title 22, California Code of Regulations. The MCL is 0.2 and the well produces water in concentrations that exceed 0.3 microgm/l. This well has been placed on "standby" status pursuent to direction from the Department of Health Services dated June 19, 2000.	1,740,000	472	900 11	Fresno	111	2007
							In addition, the well has concentrations of nitrate that exceed 50 mg/l. The MCL for nitrate is 45 mg/l as defined in Section 64431 (a) of Title 22, California Code of Regulations.						
							Malaga County Water District is completely reliant upon groundwater as the water supply source. Well No. 3 generates 1,500 gpm and the site includes a standby generator. The removal of this well from active status has severely restricted the District's ability to reliably provide water to its residential, commercial, and industrial customers.						
							The Malaga County Water District has experienced bacteriological problems with Well No. 1. Well No. 1 is presently out of service. Well No. 4 has been enhanced with GAC treatment facilities, however, the use of this well is limited as the electroconductivity of the source						
924 1010042	1010042-009	MALAGA COUNTY WATER DISTRICT	Replacement Well for We	Il The project consists of acquiring a new well site, drilling L a test well, design and construction of a new well, connection to the water distribution system, and abandonment of Well No. 5.	0	С	Water quality from Well No. 5 exceeds the maximum contaminant level for DBCP as defined in Section 64445.1 (c)(5)(B) of Title 22, California Code of Regulations. The MCL is 0.2 microgm/l (ppb) and the well produces water in concentrations of 0.62 microgm/l. The well has been placed on "Standby" status pursuent to the direction from the Department of Health Services dated June 19, 2000.	1,740,000	472	900 11	Fresno	111	2007
							The Malaga County Water District is completely reliant upon groundwater as the water supply source. Two of the District's wells have been placed on "inactive" status due to contamination which severely restricts the District's ability to reliably provided water to its residential, commercial, and industrial customers.						
							The Malaga County Water District has experienced bacteriological problems with Well No. 1. Well No. 1 is presently out of service. Well No. 4 has been enhanced with GAC treatment facilities, however, the use of this well is limited as the electroconductivity of the source water is high after treatment and leads to violations of the Waste Discharge Requirements at the Wastewater Treatment Plant. Additional information will be forwarded to the Dept. of Public Health. Presently Malaga County Water District is reliant upon two water supply wells. One of the supply wells has had						
925 4010024	4010024-001	SLO CWWD NO. 23 - SANTA MARGARITA	Standby Sources	connect to Central Coast Water Authority (CCWA) L 2/3/06.	0	С	Wells subject to SWTR compliance and are not filtered.nadequate source of supply. Two wells under influence of surface water. Two other wells inadequate to meet system demand.	1,000,000	516	1,200 06	San Luis Obispo	IV	1998

926 4410015	4410015-001	Lompico County Water District	Water Storage Tanks Replacement and Site Improvements. Water Lateral Replacements. 8" Interconnect	1. Water Storage Tank Replacements: All of the tank site would obtain an engineered soils report and design plans. In addition, each site would require demolition and site grading. Temporary storage tanks would be required for the Lewis #1 Tank replacement. Lewis #1 is also a larger site including the Lewis WTP, which would involve addition demolition and site grading. Concrete ring foundations would be constructed per engineered plan provided by the Tank Subcontractor. Tanks would also be constructed also by engineered plans up to seismic codes. Piping connecting to the tanks would be replaced. Flexible piping connecting to the tank would be to the tank. Lewis #1 and #2 would be replaced with welded steel tanks and coated. Welded steel tanks are well documented to be the longest lasting water storage tank but require sufficient space to construct, which the Lewis Tanks have. The next best tank for restricted areas is a fiberglass coated bolted steel tank and this type of tank is selected for the remaining 4-60,000 gallon tanks. 2. Service Lateral Replacement: The service lateral replacement would not require any engineering, however all of the services would have to be located which would need to be drawn on a map and supplied to qualified bidding contractors. The piping from each would here Placed with copper piping per standard specifications.3. System Interconnect Pipeline: The System Interconnect Pipeline would be 8" in	0	c	1. Water Storage Tank Replacements: Lompico County Water District, LCWD, has six (6) water storage tanks and they are all made out of redwood, which is no longer a standard in the industry due to a low useful life span. Two of the tanks, called Lewis #1 & #2, are 100,000 gallon tanks and represent 50% of the storage to the community. These two tanks are leaking profusely, creating an emergency situation to replace these tanks as soon as possible. Two of the other tanks, called Kaski #1 & #2, are 60,000 gallon each. These tanks have begun to leak and also should be replaced very soon. The final tanks, Madrone #1 & #2 are also 60,000 gallon. These tanks were replaced in 1989 and will probably last another 10 years without leaks.2. Service Lateral Replacement: LCWD has 500 -3/4" connections and all of the lateral piping for these services were installed with polybutylene piping which is now a defunct pipe material due to vernsive failures. Many of these service laterals fail without warning, and also often during weekends or nights. Not only is a large amount of fix them which involves replacing the entire lateral with copper piping. To date, 167 of these laterals have already been replaced, leaving 333 remaining to replace.3. System Interconnect Pipeline: A system interconnect pipeline between LCWD and San	4,121,750	501	1,500 05	Santa Cruz	IJ	2011
927 1710012	1710012-005	Cobb Area County Water District	CAWD WELL 3 FILTER REHAB	Contractor will come in and vacuum out filter, repair underdrain (if necessary) refili will multiple layers of aggregate including:4 levels of gravel from 1.5" - #10 sand1 level of filter sand1 level of anthraciteAll equipment and safety compliance measures and labor will be supplied by contractor.	0	С	Filter life has expired, this project rebuilds 6' x 12' rapid sand filter, for meeting iron and manganese compliance levelsCurrently water source is off line, due to filter and ozone issues. Do not have quote for rebuild of 03 generator, may apply separetly.	20,960	708	2,500 03	Lake	II	2009
928 1710012	1710012-006	Cobb Area County Water District	CAWD WELL 3 OZONE REHAB	Without Well#3 on line we have no redundancy in the L system. WEll 3 and Well 1 work together and are the primary wells for the entire water system. Well 3 cannot meet the standard for iron and manganese without oxidation and filtration, the combined ozone and filter rehab projects provide us with adequate water to maintain both water and fire service.Our system remains vunerable until the situation can be remedied	0	C	Project is in direct conjunction with CAWD Well 3 Filter Rehab application. Ozone generator does not function must have new Ozone Reaction Chambers, Compressors, etc. We cannot meet the standards for Iron and Manganese, and have had to take this source off-line. Well 3 works in tandum with another source, and serves as a compliment and a backup to our primary well.	10,000	708	2,500 03	Lake	II	2009
929 4410018	4410018-002	Central Water District	Cox Well Field Iron/Manganese Treatment Facility	This project is divided into two phases. The first phase L includes hiring a consulting engineer to assist the CWD with the evaluation and design of an iron and manganese treatment plant that addresses the concerns of the District. The second phase of the project is to conduct a pilot plant study to help assure that several parameters are met. These parameters include the removal of iron, manganese and hardness from the Cox Well Fields utilizing the most cost effective and efficient technology. Additionally, the Central Water District will work to minimize project capital costs as well as operational and maintenance overhead. The District will construct a treatment plant which will have the capacity to treat up to .35 mgd and could be modified to meet projected transfer of drinking water supplies from the Aromas Red Sands Aquifer to the Cox Well Field. (Due to Chromium 6 levels present in the Aromas Red Sands Aquifer.)The treatment plant design will incorporate alternative energy sources, such as solar power, to help minimize the Carbon Footprint.	0	с	The Cox Well Field has high levels of Iron and Manganese. The District currently blends drinking water from the Cox Well Field with water from the District's primary source, the Aromas Red Sands Aquifer. The District is aware of the fact that elevated levels of Chomium 6 exist in the Aromas Red Sands Aquifer and so is being proactive in planning for the use of the Cox Well Field as its primary source of drinking water. The project will take a comprehensive apporach to planning for long term solutions that help ensure a clean and safe source of drinking water. The project planning will include a planning and feasibility study for a water treatment facility to be located within the Central Water District at the Cox Well Field. The treatment plant will function to treat a drinking water supply that currently cannot be fully utilized due to a high concentration of both iron and manganese.	2,000,000 r	808	2,700 05	Santa Cruz	II	2011

930 3610063 931 1610001	3610063-001 1610001-010	GOLDEN STATE WATER CO - MORONGO DE Armona Community Services Dist	L SUR Well 1 Arsenic Compliance	Construct treatment facilities The project would consist of modifying the existing treatment facilities at Well No. 1 to provide removal of arsenic from water produced by the well. The project will include retrofitting of the existing filters, replacing filter media, installing chemical storage tanks and controls and related appurtenant facilities.	L	0 0	c c	Uranium approaching MCL The arsenic concentrations at Well #1 exceeds the Federal Drinking Water Standards of 10 ppb for Arsenic. Our 4-quarter running average exceeds the Federal (and State) limit of 10 ppb. Well #1 is the primary water source. ACSD has no other wells that meet the Arsenic Standard. ACSD must achieve compliance with the running annual average MCL for Arsenic at every arsenic sampling point in our system no later than June 30, 2010.	250,000 500,000	823 1,179	2,716 13 3,239 12	San Bernardino Kings	V III	1998 2009
932 1310011	1310011-003	Coachella VWD: I.D. NO. 11	CVWD No. 11 - elevated TDS and fluoride	Drill new well sites north of the existing ID # 11 well field. Future ID # 11 wells to provide water to the existing 1310017	L	0	с	Water quality is poor in terms of TDS and fluoride levels approaching the MCL. The ground water is declining at a rate of 6 feet per year.	2,000,000	2,624	4,198 20	Imperial	v	2002
933 2410008	2410008-003	MEADOWBROOK WC	Hexavalent Chromium Mitigation (Cr+6)	There are currently no approved mitigation measures for Ch6. We will need to identify technologies, plan, obtain bids and construct whatever facilities are deemed necessary once new standards and technologies are in place.	L	0	c	Mwc does not meet new proposed standards for Chromium 6 (Hexavalent Ch). We serve two public schools (K-2 and 3-8), a Migrant Housing Camp and a meat packing facility that provides meat to the armed forces and the public. Mwc was sued in 2008 over potential contamination due to a nearby EPA clean-up site. DPH states that when new standards are enacted we will be out of conformance and will need to have mitigating measures in place.	200,000	1,539	4,400 11	Merced	III	2012
934 4210024	4210024-001	LA CUMBRE MUTUAL WATER CO	System improvements	Pressurized media filter, operator control room, chemical feed equipmentbackwash pumps, reclaim pumps water quality monitoring instrumentsreclaim tank, piping, control valves, SCADA equipment. the facility will be located at our maintenance yard owned by the Water Company. The well will have to be automated to work in conjuction with the plant and automatic control flow control valves. The wells and motor control centers are existing.	ι	0	с	Our groundwater wells exceed the iron & Manganese SMCL. The well areintended to offset our State Water allocation. Half of our customers aregetting this water. We need to treat this water with oxidation followedby filtration. We have hired a consultant to define the treatment process and preliminary engineering. The treatment plant will deliver water to a central location that already exists and is owned by the Water Company. We have an agreement with our local Public Health Department to blend250 GPM of well 21 water but this low flow still causes us to have customercomplaints. La Cumbre Mutual Water Company is a small Company andwe do not have the funds to construct a Iron & Managenese plant. This funding will make our water system reliable, and produce water that is free ofiron & Manganese.	1,000,000	1,448	4,900 06	Santa Barbara	IV	2008
935 1910163	1910163-002	VALENCIA HEIGHTS WATER CO.	Elevated nitrate	Install nitrate removal facility.	L	0	с	Nitrate above MCL in all domestic wells. Possible loss of source of blending water within two years.	1,000,000	1,600	5,500 16	Los Angeles	IV	2001
936 3410005	3410005-001	Rancho Murieta Community Servi	Phase 1 Plant Replacemen and Upgrade	t The project will replace a 30 year old traveling bridge filter system with a submerged membrane system. The existing filter bed is failing. The existing filter bed and sedimentaion basins will be removed and replaced with the submerged membrane system components. New controls and chlorination facilites are included as well as new controls including new SCADA equipment.	s	0	с	The treatment plant is over 30 years old comprised of a traveling bridge filter system. The project will replace the traveling bridge filter system with a submerged membrane system to ensure compliance with LTESWTR. The existing filter bed is failing causing turbidity problems. THM formulation is exacerbated in late summer and fall, due to algae blooms, which stresses the filter system resulting in inefficient organic removal prior to chlorination.	7,000,000	2,525	6,060 09	Sacramento	I	2009
937 3610053	3610053-002	WESTERN HEIGHTS WATER COMPANY	Construct a New Two- Million Gallon Reservoir	Construct a 2-million gallon reservoir to blend two standby wells	L	0	С	Two standby wells with nitrate levels above the MCL need blending treatment	750,000	2,225	7,120 13	San Bernardino	v	2002
938 5410008	5410008-003	Orosi Public Utility District		INSTALL NITRATE REMOVAL EQUIPTMENT ON THE WELL HEAD. OTHER - DESIGN AND CONSTRUCTION	LL	0	с	LOST MAIN WELL DUE TO HIGH NITRATES-WELL NEEDED TO MEET DEMAND	600,000	1,870	7,318 12	Tulare	Ш	1998

939 4910016	4910016-003	Cotati, City of	Well 1A and 3 Sand Filter Replacement	Work will consist of replacing the green sand mixed media at two municipal wells (Well 1A and Well 3), and repacing the backwash control valves and actuators. Construction activity start date is shown as October 2009 to reduce the impact of having these wells out of service during peak summer demand periods. The project is intended to address periodic break-throughs of Fe and Mn in the finish water in violation of secondary MCLs, increase the reliability of the backwash controls, and reduce water waste through leaky backwash control valves. The sand filter system has been in service over 20 years.	L d	0	c	The City of Cotati has 3 municipal groundwater wells. Two wells (Well 1A and Well 3) have elevated levels of iron (FE) and manganese (Mn) in the raw water, in addition to hydrogen sulfide (H2S). The City uses a green sand-mixed media filter to remove the Fe, Mn, and H2S, in addition to pre-chlorine/potassium permanganate oxidation step. The green sand-mixed media filters have been in service for over 20 years and are well past the expected service life. As a result, the City has periodic violations of secondary MCLs for Fe and Mn in the finish water.In addition, the sand filter backwash control valving is equally old and is experiencing periodic failures. There is also chronic leaking of the backwash control valving into the sanitary sewer. These issue can't be addressed without taking the unit out of service, and the City wishes to coordinate this work to reduce down-time.	150,000	2,560	7,532 18	Sonoma	11	2009
940 4910011	4910011-006	Sebastopol, City of	Well 5 Treatment System for VOCs	Place VOC treatment system on drinking water well.	L	0	с	Place treatment system on existing well for VOC contamination removal. No violation or CDPH directive. Well is off line pending treatment.	500,000	2,885	7,750 18	Sonoma	П	2009
941 4210020	4210020-005	Santa Ynez River Water Cons. Dist. ID#1	Well #3 replacement	Drill 3 test holes and convert one into production well	L	0	С	Well 3 exceeds nitrate MCL. Standby Well	500,000	2,327	8,298 06	Santa Barbara	IV	2003
942 4210020	4210020-008	Santa Ynez River Water Cons. Dist. ID#1	Nitrate Well Treatment	Santa Ynez Water Conservation District, Improvement District No 1's (ID#1) project is the reactivation of existing Well #3 with nitrate removal treatment as determined through best engineering planning and practices.	L	0	c	Santa Ynez Water Conservation District, Improvement District No. 1 (D#1) serves a population of 8,298. It also provides water to the City of Solvang with a population of 5,322 and serves water on a stand-by basis to Rancho Marcelino Mutual Water Company, which uses the water provided to blend with its one well for the purpose of Nitrate MCL reduction. ID#1's source water problem is Nitrate contamination in Well # 3, which exceeds Nitrate MCL. This well is critical to the water delivery capability in pressure Zone 2, which has the highest demand for domestic water and is needed to compensate for production losses in well #1 due to its nearly 60-year age. The decrease in production is further complicated by the uncertainty of the scheduled water deliveries from the State Water Project, and loss of several GWUDI (Ground Water Under the Direct Influence) wells due to floods and river shifting. As ID#1 will need to continue to meet the water demand and provide water to the City of Solvang, because of the State Water Project delivery amounts, ID#1 will need to backfill that supply with water from its	1,200,000	2,327	8,298 06	Santa Barbara	IV	2007
943 1010001	1010001-002	BAKMAN WATER COMPANY	Wells 10 & 13 DBCP	Install GAC treatment systems on Wells 10 and 13.	L	0	C	groundwater basin. Additionally, Well #3 provides for necessary pressure to ID#1's pressure Zone 2 area, which, within specific locations do not meet fire flow standards. Well #3 is a high yield, reliable, Zone 2 well, capable of pumping 800 gpm, and reactivating it would Wells 10 and 13 are contaminated with DBCP.	573,430	1,910	8,865 11	Fresno	Ш	2004
			Treatment											

944 1010025	1010025-003	PARLIER, CITY OF	Integrated Well Storage and Distribution System	The City is adding an additional well and a storage tank L to meet peak demands and fire flow. The problem comes when some wells must be shut down because of elevated DBCP levels. The DBCP levels range from .22 - .41. The current State Maximum Contaminant Level (MCL) for DBCP, set by DHS, is 0.2 µg/L. The city finds it more economical to to have storage versus drilling another well. The City also has no way of knowing if a well is having problems until complaints are received. A SCADA system will allow the City to better monitor and manage which wells are in service and how the storage tank can best be utilized to avoid distribution pressure problems, especially during power outages, peak demands or fire flow conditions. The SCADA software can be tailored to provide decision making routines based upon collected data from all of the well sites. The SCADA can notify City staff as soon as a problem is detected at a well site. This will avoid distribution pressure problems and maximize use of available wells and future storage. The City staff will be able to make control inputs from a central location and avoid the time lag associated with having to drive to each well site. The SCADA can also provide security for	0	c	The City currently has sufficient water supply and distribution when all wells are online. The problem comes when some wells must be shut down because of elevated DBCP levels. The DBCP levels range from .2241. The current State Maximum Contaminant Level (MCL) for DBCP, set by DHS, is 0.2 µg/L. To correct this problem, the City is adding an additional well and a future storage tank. The City also has no way of knowing if a well is having problems until complaints are received. A SCADA system will allow the City to better monitor and manage which wells are in service and how the storage tank can best be utilized to avoid distribution pressure problems, especially during power outages, peak demands or fire flow conditions. The loss of additional wells to DBCP contamination and the need for storage to meet peak demands and fire flow necessitates storage tank. Drilling another well is more expensive than storage and it is becoming more difficult to find good water in the area. The City has received a violation for bacteria contamination. The city is required to do continuous chlorination.	1,200,000	2,229	12,058 11	Fresno		2007
045 4010004	4010004 005		Nitrata compliance	the well site by incorporating intruder alarms. The	0	C	Nitrate removal treatment plant people upgrades to	20,000	E 202	12 248 06	San Luis Obisno	11/	2006
945 4010004	4010004-005	GROVER BEACH WATER DEPARTMENT	Nitrate compliance	analyzer	0	C	comply with the nitrate MCL.	50,000	5,205	15,248 00	Sali Luis Obispo	IV	2000
946 1510012	1510012-005P	Lamont Public Utility Dist	Plainview Well Rehabilitation Project	Plainview well # 3 was taken off line and abandoned due to high nitrates. The proposed project is to first perform a groundwater study of this site to gather the necessary information for redrilling to a different aquifer, within the location of the existing well site, where nitrates are not present. Upon receiving results of the groundwater study, the second step will be to drill a new well at the suggested depth to bypass nitrates and begin producing water from a viable groundwater source. The following steps will require a new motor, pump, connection to existing system and existing on site storage tank.	0	с	The Plainview Rehabilitation project will address the excessively high nitrate problem at this site. The drinking water standard exceeded the MCL for nitrates.	10,000	3,603	13,296 12	Kern	III	2008
947 1510019	1510019-005	Shafter, City of	Arsenic Treatment at Well	I The City has started to conduct pilot studies of the three L accepted Arsenic treatment options which are adsorption, ion exchange and coagulation and filtration. The option that presents the most cost-effective solution will be chosen and we would immediately commence the design and construction of that full-scale treatment system. Because any of the treatment options considered will hydraulically impact the existing well's ability to produce a desirable amount of flow with the addition of new vessels and discharge piping, the pump will need more impeller bowls added to its multistage assembly. A new motor equipped with a variable frequency drive will also be needed because of the additions to the pump and to efficiently adjust the flows to the actual needs of the system. A hydropneumatic tank is also needed to regulate the water pressure exiting the well. The City's sewer collection pipeline system is in the immediate vicinity to discharge wastewater from any media or process used to treat for Arsenic.	0	с	The City of Shafter constructed a groundwater well in 2004 per State drinking water standards adjacent to its inactive wastewater plant. The City has been intending to tie the well into its distribution system once the wastewater plant was properly abandoned and the site could be used for redevelopment purposes to promote job growth. The City has designated the well as "Well 15". The plant is now abandoned but it has been revealed that the well's Arsenic levels exceed the State's new maximum contaminant level of 10 parts per billion (ppb). Currently, the levels are at approximately 16 ppb. Having access to this well is critical to the City's ability to market the neighboring area for economic development and job growth but the typical price of constructing an Arsenic treatment exceeds what our water capital improvement and operational reserves can fund.	2,250,000	3,863	15,609 12	Kern	Ш	2009

948 3410704	3410704-007	SCWA Mather-Sunrise	Standby Well - Elevated	Design and construct new well.	L	0	С	Standby well Contaminated with VOC's.	250,000	4,330	15,903 09	Sacramento	I	2006
949 3510003	3510003-007	Sunnyslope County Water Dist	VOCS Lessalt Surface Water Treatment Plant Disinfection By-Product Compliance Upgrade, System Intertie, &	The construction of the Lessalt Surface Water Treatment Plant retrofit will consist of two phases. In the first phase, alum coagulant (PACL), and polymer wi be added to the influent side of the existing treatment plant to reduce total organic carbon, lower chlorine demand, and reduce disinfected byproducts. The coagulated water will then flow in a retrofitted detention chamber where it will be subsequently treated by existing microfiltration filters. Following microfiltration, the filtered water will enter a new clearwell and be pumped into the Fairview and Ridgemark Potable Water Pressure Zones via two new 4000 foot long pipelines for additional contact time. At the Fairview Potable Tanks the tanks will be reconfigured for additional contact time, turnover circulation, and chlorine residual monitoring and rechlorination. Phase one will also have a pilot study to determine the effect of proposed nanofiltration following existing microfiltration on disinfected by products, especially brominated species. In the second phase, after the nanofiltration pilot study, additional treatment will be added to reduce disinfection by- products. At this time, it is assumed that nanofiltration will be effective in reducing disinfection by-products to compliance levels. Preoxidation will also be added, and existing non oxidant tolerant membranes will be replace	L H t t t t t t t t t t t t t t t t t t	0	c	Currently the Lessalt Surface Water Treatment Plant will not meet the upcoming disinfection byproduct rule for potable water which is slated to take effect in 2012. The renovation of the Lessalt Surface Water Treatment Plant will allow the Lessalt Potable Water System, the City of Hollister Potable Water System to meet the disinfection byproduct rule in 2012. Additionally, the Lessalt upgrade will increase the reliability of the Lessalt Treatment Plant to effectively operate at 3 million gallons per day, and supply potable water to the Ridgemark Potable Water Pressure Zone with soft treated surface water. Once the Ridgemark Potable Water Pressure Zone receives soft treated surface water, water customers in the Ridgemark Potable Water Pressure Zone will discontinue using salt based water softeners which customers currently use to reduce hardness. The discontinuation of the used of salt based water softeners will allow the Ridgemark Wastewater Treatment Plant to comply with its primary discharge requirements for total dissolved solids, sodium and chloride which it is currently in violation of. The improved water and treated wastewater quality will also produce recycled irrigation water of sufficient quality to replace imported raw water from the Sacramento Delta which is currently used for irrigation.Currently the Lessalt Treatment Plant	17,129,300	5,241	16,713 05	San Benito	Ι	2009
950 1910130	1910130-002	QUARTZ HILL WATER DIST.	Well 6A Arsenic Mitigation	Quartz Hill Water District is planning on partially abandoning Well 6a. The planned start date for this project is fall of 2007. According to Los Angeles County Water Works District 40, the aforementioned process takes approximately two weeks to complete. The parti abandonment process is done by removing the shaft and bowls within the well. Then a compactor is lowere to the strata where the high levels of arsenic have bee detected. A fine grout will then be pumped into the area where the arsenic heavy water is present which effectively seals off the portion of the well where the contaminants reside. The compactor is then removed and the shaft and bowls are replaced, and pumping car resume.	L al d n	0	C	Do to the EPA lowering the MCL for Arsenic on the 23rd day of January 2006 Quartz Hill Water District has had to suspend use of Well 6a due to high levels of arsenic being detected in the water. Several alternative blending plans have been implemented in hopes of mitigating the arsenic problem, but none have been found to be successful. For this reason Quartz Hill Water District is planning on partial abandonment of well 6a (one of nine active wells). Since the arsenic problem with in this region is very localized (primarily one strata), the planed course of action is to "micro grout" the region of the well were the levels of arsenic are much higher. It is currently believed that the elimination of this strata will not affect greatly affect the production of this strata will not affect greatly affect the production of this well. In January of 2007 Department of Health Services notified Quartz Hill Water District that they had received a Tier II violation. Due to this violation, we have suspended use of Well 6a.	65,000	5,490	17,050 16	Los Angeles	IV	2008
951 1910245	1910245-006	SANTA FE SPRINGS - CITY, WATER DEPT.	Standby well - arsenic compliance	Destroy existing well and construct a new replacement well with arsenic treatment facility	t L	0	C	Water well 02 had Arsenic level @ 14 ug/L. Size of the well can not accommodate any treatment facility	2,000,000	5,209	17,438 22	Los Angeles	IV	2004

954 1910154       1910154-008       City of South Pasadena       Standby Wells - Nitrate       Design and construct water treatment facility to remove increasing levels of PCE and nitrate from pumped ground water.       0       C       Standby wells contaminated with nitrate and PCE are blended to meet the SDWA MCL's (Well field at the Wilson Facility).       6,264       25,824 16       Los Angeles         955 1910154       1910154-007       City of South Pasadena       South Pasadena - Standby       Rehabilitate well to isolate contaminated zones in the aquifer and install denitrification system. Project involves: Design, and Construction       0       C       Standby Wilson Well No. 2 is contaminated with nitrate and PCE (13 ppb).       500,000       6,264       25,824 16       Los Angeles         956 1910154       1910154-003       City of South Pasadena       South Pasadena - Standby       Rehabilitate well to isolate contaminated zones in the aquifer and install denitrification system. Project involves: Design, and Construction       0       C       Standby Wilson Well No. 2 is contaminated with nitrate and PCE (13 ppb).       1,800,000       6,264       25,824 16       Los Angeles         956 1910154       1910154-003       City of South Pasadena       City of South Pasadena       Install denitrification system. Design and construct.       L       0       C       The groundwater pumped from Graves Well, standby wells, standby well so not minated with nitrate level in excess of the MCL of 45 mg/L.       MCL of 45 mg/L.       Los		952 3410016	3410016-002	Orange Vale Water Company	OVWC Well No. 2 Replacement Project	The project will provide up to 2,000 AFV of reliable water supply for the OVWC and will play an important role in the Regional Water Authority's and San Juan Water District's dry year plans by creating the possibility of forgoing portions of its surface water supplies, and allow both agencies to meet the terms of the Water Forum Agreement. It may be cost effective to rehabilitate the existing well but even with rehabilitation the production rate would be significant! decreased. This project would replace Well No. 2 on the same site with a new well equipped with an electric motor and pump, disinfection equipment, and space for a backup generator for emergency power. The project would also include a complete CEQA review, permitting and the destruction of Well No. 2 according to Californ Well Standards. The intended capacity of the well is 1,200 to 1,800 gpm. Prior to the destruction of Well No. 2, extensive pumping and analytical testing program would be conducted to confirm the absence of perchlorate and other contaminants. Concurrent with this work a CEQA review will be conducted; however, if is anticipated that a Notice of Exemption will be adequate due to the replacement nature of the project Upon successful completion of this program, the dismantling and destruction of existing Well No. 2 and completion of the permitting processes, the The City of Garden Grove (City) is seeking grant funds i the amount of 54,000,000, to fund the City and Laguna Beach County Water District's (District) Nitrate Remova Project. This project is located in Northern Garden Grove, between Chapman Avenue and Lampson Avenue, near Euclid Street. This project is scheduled to begin in September 2009 and will be completed in February 2010. The Nitrate Removal Facility unil requir the following equipment and activities: installation of an Anionic lon Exchange Facility, ion exchange vessels, valves and gauges, resin, brine system, nitrate analyzer control system, riss tank, waste tank, bag filter, booster pumps, concrete work, yard piping,	f ly he or t g, nia m t t t. in L a al o r e r, n A	0	c	The Orange Vale Water Company (OVWC) is located in northeast Sacramento County, encompasses approximately 4.8 square miles and serves approximately 17,500 customers. OVWC now receives 100% of their supply from surface water supplies through its parent wholesale agency, San Juan Water District (SJWD). Two existing groundwater supply wells have been used for emergency and dry year supply (Well No. 1 and Well No. 2); however, these wells have deteriorated over time which has resulted in the production of an unacceptable amount of sand, significantly reduced specific capacity of the wells, and Well No. 1 has now been impacted by perchlorate. In 2007, through Proposition 50 grant funding and in coordination with the Regional Water Authority and San Juan Water District, OVWC was awarded \$400,000 in grant funds for the installation of a conjunctive use replacement well (Well No. 3) with a total cost of \$1.4 M. The new Well No. 3 is located in the OVWC Corporation yard within approximately 2000 gpm but has recently been impacted by perchlorate (June 2008). With all three wells no longer reliable OVWC has lost a combined 4,500 gallons per minute supply - even for emergency use. This makes OVWC vulnerable to lack of water supplies as well as providing conjunctive use The City of Garden Grove (City) and Laguna Beach County Water District (District) are coordinating a project that will provide additional water supply as well as protect the Orange County Groundwater Well in response to surveys indicating an ever-increasing concentration of nitrate that exceeds state and federal drinking water standards, in an area historically used for agricultural purposes. Under these circumstances, there is a potential threat for contamination in deep aquifers will affect the potable water supply as a recommendation in a recent feasibility study conducted by Carollo Engineers and sponsored by the Municipal Water District Orange County, which consists of nearly 2.3 million residents. This project was a recommendation in a recent feasibili	4,000,000	5,327	25,000 08	Orange	v	2009
957 1910154       1910154-007       City of South Pasadena       South Pasadena - Standby       Rehabilitate well to isolate contaminated zones in the L       0       C       Standby Wilson Well No. 2 is contaminated with nitrate       350,000       6,264       25,824 16       Los Angeles         955 1910154       1910154-003       City of South Pasadena       Mell treatment       aquifer and install denitrification system.       6       C       Standby Wilson Well No. 2 is contaminated with nitrate       350,000       6,264       25,824 16       Los Angeles         956 1910154       1910154-003       City of South Pasadena       Install denitrification system. Design and construction       F       0       C       The groundwater pumped from Graves Well, standby       1,800,000       6,264       25,824 16       Los Angeles         956 1910154       1910154-003       City of South Pasadena       Install denitrification system. Design and construct.       L       0       C       The groundwater pumped from Graves Well, standby       1,800,000       6,264       25,824 16       Los Angeles         956 1910154       1910154-003       City of South Pasadena       Install denitrification system. Design and construct.       L       0       C       The groundwater pumped from Graves Well, standby       1,800,000       6,264       25,824 16       Los Angeles         957 2410005	1	954 1910154	1910154-008	City of South Pasadena	Standby Wells - Nitrate	Design and construct water treatment facility to remove increasing levels of PCE and nitrate from	L	0	С	Standby wells contaminated with nitrate and PCE are blended to meet the SDWA MCL's (Well field at the	4,500,000	6,264	25,824 16	Los Angeles	IV	2006
Project involves: Design, and Construction 956 1910154 1910154-003 City of South Pasadena Install denitrification system. Design and construct. L 0 C The groundwater pumped from Graves Well, standby 1,800,000 6,264 25,824 16 Los Angeles well, is contaminated with nitrate level in excess of the MCL of 45 mg/L 957 2410005 205 BANOS-CITY Los Banos - Well 15 Install a filtration system to remove arsenic. Do a L 0 C Exceeded McI for arsenic in well 15 845,960 12,277 27,635 11 Merced	1	955 1910154	1910154-007	City of South Pasadena	South Pasadena - Standby Well treatment	pumped ground water. Rehabilitate well to isolate contaminated zones in the aquifer and install denitrification system.	L	0	С	Wilson Facility). Standby Wilson Well No. 2 is contaminated with nitrate ( 75 ppm) and PCE (13 ppb).	350,000	6,264	25,824 16	Los Angeles	IV	2006
MCL of 45 mg/L. 957 2410005 2410005-005 LOS BANOS-CITY Los Banos - Well 15 Install a filtration system to remove arsenic. Do a L 0 C Exceeded Mcl for arsenic in well 15 845,960 12,277 27,635 11 Merced	1	956 1910154	1910154-003	City of South Pasadena		Project involves: Design, and Construction Install denitrification system. Design and construct.	L	0	С	The groundwater pumped from Graves Well, standby well, is contaminated with nitrate level in excess of the	1,800,000	6,264	25,824 16	Los Angeles	IV	1998
Arsenic mitigation feasibility study for other options such as blending.	1	957 2410005	2410005-005	LOS BANOS-CITY	Los Banos - Well 15 Arsenic mitigation	Install a filtration system to remove arsenic. Do a feasibility study for other options such as blending.	L	0	с	MCL of 45 mg/L. Exceeded Mcl for arsenic in well 15	845,960	12,277	27,635 11	Merced	ш	2012

958 2410005	2410005-004	LOS BANOS-CITY	Well head treatment for Chromium, hexavalent for twelve wells (Cr+6)	Install filtration system to remove Hexavalent Chromium. Install piping, sediment tanks, filtration units, monitoring equipment, electrical services, (480 V 3 phase) Pumps,concrete pads, media and engineering.There may be other unknown cost for training and other unforeseen events.	L	0	с	Our active wells have Hexavalent Chromium levels of 21,21,25,25,25,26,30,32,32,33,34,and 37 ug/L OEHHA submitted a PHG of 0.006 ppb. and the MCL has not been set. We will have to address the Hexavalent Chromium if the MCL exceeds our current levels.	13,600,000	12,277	27,635 11	Merced	III	2011
959 1910013	1910013-001	BELLFLOWER - SOMERSET MWC	Elevated TCE	Design and construct replacement wells.	L	0	с	Well contaminated with TCE and manganese. Two other wells are vulnerable to TCE contamination.	1,000,000	6,790	28,000 07	Los Angeles	IV	2006
960 2410001	2410001-002	ATWATER, CITY OF	Well #22 Construction Project	Well #22 Construction Project is currently in the design phase and CEQA has been completed. The only obstacle to construction is funding. A new well will be constructed and approximately 1,000 feet of 12 inch pipe will connect the new well to the current system. This project would consist of construction of a new municipal well, pumping equipment, electrical and controls, an emergency generator and site work. A test well was completed and analyzed to 700 feet and contract documents with specifications have been prepared and ready for a bid call when funding is secured. Well #22 will have a capacity of 1,500 gpm which would go a long way in covering the 1,570 gpm deficit the Atwater system is currently experiencing.	L	0	c	The City of Atwater is located in Merced County in Central California. The climate is dry and mild in the winter and hot in the summer. Rainfall occurs between November and April, and rarely during the summer. High temperatures and low humidity in the summer months lend to a generally much higher water usage. The City's water users consist mostly of residential, commercial, and industrial with some agricultural customers. The City's water supply is entirely from groundwater wells with an average annual consumption of 2,869 MG and a daily average demand of 5,650 gpm. The City of Atwater's existing water system consists of ten groundwater wells serving a current population of 27,369 based on 2009 estimates from the California Department of Finance and it is anticipated the population will increase to 38,800 by buildout. A nearby federal prison is connected to Atwater's system but has its own well. As of December 2009, nine of the ten wells are active and per a discussion with a representative from California Department of Public Health recently, Atwater is on the brink of not meeting capacity. Our largest well, Well #15, is inactive due to elevated nitrate levels (over 60 ppm) that exceed the California Department of Health Services standards. As a result, Well #13 was recently on standby due to elevated levels of ethylene dibromide but is currently active and supplies water to the system on an as-	650,000	6,721	28,100 11	Merced	11	2011
961 4110009	4110009-001	California Water Service-S San Francisco		INSTALL FACILITIES TO ENABLE CHLORAMINE DISINFECTION OF ALL SYSTEM RESERVOIRS (13) AND PURCHASE PORTABLE CHLORINATION EQUIPMENT.	L	0	С	System meets existing trihalomethane MCL, but not but not DBP Rule.	540,000	15,748	56,110 17	San Mateo	II	1998
962 4110006	4110006-002	California Water Service - Bear Gulch		Install facilities to enable chloramine disinfection of 23 Reservoirs and treatment plant, puchase portable chlorination.	L	0	с	System meets existing trihalomethane MCL, but not DBP Rule	1,020,000	17,568	66,470 17	San Mateo	II	1998

963 1910070	1910070-014	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-26	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-26 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	0	с	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006,	820,000	46,878	144,215 16	Los Angeles	IV	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-26 at 900 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple			Paimoale areas of the Anterope Valley. Juring 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.						
			columns of ion exchange resin operating in parallel to			The District collected thirty-two assenic samples						
964 1910070	1910070-026	LOS ANGELES CO W/W DIST 4 & 24-1 ANCASTI Arconic Treatment in Well	This project is for the removal of assenic from the	0	c	Arcenic is the primary contaminant to be addressed by	820.000	46 979	144 215 16	Los Angeles	IV.	2007
504 131070	131600-020	4-52	In project is promed from Well No. 4-52 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	U	c	The project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006,	220,000	40,078	14,213 10	Los Angeles	v	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each			approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Suburit of the Antelnoe Valley Groundwater						
			component that is sized to treat the flow rate from Well No. 4-52 at 800 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple			Basin impacted by arsenic, which is naturally present in rocks and minerals.						
			columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns			The District collected seven arsenic samples between						

965 1910070	1910070-011	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well	This project is for the removal of arsenic from the	0	с	Arsenic is the primary contaminant to be addressed by	820,000	46,878	144,215 16	Los Angeles	IV	2007
		4-37	groundwater pumped from Well No. 4-37 to ensure			the project. Arsenic in drinking water has been shown						
			compliance with the new arsenic standard. To			to impact human health and is considered one of the						
			accomplish this goal, the District proposes using one of			prominent environmental causes of cancer in the world.						
			the commercially available ion exchange systems for			The Safe Drinking Water Act Amendment of 1996						
			arsenic treatment. Ion exchange is designated as Best			required the United States Environmental Protection						
			Available Technology by the US EPA for the removal of			Agency (USEPA) to finalize a new drinking water						
			arsenic from drinking water sources and some ion			standard for arsenic. In January 2001, the USEPA						
			exchange treatment systems have already been			adopted a new arsenic standard of 10 parts per billion						
			permitted by the California Department of Public Health			(ppb). The new standard became effective in January						
			and are in operation in the State. Also, a typical ion			2006.						
			exchange treatment process is simple, robust, compact,									
			The treatment goal is to remove the arsenic in the			The Los Angeles County Waterworks District No. 40						
			effluent (treated) water to less than 4 pph, meeting the			Antelone Valley, Regions 4 & 34 (ancaster (Regions)						
			arsenic standard of 10 nnh			serves approximately 145 000 people through over						
						47.000 service connections in the Lancaster and						
						Palmdale areas of the Antelope Valley. During 2006,						
			The proposed packaged wellhead arsenic removal			approximately 20 percent of the water supply in the						
			system includes a treatment module, pre-filter			Regions was groundwater. The groundwater is						
			assembly, salt/saturator tank, brine processing unit, and			extracted from 33 wells drilled into the aquifers in the						
			brine wastewater storage tank(s). Details of each			Lancaster Subunit of the Antelope Valley Groundwater						
			component that is sized to treat the flow rate from Well			Basin impacted by arsenic, which is naturally present in						
			No. 4-37 at 1000 GPM are as follows. The treatment			rocks and minerals.						
			module (i.e., ion exchange system) uses multiple									
			columns of ion exchange resin operating in parallel to									
			remove the arsenic from the well water. The columns			The District collected seven arsenic samples between						
966 1910070	1910070-029	LOS ANGELES CO WW DIST 4 & 34-LANCAST Arsenic Treatment in Well	This project is for the removal of arsenic from the L	0	С	Arsenic is the primary contaminant to be addressed by	640,000	46,878	144,215 16	Los Angeles	IV	2007
		4-62	groundwater pumped from Well No. 4-62 to ensure			the project. Arsenic in drinking water has been shown						
			compliance with the new alsenic standard. To			prominent environmental causes of cancer in the world						
			the commercially available ion exchange systems for			The Safe Drinking Water Act Amendment of 1996						
			arsenic treatment. Ion exchange is designated as Best			required the United States Environmental Protection						
			Available Technology by the US EPA for the removal of			Agency (USEPA) to finalize a new drinking water						
			arsenic from drinking water sources and some ion			standard for arsenic. In January 2001, the USEPA						
			exchange treatment systems have already been			adopted a new arsenic standard of 10 parts per billion						
			permitted by the California Department of Public Health			(ppb). The new standard became effective in January						
			and are in operation in the State. Also, a typical ion			2006.						
			exchange treatment process is simple, robust, compact,									
			easy to automate, and can be operated on demand.									
			The treatment goal is to remove the arsenic in the			The Los Angeles County Waterworks District No. 40,						
			effluent (treated) water to less than 4 ppb, meeting the			Antelope Valley, Regions 4 & 34, Lancaster (Regions),						
			arsenic standard of 10 ppb.			serves approximately 145,000 people through over						
						47,000 service connections in the Lancaster and						
			The proposed packaged wellhead arsenic removal			approximately 20 percent of the water supply in the						
			system includes a treatment module pre-filter			Regions was groundwater. The groundwater is						
			assembly, salt/saturator tank, brine processing unit, and			extracted from 33 wells drilled into the aquifers in the						
			brine wastewater storage tank(s). Details of each			Lancaster Subunit of the Antelope Valley Groundwater						
			component that is sized to treat the flow rate from Well			Basin impacted by arsenic, which is naturally present in						
			No. 4-62 at 400 GPM are as follows. The treatment			rocks and minerals.						
			module (i.e., ion exchange system) uses multiple									
			columns of ion exchange resin operating in parallel to									
			remove the arsenic from the well water. The columns			The District collected forty-five arsenic samples						

967 1910070	1910070-012	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-36	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-36 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	0	C	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and	820,000	46,878	144,215 16	Los Angeles	IV	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-36 at 900 GPM are as follows. The treatment module (i.e., ion exchange resin operating in parallel to remove the arsenic from the well water. The columns			Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic which is naturally present in rocks and minerals.						
968 1910070	1910070-024	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-43	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-43 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	0	с	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over d 2000 cnewtor and	640,000	46,878	144,215 16	Los Angeles	IV	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-43 at 600 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns			47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals. The District collected thirteen arsenic samples between						

969 1910070	1910070-023	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-42	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-42 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand.	0	с	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006.	640,000	46,878	144,215 16	Los Angeles	IV	2007
			The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.			The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006,						
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-42 at 600 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to			approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.						
970 1910070	1910070-022	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-17	remove the arsenic from the well water. The columns This project is for the removal of arsenic from the groundwater pumped from Well No. 4-17 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	0	c	The District collected four arsenic samples between Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and	640,000	46,878	144,215 16	Los Angeles	IV	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-17 at 600 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns			Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals. The District collected eight arsenic samples between						

971 1910070	1910070-021	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-13	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-13 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	L	0	C	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006.	640,000	46,878	144,215 16	Los Angeles	IV	2007
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-13 at 400 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple				Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.						
			columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns				The District collected four arsenic samples between						
972 1910070	1910070-015	LOS ANGELES CO WW DIST 4 & 34-LANCAST Arsenic Treatment in Well	This project is for the removal of arsenic from the	L	0	с	Arsenic is the primary contaminant to be addressed by	820,000	46,878	144,215 16	Los Angeles	IV	2007
		4-68	groundwater pumped from Well No. 4-68 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.				the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47 000 rewires connections in the Lancaster and						
			The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-68 at 900 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns				4.,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals. The District collected thirteen arsenic samples between						

973 1910070	1910070-017	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-48	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-48 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb. The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-48 at 1950 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple	0	c	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.	1,650,000	46,878	144,215 16	Los Angeles	IV	2007
			columns of ion exchange resin operating in parallel to			The District educated are service enough in Amount 2000						
974 1910070	1910070-016	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well 4-49	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-49 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	0	c	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the	1,650,000	46,878	144,215 16	Los Angeles	IV	2007
			component that is sized to treat the flow rate from Well No. 4-49 at 1800 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to remove the arsenic from the well water. The columns			Basin impacted by arsenic, which is naturally present in rocks and minerals.						

975 1910070	1910070-013	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well	This project is for the removal of arsenic from the L	0	с	Arsenic is the primary contaminant to be addressed by	640,000	46,878	144,215 16	Los Angeles	IV	2007
		4-FOX	groundwater pumped from Well No. 4-Fox to ensure			the project. Arsenic in drinking water has been shown						
			compliance with the new arsenic standard. To			to impact human health and is considered one of the						
			accomplish this goal, the District proposes using one of			prominent environmental causes of cancer in the world.						
			the commercially available ion exchange systems for			The Safe Drinking Water Act Amendment of 1996						
			arsenic treatment. Ion exchange is designated as Best			required the United States Environmental Protection						
			Available Technology by the US EPA for the removal of			Agency (USEPA) to finalize a new drinking water						
			arsenic from drinking water sources and some ion			standard for arsenic. In January 2001, the USEPA						
			exchange treatment systems have already been			adopted a new arsenic standard of 10 parts per billion						
			permitted by the California Department of Public Health			(ppb). The new standard became effective in January						
			and are in operation in the State. Also, a typical ion			2006.						
			exchange treatment process is simple, robust, compact,									
			The treatment goal is to remove the arconic in the			The Los Apgelos County Waterworks District No. 40						
			offluent (treated) water to less than 4 pph, meeting the			Antelone Valley, Regions 4 & 24 Lancaster (Regions)						
			arcenic standard of 10 ppb			serves approximately 145 000 people through over						
			a serie standard of 10 ppb.			47 000 service connections in the Lancaster and						
						Palmdale areas of the Antelope Valley, During 2006.						
			The proposed packaged wellhead arsenic removal			approximately 20 percent of the water supply in the						
			system includes a treatment module, pre-filter			Regions was groundwater. The groundwater is						
			assembly, salt/saturator tank, brine processing unit, and			extracted from 33 wells drilled into the aquifers in the						
			brine wastewater storage tank(s). Details of each			Lancaster Subunit of the Antelope Valley Groundwater						
			component that is sized to treat the flow rate from Well			Basin impacted by arsenic, which is naturally present in						
			No. 4-Fox at 500 GPM are as follows. The treatment			rocks and minerals.						
			module (i.e., ion exchange system) uses multiple									
			columns of ion exchange resin operating in parallel to									
			remove the arsenic from the well water. The columns			The District collected five arsenic samples between						
976 1910070	1910070-020	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Treatment in Well	This project is for the removal of arsenic from the L	0	С	Arsenic is the primary contaminant to be addressed by	1,000,000	46,878	144,215 16	Los Angeles	IV	2007
		4-50	groundwater pumped from Well No. 4-50 to ensure			the project. Arsenic in drinking water has been shown						
			compliance with the new arsenic standard. To			to impact human health and is considered one of the						
			accomplish this goal, the District proposes using one of			prominent environmental causes of cancer in the world.						
			arcenic treatment. Ion exchange is designated as Best			required the United States Environmental Protection						
			Available Technology by the LIS EPA for the removal of			Agency (LISEPA) to finalize a new drinking water						
			arsenic from drinking water sources and some ion			standard for arsenic. In January 2001, the USEPA						
			exchange treatment systems have already been			adopted a new arsenic standard of 10 parts per billion						
			permitted by the California Department of Public Health			(ppb). The new standard became effective in January						
			and are in operation in the State. Also, a typical ion			2006.						
			exchange treatment process is simple, robust, compact,									
			easy to automate, and can be operated on demand.									
			The treatment goal is to remove the arsenic in the			The Los Angeles County Waterworks District No. 40,						
			effluent (treated) water to less than 4 ppb, meeting the			Antelope Valley, Regions 4 & 34, Lancaster (Regions),						
			arsenic standard of 10 ppb.			serves approximately 145,000 people through over						
						47,000 service connections in the Lancaster and						
			The property packaged wellhood arconic removed			rainidale areas of the Antelope Valley. During 2006,						
			me proposed packaged weimead arsenic removal			approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is						
			assembly salt/saturator tank bring processing unit and			extracted from 33 wells drilled into the aquifers in the						
			hrine wastewater storage tank(s) Details of each			Lancaster Subunit of the Antelone Valley Groundwater						
			component that is sized to treat the flow rate from Well			Basin impacted by arsenic, which is naturally present in						
			No. 4-50 at 1100 GPM are as follows. The treatment			rocks and minerals.						
			module (i.e., ion exchange system) uses multiple									
			columns of ion exchange resin operating in parallel to									

977 1910070	1910070-018	LOS ANGELES CO WW DIST 4 & 34-LANCAST	(1 Arsenic Treatment in Well 4-67	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-67 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, encoded the encode the encoded of the encode	 0	c	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006.	820,000	46,878	144,215 16	Los Angeles	IV	2007
				The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.			The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006,						
				The proposed packaged wellhead arsenic removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-67 at 800 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to			approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.						
				remove the arsenic from the well water. The columns	_		The District collected eight arsenic samples between						
978 1910070	1910070-019	LOS ANGELES CO WW DIST 4 & 34-LANCAST	Arsenic Treatment in Well	This project is for the removal of arsenic from the groundwater pumped from Well No. 4-51 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the	 0	c	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions),	820,000	46,878	144,215 16	Los Angeles	IV	2007
				arsenic standard of 10 ppb. The proposed packaged wellhead arsenic removal			serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the						
				system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 4-51 at 900 GPM are as follows. The treatment module (i.e., ion exchange system) uses multiple columns of ion exchange resin operating in parallel to			Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.						
979 3610041	3610041-024	SAN GABRIEL VALLEY WC - FONTANA	Plant F26 Perchlorate Treatment Facility	remove the arsenic from the well water. The columns Plant F26 occupies an approximately 0.50-acre lot on L Micallef Street between Sierra and Mango. The proposed project will consist of grading and site work to provide a well-draining site with appropriate Stormwater treatment facilities and the construction of four (4) new ion exchange reactor vessels with related piping to remove perchlorate from the groundwater prot to construction. Additional electronic controls will be installed to provide both local and remote indication and control of the new facilities.	 0	с	The District collected seven arsenic samples between Well F26A is a critical production well in the north east portion of the Fontana Water Company service area that produces approximately 2,000 gpm. The well has been impacted by perchlorate with an historic high of 6.0 ppb. The Department of Public Health has established a drinking water maximum contaminant level for perchlorate of 6.0 ppb. It is necessary to construct an ion exchange system to remove this pollutant from the groundwater from this well prior to consumption.	1,500,000	42,871	153,647 13	San Bernardino	V	2008

980 3610041	3610041-025	SAN GABRIEL VALLEY WC - FONTANA	Plant F23 Perchlorate Treatment Facility	Plant F23 occupies an approximately 1-acre lot on Boyle Avenue between Citrus and Catawba Avenues about one block south of the I-10 Freeway in the City of Fontana. The plant is located in the south central portion of the Fontana Water Company service area and provides a critical source of supply to the south end of the system. The proposed project will provide new facilities to remove the pollutant perchlorate. The project consists of regrading to provide a well-draining site with appropriate Stormwater treatment facilities. New asphalt pavement will provide site access by maintenance vehicles and parking. Construction of fou new ion exchange reactor vessels with related piping and controls to remove perchlorate from the groundwater prior to consumption. Additional electronic controls will be installed to provide both loca and remote indication and control of the new facilities.	e L d ur al	0	с	Well F23A is a critical production well that produces 2,500 gpm in the south portion of the Fontana Water Company service area. The well has been impacted by perchlorate with an historic high of 6.0 ppb. The Department of Public Health has established a drinking water maximum contaminant level for perchlorate of 6.0 ppb. This project is partially funded by the Department of Defense through the ESTCP program and funding allocated towards this project is currently \$653,000. Matching funds are available if Prop 50 funding is available for this project.	856,100	42,871	153,647 13	San Bernardino	v	2008
981 3910001	3910001-001	California Water Service - Stockton	Standby well - elevated	DESIGN AND CONSTRUCT A S MGD TREATMENT PLANT OTHER = DESIGN AND CONSTRUCTION	Г. L	0	с	ARSENIC ABOVE THE ANTICIPATED FUTURE MCL	2,600,000	43,689	171,777 10	San Joaquin	ш	2006
982 3410001	3410001-028	Sacramento Suburban Water District	Replacement Well for We #19	If One of the options for this well would be on-site treatment of the Tetrachloroethylene (PCE). Treatmen of groundwater containing PCE typically is performed with traditional pump-and-treat technology using air stripping or activated carbon filtration. It is estimated that the cost of a 1,000 gpm granular activated treatment system for this well would be in the range of \$700,000 to \$1,000,000 (not including design, permitting or construction management). This also does not include the cost of acquiring additional property. This well was drilled in 1951 and currently has a capacity of 950 gpm. Becasue of it's age and the fact that the site is tight with very little potential for acquiring additional property for treatment equipment, the preferred option to the District would be to drill a replacement well. The replacement well would have a mimimum capacity of 1,500 gpm. The District already owns a well site within 1/2 mile of the Balmoral/Yorktown Well (#19) that could be used for the construction of a replacement well. There is an existing monitoring well on the proposed site of the replacement production well and this monitoring well could be used to monitor water quality and groundwater depth. When this monitoring well was constructed water quality samples were collected and the water met all current federal and state drinking water standards. Since the District be printing tready wave the	L It f	0	c	The Balmoral/Yorktown Well (#19) (PS Code #3410001- 014) has a current pumping capacity of 950 gpm. On June 11, 2009, staff collected samples in accordance with Title 22 in the District's South Service Area (SSA). The results from Well #19 showed a detection of Tetrachloroethylene (PCE) at a concentration of 5.9 ug/l which is above the Maximum Contaminant Level (MCL). The MCL for PCE is 5 ug/L. Well #19 was immediately placed off-line upon notification by the laboratory of the test results. PCE is a colorless organic liquid with a mild, chloroform-like odor. Its greatest use is in the textile industry, and as a component of aerosol dry- cleaning products. The California Department of Public Health (CDPH) requires that a confirmation sample be collected when PCE is detected, with the average value compared to the MCL. On June 24, 2009, a confirmation sample was taken and the concentration of PCE was found to be 10.0 ug/l. Therefore, the average concentration of the two samples was 8 ug/l. The MCL is not violated until after the monthly (up to 6 months) sampling average exceeds the MCL. Staff is currently compiling information necessary to determine if monthly PCE monitoring can be conducted. In order to conduct monthly monitoring the well would have to pump to waste for approximately 1 hour prior to each sample collection. General waste discharge	2,000,000	44,744	177,000 09	Sacramento	I	2009
983 4310011	4310011-008	San Jose Water Company	DBP Compliance	Evaluate, design, and construct required facilities for reducing THM's	L	0	С	Stage II DDBP rule compliance needed.	8,000,000	219,571	998,000 17	Santa Clara	П	2006
984 2700964	2700964-001	BRADLEY UNION SCHOOL WS	Lead and copper rule	Install a corrosion control treatment unit.	L	0	Ρ	Exceeded lead or copper action levels.	80,000	1	39 05	Monterey	П	2000
985 2702322	2702322-005	CAPTAIN COOPER SCHOOL WS	Lead and copper rule	Install a corrosion control treatment unit.	L	0	Ρ	Exceeded lead or copper action levels.	80,000	1	95 05	Monterey	П	2000
986 2702490	2702490-001	CENTRAL BAY HIGH SCHOOL WS	Lead and copper rule	Install a corrosion control treatment unit.	L	0	Р	Exceeded lead or copper action level	80,000	1	250 05	Monterey	II	2000
987 4901168	4901168-001	Salmon Creek Middle School	Excess iron interfers with treatment	Upgrade treatment facilities	L	0	Ρ	Severe iron concentrations from well and old treatment plant becoming unable to properly treat water	50,000	7	300 18	Sonoma	Ш	2001
988 2700552	2700552-001	ECHO VALLEY SCHOOL WS	Lead and copper rule compliance	Install a corrosion control treatment unit.	L	0	Ρ	Exceeded lead or copper action levels.	80,000	1	400 05	Monterey	II	2000
989 1000057	1000057-001	WATERTEK-METROPOLITAN		CONNECT TO THE CITY OF FRESNO.	м	45	с	THE SYSTEM LACKS ADEQUATE SOURCE RELIABILITY.	25,000	26	60 23	Fresno	Ш	1998
990 3600070	3600070-002	Center Water Co	Consolidation of western Lucerne Valley water systems with Center Water Company.	Sources of water in the Lucerne Valley area are individual systems (parcel-by-parcel, well-by-well) operated by property owners and small mutual water companies, some of which currently cannot meet service requirements and will not likely be able to accommodate new hookups. There are numerous independent small water systems within the area that are overseen by the County of San Bernardino.	М	45	С	Source of water in Lucerne Valley are individual wells of property owners & small mutual water companies, some of which currently cannot meet service requirements & may be unable to accommodate new connections. Some SWS in area have higher nitrate level	5,000,000	44	65 13	San Bernardino	V	2007
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				Some wells in the higher groundwater levels upgradien of the Helendale Fault have shown evidence of somewhat higher Nitrate levels, although not to levels exceeding standards. Nitrate levels from tested wells west of the Fault averaged approximately 5 mg/l. Samples for Nitrates were taken at the Lucerne Valley Elementary School in April of 2005 and levels were observed to be 12 mg/l at this location. Higher Nitrate levels could be detected where wells and septic tank	ıt									
				systems are in proximity to each other. Improvements to consolidate up to six water systems in the Lucerne Valley area were studied and evaluated in the Lucerne Valley Water & Sewer Preliminary Study, completed in 2006 by Nolte Associates. The project was conceived to take place in two phases. This project constitutes Phase 2 of a bigger water system consolidation effort among the Lucerne Vista Water	n Is									
991 3400331	3400331-002	WESTERNER MOBILE HOME PARK		Hook up to public water supply, City of Sacramento	м	45	С	On well water, inadequate water pressure and volume	30,000	47	65 09	Sacramento	I	2000
992 5200516 993 1700516	5200516-002 1700516-002	LAZY CORRAL MOBILE HOME PARK Lake County CSA 16 - Paradise Valley		Connect to Corning City Water System Consolidate with Kono Tayee water system with 800 ft connection line.	M M	45 45	c c	Low volume and pressure System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include water supply and quality.	180,000 250,000	29 72	84 21 180 03	Tehama Lake	 	1999 1998
994 2500911	2500911-003	I'SOT Well #3 & #15		Consolidate existing water systems into one system, which will loop the distribution lines and provide the reliability required by the Waterworks Standards.	м	45	с	Three small separate systems with deadend lines not fulfilling Section 64626 (layout of water mains) of the Waterworks Standards.	45,000	43	215 01	Modoc	I	1998
995 1700554	1700554-001	Lake County CSA 13 - Kono Tayee		Conduct capacity analysis and develop master plan, study possibility of consolidation with Paradise Valley water system.	М	45	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include inadequate water supply and quality. Distribution system should be evaluated.	100,000	136	333 03	Lake	II	1998
996 1700554	1700554-003	Lake County CSA 13 - Kono Tayee		Consolidate with Paradise Valley water system with 800 ft connection line.	0 M	45	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include water supply and quality.	250,000	136	333 03	Lake	II	1998

997 2010014	2010014-003	HILLVIEW WATER CO-GOLDSIDE-HIL	Goldside-2010014 Interconnect with Oakhurst - Source and Treatment	The primary solution to the water quality and quantity problems would be to interconnect and consolidate with the Oakhurst Sierra Lakes Water System. The 16,500' of 12" pipeline to intertie would allow blending for a higher quality water and provide a continuous reserve for emergencies and routine maintenance of the Goldside water system. Drilling two new wells on existing water lots and installing iron and manganese removal on the south side of the Goldside system and blending will eliminate all water quality problems in the Goldside area. This would also make it feasible for interties or consolidation to help several small Madera County maintenance districts neighboring the Goldside water system. This economy of scale would benefit the water quality and limit the skyrocketing costs for water in this area. It would also improve fire flow. Security is an ever present priority which could be done with 1,200' of 6' privacy fencing with razor wire around all wells and equipment sites, coupled with SCADA to maintain and further secure the system.		45	C	The Goldside water system is located over the "Fresno River" underground flow of water. Salt water is the inevitable result if wells are drilled below a certain level. Once this happens, the well is no longer usable because of the high cost of treating the water and disposing of the salt waste. Additionally, the water in the area is high in iron and manganese, which can cause problems for consumers. The existing wells have been fairly consistent over the years, but there has been some diminishing output recently due to low precipitation years. The inability to closely monitor well levels and other important indicators will cause service and maintenance response problems as the system ages, greatly reducing the longevity of the existing wells. Additionally the system does not have adequate security.	3,849,780	314	927 11	Madera	11	2009
998 1510041	1510041-006	North of the River MWD	Water Transmission Intertie/Redundancy Project	There is now under construction a second 27 inch line that is about one mile in length. This proposed project would connect to the end of that new main, and increase the sizes of some of OMWC's water mains such that a redundant water transmission pathway would exist completely independent of the current transmission main, and connecting into NORMWD's system. The design is already complete.	M	45	С	The community of Oildale is served by two water agencies, North of the River (2000 customers) and Oildale Mutual Water Co.(7000 customers). They receive their water supply from a treatment plant 3 miles away., through one 27 inch pipeline. If that line were to rupture, service could be interupted for days.	1,800,000	2,025	7,500 12	Kern	Ш	2009
999 5500152	5500152-004	CURTIS CREEK ELEMENTARY SCHOOL	Curtis Creek School Distr Water Connection to Tuolumne Utilities Distric	ict Tuolumne Utilities District (TUD) has water available within a reasonable accessible distance of the school site. It is estimated that a minimum of a 12 inch line run approximately a half mile will be needed to meet the needs of the fire hydrants as well as the school. The school is required to provide its own link to the main line. Through the Office of Public Hardship Program the lines on campus have been replaced. Unless the water source is also replaced, this solution is only temporary. TUD has established the fee for the District to connect to TUD water at the rate of \$431.00 per student, which is \$215,500.00 as our current student count is right around 500. The District cannot afford to pay that fee and is seeking funding to make this connection and bring the service to the school location. It is imperative that this work be done as soon as possible to protect the long term health and safety of the school's students and staff and to insure the future of the school.	M n s	45	Ρ	Curtis Creek School relies on well water for all of its watering needs. The well is a very old one having been drilled in 1957. The well services nearly 600 students and staff during the school year. It also is used to irrigate approximately 5.5 acres of lawn areas which includes two large ball fields. Water is pressurized in a metal tank and the water quality is declining. In the recent past we have had bacterial contamination of the water system which required work to be done to the well casing and resulted in the closure of the school. At the beginning of the current school year we had a failure of the well which resulted in the closure of the school for one day due to the inability of the well to meet the water demands of the school. Sediment was pumped into the schools water supply. The public was notified via a CONNECT ED message of school closure for one day. The following day a do not drink order was in effect. Bottled water was provided to students and staff. Efforts have been made to improve water quality and reliability but they are only temporary fixes as the declining well is currently unable to meet our needs. We are losing our ball fields due to regularly flush the pipes and keep deposits from collecting. Steps have been taken to improve water quality by replacing all of the metal pipes and corroded lines with new piping. In	500,000	1	595 11	Tuolumne	Π	2012
1000 0800800	0800800-001	Pine Grove Trailer Park		Hook up to City of Crescent City water system.	М	40	с	Water system does not meet Section 64560(a)(6) of the Waterworks Standards. Loss of electrical power results in immediate water entropy	20,000	51	100 01	Del Norte	I	1998
1001 3301428	3301428-001	Blythe - Mesa Ranch		Construct a transmission main pipeline connection of the water system to City of Blythe water system.	М	40	С	in infiniteuate Water outage. Insufficient supply well capacity and water quality problems. Insufficient water sttorage capacity. (see attached documentation).	5,033,000	199	200 20	Riverside	V	1998

1002 0800552	0800552-001	Northcrest Trailer City		Hook up to City of Crescent City water system	м	40	с	Does not meet Section 64560(a)(6) of the Waterworks Standards. Loss of electrical power results in immediate	30,000	89	250 01	Del Norte	I	1998
1003 1510046	1510046-001	Lost Hills Utility District		REPLACE 11 MILES OF TRUNK LINE, DEVELOP RELIABLE WATER SOURCE, UPGRADE PUMP STATION AND INSTALL STORAGE TANK FOR FIRE FLOW. OTHER - DESIGN AND CONSTRUCTION	Μ	40	с	LARGEST WATER USER IS CONNECTED THROUGH 11 MILES OF TRUNK LINE AND DOES NOT PROVIDE ENOUGH FIRE FLOW	1,500,000	360	2,772 12	Kern	III	1998
1004 1710021	1710021-001	Lake County CSA 21 - North Lakeport		Perform capacity analysis and update master plan. Construct components to accommodate capacity needed by the consolidation.	Μ	40	с	Need to perform capacity analysis and update master plan to evaluate consolidation potential with other water systems, like Nice and Lucerne. Re-finance DWR loan.	1,000,000	1,204	2,868 03	Lake	П	1998
1005 5510013	5510013-004	TUD - Columbia Water System	New Melones intake	CONSTRUCT IMPROVEMENTS AND REPAIRS TO THE INTAKE STRUCTURE.	м	40	С	THE NEW MELONES PUMP STATION EXPERIENCED AN INTAKE PIPFLINE FAILURE.	74,000	1,548	3,646 11	Tuolumne	Ш	1998
1006 5510013	5510013-003	TUD - Columbia Water System	Columbia WTP improvements	ENLARGE THE COLUMBIA WTP'S CAPACITY FROM 1.0 MGD TO 1.5 MGD.	М	40	с	UPGRADE THE COLUMBIA WTP FROM 1.0 MGD TO 1.5 MGD TO PROVIDE SOURCE RELIABILITY FOR THE GIBBS RANCH AND SONORA WATER SYSTEMS WHICH ARE INTERCONNECTED.	230,000	1,548	3,646 11	Tuolumne	III	1998
1007 1010007	1010007-027	FRESNO, CITY OF	Veterans Home Water Main - Construction	The project is to construct approximately 1 1/2 miles of 14" water main along California Avenue from West Avenue to Marks Avenue and 14" water main along Marks Avenue from California Avenue to Kearney Avenue, so that water can be made available to the veterans housing units.	Μ	40	с	The City of Fresno has a great need to provide safe, healthy and affordable housing to its veteran citizens. To satisfy this need the City is required to design and construct 11/2 miles of water main which is necessary to provide water service to the veteran's home at the Southeast corner of California and Marks Avenue.	810,000	128,152	457,511 11	Fresno	Ш	2009
1008 3701005	3701005-003	SPENCER VALLEY SCHOOL DISTRICT	Wildfire Mitigation, Well Destruction and Potable Water Improvement Project (The WMWDPWIP	Spencer Valley School, a one school school district, is located in the mountains above San Diego County. This area has experienced two major wildfires in the past ) four years. The water storage capacity here is now below recommended levels for basic fire protection. 1)The district would like to increase the water storage capacity for fire protection by adding an extra 5000 gallon tank to the system. In addition, there are old abandoned wells on the school campus that threaten the quality of the aquifer and potentially compromise student safety on the playground.2) The district's plans include destruction of these wells.3)Minor upgrades to the current water disinfection system will be accomplished to ensure water quality of the potable water at Spencer Valley School.4)This includes purchase of a generator to use as a back up power source and ensure pressure in the lines is maintained during power outages.	M	40	Ρ	Spencer Valley School, a one school school district, is located in the mountains above San Diego County. This area has experienced two major wildfires in the past four years. The water storage capacity here is now below recommended levels for basic fire protection. The district would like to increase the capacity by adding an extra 5000 gallon tank to the system. In addition, there are old abandoned wells on the school campus that threaten the quality of the aquifer and potentially compromise student safety on the playground. The district's plans include destruction of these wells. Lastly, minor upgrades to the current water disinfection system will be accomplished to ensure water quality of the potable water at Spencer Valley School. This includes purchase of a generator to use as a back up power source and ensure pressure in the lines is maintained during power outages.	100,000	4	38 14	San Diego	v	2009
1009 1700563	1700563-002	Lake County CSA 22 - Mt. Hannah		Conduct capacity analysis and develop master plan, study possibility of consolidation with Loc Lomand water system.	м	35	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include extremely high turbidity in the source water. The distribution system should be evaluated.	100,000	36	88 03	Lake	II	1998
1010 4500012	4500012-001	CASCADE RACQUET CLUB MUTUAL WATER		Construct hydropneumatic storage tank; build larger pumping facility with standby generator to provide reliability required by the Waterworks Standards.	М	35	С	System has insufficient storage and lack of standby power. System not fulfilling Section 64560(a)(6) (minimize the effects of power supply failure) and Section 64564 (storage volume) of the Waterworks Standards.	40,000	28	100 02	Shasta	I	1998

1011 5500041	5500041-002	ALPINE ACRES MUTUAL WATER CO	Alpine Acres Water Supply/Intertie Project	This intertie project will connect Alpine Acres MWC's M existing facilities to TUD's Crystal Falls system. The intertie will require approximately 1,400.1f. of 8-inch line to be laid along with appropriate valves, master meters, road repairs, engineering, inspections etc.	35	c	Alpine Acres MWC seeks to consolidate its operations with Tuolumne Utilities District to improve the reliability of water supply and delivery operations. The Company currently relies on two wells to serve its customers. This groundwater supply fails to meet secondary standards for Manganese and/or Iron content. The system includes no treatment facilities. Currently, untreated water is served to all customers. Further, the ground water supply has been unpredictable leading to service interruptions. This intertie project will convert the system's supply to more reliable treated surface water. Alpine Acres MWC's small size presents operational challenges. Maintenance of the delivery systems using primarily volunteer labor from the company's membership has led to service interruptions. Consolidation with TUD will provide access to TUD's maintenance staff and will reduce duration of future service interruptions.Note that the Company is currently unable to determine the median household income for its service area. Because many customers are retired and because many of the residences served are quite modest, we believe that many customers do have household incomes below \$46,731. We request DWP's assistance in determining the median household income of our service area.	282,857	61	100 11	Tuolumne	11	2009
1012 4900799	4900799-001	El Portal Mobile Estates		Connect to City of Santa Rosa water supply or design an M alternate form of water production	35	С	Available water from well is running out.	250,000	123	200 18	Sonoma	П	1998
1013 1000259	1000259-001	NEW HORIZONS MOBILE/RV PARK		CONNECT TO FRESNO MUNICIPAL WATER SUPPLY - CITY M OF FRESNO. OTHER - DESIGN AND CONSTRUCTION	35	С	NO BACK-UP SOURCE. BACT. PROBLEMS WHEN WELL IS DOWN FOR MAINTANCE	100,000	64	200 23	Fresno	ш	1998
1014 0910007	0910007-006	Lukins Brothers Water Company	Lukins Brothers Water Company Distribution System Upgrades	Lukins Brothers Water Company (LBWC) was formed in M 1946 by Melvin Lukins to serve seasonal and annual residents in the Lukins Brothers real estate subdivision. In 1953, Lukins was granted a Certificate of Public Convience and Necessity. The system's 20 customers were served by two wells through two-inch and four- inch mains. The system now includes approximately 400 feet of two-inch main, 48,000 feet of four-inch main, 7,600 feet of 6-inch main, and 1,300 feet of 8-inch main. The mains and wells are almost fully depreciated, and are near the end of their normal service life. Some parts of the system cannot carry enough water for adequate flow because the mains are too small, and many of the mains and wells are between 50 - 60 years old. On June 24, 2007, the Angora fire, ignited by an illegal campfire burned 3,100 acres of land and destroyed 254 homes in and around the City of South Lake Tahoe. Shortly after this catastrophic event, emergency assessments were conducted and the magnitude of the inadequate water flow was brought to the forefront of concern by residents and local agencies. The City of South Lake Tahoe, local fire agencies, customers, and Lukins all want the Lukins Brothers Water Company. The Public Utilities Commission of the State of California agrees with the imminent need for	35	C	Lukins Brothers Water System (LBWC) serves approximately 650 acres, with 942 connections. The system is comprised of approximately 54,000 feet of water main of which about 45,000 feet are 4-inch diameter steel pipe. Five wells origianly supported the system's water supply but two wells are abandoned due to the presence of Synthetic Organic Chemicals (SOC's) and two others are of questionable value because they showed small traces of Perchloroethylene (PCE's) in the most recent sampling. In addition, the current distribution system cannot meet local and State fire flow requirements of a least 1,000 gallons per minute (gpm) for residential and 1,500 gpm for commercial. The ISO rating of fire protection for part of the Lukins service area is 9/10, the lowest rating for fire safety. This becomes increasingly dangerous, as evidanced from the 2007 Angora Fire event in South Lake Tahoe where more than 250 homes were destroyed. Had the fire spread less that a mile from where it was contained, it would have encroached in the LBWC area, in which the current system would not have been able to handle the needed water flow requirments. This could have lead to a much larger catastrophe losing many more homes and businesses to the fire. Currently the 4-inch diameter mains only flow at rates as slow as 100 gpm, far below the fire flow requirements of 1,500 gpm. To meet standards, all 4-inch diatmenter mains will need	24,000,000	905	250 09	El Dorado	I	2009

1015 5510027	5510027-001	TUD-Cuesta Center-Lambert Lakes	Curtis Creek School	Tuolumne Utilities District (TUD) is installing water within a reasonable accessible distance of the school site. This has previously not been an option for the district. The school is required to provide its own link to the main line. Through the Office of Public School Construction Critical Hardship Program the lines on campus have been replaced. Unless the water source is also replaced, this solution will only be temporary. The TUD has established the fee for the district to connect to TUD water at the equivalent of 32.9 residential units, which is \$160,000.00. The district cannot afford to pay that fee and is seeking funding from the Department of Health Services Division of Drinking Water and Environmental Management to make this connection and protect the long term health of the school's students and staff.	м	35	c	Curtis Creek Elementary School is located in rural area of Sonora, California. The campus houses nearly 500 students and staff during the school year. The current water source is a well. Water is stored in a metal tank and the water quality is declining. Efforts have been made to improve water quality but they are temporary fixes. Water pressure is inadequate to regularly flush the pipes and keep deposits from collecting. Steps have been taken to improve water quality by replacing all the metal pipes and corroded lines with new piping. In addition, the well does not provide the pressure required to serve the five fire hydrants recommended by the Tuolumne County Fire Protection District.	160,000	200	491 11	Tuolumne		2007
1016 1710019	1710019-001	Lake County CSA 6 - Finley		Construct 100,000 gal storage tank and evaluate consolidation with Kelseyville and Soda Bay systems.	м	35	с	During high demands, source becomes taxed. No long term storage exists.	500,000	207	590 03	Lake	II	1998
1017 1710019	1710019-002	Lake County CSA 6 - Finley		Conduct capacity analysis and develop master plan, study possibility of consolidation with Soda Bay water system.	м	35	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include storage source reliability. The distribution system should also be evaluated.	75,000	207	590 03	Lake	II	1998
1018 5510019	5510019-002	TUD - Mono Village Water System	Mono Village System Improvements	This project involves the construction of a new six inch pipeline, 2050 feet in length, 750 lineal feet of ten inch pipeline and new valves. The existing surface water treatment plant will remain in service. The project includes the elimination of the existing contaminated well. The construction of this new pipeline from the existing WTP to the storage tanks will further address the backwashing needs of the WTP.	Μ	35	c	The Mono Village water system was acquired by the Tuolumne Utilities District (TUD) in January of 2004 at the request of the Mono Village Mutual Water Company. It was determined by the Mono Village Mutual Water Company that it would be best that the TUD take over the ageing water system to meet the needs of the existing customers. The system is comprised of four wells and a limited capacity surface water treatment system. The WTP can not meet the summer demands of the system and the wells are run all year round to meet the consumptive demands and for operational efficiency. One of the wells in the systems that supplies 19.5 % of the total well capacity has tested positive for Uranium above the State standards. In addition, all the other existing wells exceed the secondary standards for manganese and iron. The current manganese and iron treatment unit is plumbed in such a manner that all water, including the treated water from the surface WTP, must be re- treated and it requires that untreated well water be used for backwashing of the WTP.	374,080	275	649 11	Tuolumne	111	2007
1019 1805007	1805007-006	Herlong Utilities Incorporated	Herlong Trailer Park Connection	Connect the Trailer Park to the Herlong Public Utility District's system. After completion of construction of the district's new storage tank, the district will have the capacity to provide service to the park. The district would construct a 6"inter tie to the parks system.	М	35	С	The Herlong Trailer park currently operates its own water well along with sewer collection and a septic system. There is concern about adequate separation between the drinking water supply and the septic. It is unknown to what standard the well was drilled and developed; and is undertermined if there is an adequate sanitary seal.	286,250	1	1,200 02	Lassen	I	2009

1020 2010008	2010008-001	Madera County M.D. #10A - Madera Ran	cho Consolidation with MD-95	Create an intertie with MD-95, Banchos West water system, directly to the west. The project would entail installation of approximately 4,020 feet of 8-inch C-900 PVC water main. Additional appurtenances, pavement construction, etc may be required.	м	35	c	MD-95 is a small water system adjacent to MD-10. Their system currently has three well (South, East and North Wells). The South Well is the primary source of water, producing approximately 125 gpm. The East Well produces a small contribution at 10 gpm. The North well is contaminated and therefore provides no contribution to the water supply. The system serves thirty-one one- acre lots, with a water demand factor of 1.9 gpm, placing the calculated water demand at 59 gpm. The Maximum Daily Demand peaking factor is 2.4, placing the MDD at 142 gpm. Similarly, the Peak Hourly Demand peaking factor is 3.2, placing the PHD at 189 gpm. The current well system cannot meet the MDD and PHD, causing a potential low pressure issue. Additionally, all three wells have a sanding problem and only the South well is currently producing sufficient water.	322,000	922	2,255 11	Madera	Ш	2009
1021 4510002	4510002-007	Mountain Gate C.S.D.	regional water intake phase 1 shasta lake	this project is phase 1 of a regonal water supply provideing all the water to mtn gate and intertie with 2 other agencys. construction of an intake structure at beaver island shasta lake to replace the obsolete old one. install intake pipes into the pit river arm of the lake replace the high voltage power line under the lake to the island.construct 2250 ft 24 in. raw water transmission main to boosterstation site and tap off into mtn gate booster diversion .this would conclude phase 1	м	35	с	current intake structure at shasta lake is in failure .intake structure is 20ft out of water .emergency float pumps have been in constant use sence july of 2008.the district will not be able to supply necessary maximum day demand as it rises through the summer.public health and safety are at risk due to unreliable system requiring constant monitoring and maintainance. the district will be unable to maintain required fire reserves in the upcoming summer months.	264,300	664	2,500 02	Shasta	I	2009
1022 1710007	1710007-002	Kelseyville Co Waterworks District 3		Conduct capacity analysis and develop master plan, study possibility of consolidation with Soda Bay water system.	м	35	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include supply and storage inadequacies. One source needs filtration.	10,000	950	2,550 03	Lake	II	1998
1023 3610055	3610055-012	YUCAIPA VALLEY WD ID-A&2	consolidate Plantation MHP	consolidate w yvwd	М	35	С	Plantation mhp ee01943 lacks source and storage capacity	968,000	2,312	40,654 13	San Bernardino	V	1998
1024 3610055	3610055-011	YUCAIPA VALLEY WD ID-A&2	plantation mhp emergency intertie	/ construct intertie	М	35	С	emergency intertie to YVWD for Plantation MHP 3301943; limited source and storage capacity	555,000	2,312	40,654 13	San Bernardino	V	1998
1025 3610055	3610055-010	YUCAIPA VALLEY WD ID-A&2	Sharondale Mesa HOA/MHP emergency intertie	construct intertie	Μ	35	С	Emergency intertie to YVWD due to limited storage and source capacity	61,200	2,312	40,654 13	San Bernardino	V	1998
1026 3610055	3610055-009	YUCAIPA VALLEY WD ID-A&2	Rancho Calimesa MHP intertie	construct intertie	М	35	С	Emergency intertie to YVWD for Calimesa MHP (3301534) due to limited storage and source capacity	360,000	2,312	40,654 13	San Bernardino	v	1998

1027 5400639	5400639-001	TRAVER SCHOOL	Traver School to Traver	The school site is approximately 1/2 mile from the "cit	ty" M	35	Р	The Traver Joint Elementary School District is a	350,000	8	300 12	Tulare	ш	2009
			City Water System	well(s) that we hope to hook up to. It may be necessa	iry			Kindergarten through 8th grade, one school district in						
				to assist too with part of the cost of a new well for the	e			Northern Tulare County. It currently has one well that is						
				town in order to have the water capacity that would b	be			50 plus years old. It is an open bottom well with water						
				required when the school goes online. I would expect	t			at about 50 feet and a maximum depth of just over 100						
				that a 6 in. line (minimum) would be necessary to carr	rv			feet. Currently we are drawing water from 80 feet. In						
				the flow that is needed. That would be for about 1/2	.,			the past we have had some problem with fecal coliform						
				mile The existing school nump is about 400 feet back				but currently are clear. We have also recently had to						
				from the street side of the property is the line would				deel with evenesive conditions nulled up into the						
				from the street side of the property le the line would				deal with excessive sand being pulled up into the						
				have to be laid through an area of existing water pipe	es,			system. The one pump system serves both irrigation of						
				sewer lines and underground electrical lines. Once on	1			15 acres of playground as well as classroom, cafeteria						
				the street right of way we would expect a relatively				and restroom and misc needs. The water system serves						
				clear track in front of the school to a point where it				a school population of about 250 students and about 30						
				would go under the street and to the West for about				staff. ( and in many instances nearly the whole						
				1/4 mile. We would work with California Water Service	ces			community of 500 plus at special occassions) The						
				to meet all local, state and federal requirements in				population served is very low income. The adjoining						
				relation to bringing good clean water to the school sit	te.			"town" called Traver is an unincorporated area of Tulare						
				At the same time we would evaluate our old well mor	re			County. The town (pop. 700 +) is served by a water						
				thoroughly in anticipation of making it available for ba	ack			system owned by California Water Services (Coalinga						
				un nurnoses or nossibly to use for irrigation nurnoses	as			Ca ) We are very concerned that should the water						
				long as it is functional for that Traver School was	45			system fail for any reason the school would be unable						
				founded in 1992. We expect that the school /town will				to operate. California Water Services has expressed it's						
				Tourided in 1883. We expect that the school/town will	1			to operate. Camornia water services has expressed it s						
				be nere for many years to come. we are right on Hwy	/			willingness to work with us to tie into their system. we						
				99 about 5 miles South of Kingsburg, Ca. We look				would hope to do so and to incorporate the school well						
				forward to working with you on this project.				as a backup to the wells that they operate. We have had						
								a good working relationship with the California Water						
								Services company. They assisted with a source of water						
1028 5500120	5500120-001	49ER TRAILER RANCH	49er Trailer Ranch	only one approved source	М	30	с	only one approved source	100,000	34	148 11	Tuolumne	ш	2008
1029 1000229	1000229-002	GREEN ACRES MOBILE HOME ESTATE	New well to augment	Drill a new or interconnect if possible.	м	30	С	System supplied by one well. If it goes out due to	200,000	112	300 23	Fresno	ш	2008
			single well	·				drought, they will be out of water.						
1030 4110028	4110028-001	Pillar Ridge MHP (Former El Granada MHP)	Consolidation of Pillar	This project will support consolidation of the Pillar Rid	ige M	30	C	Pillar Ridge Mohile Home Park (Pillar Ridge) is a small	450 000	228	1 000 17	San Mateo	Ш	2009
1000 110020	110020 001	i mar nage min (Former Er Granada min )	Ridge with Montara Water	disadvantaged community water system with the	-Bc	50	c	mobile home community located in Moss Beach	150,000	220	1,000 1,	San Mateo		2005
			and Sanitary District	MWSD public water system. Since there is an existing	-			California in the Montara Water and Sanitary District's						
			and Samtary District	www.b.public water system. Since there is an existing	5			(MM/CD) convice and Diller Didges surrently ensures						
				operational permanent connection between the two	-l			(MWSD) service area. Final Ridges currently operates						
				water systems, only minor improvements are required	u			its own water system consisting of 3 groundwater wens,						
				for this consolidation, as follows:1. Pillar Ridge Water				a storage tank, a water treatment plant, and raw water						
				Treatment Plant improvements to consolidate the				transmission lines, and a distribution system network.						
				controls and add the facilities to the MWSD's				The system serves 228 mobile home residences in the						
				Supervisory Control and Data Acquisition System				community. In addition, MWSD currently provides						
				(SCADA). Other minor repairs and maintenance issue	es .			water to Pillar Ridge through a permanent metered						
				for the facilities are also included.2. Meter replaceme	ent:			connection on as-needed basis. The Pillar Ridge						
				existing 228 meters will be replaced with new radio-				community is designated a low- to extremely-low-						
				read meters per the MWSD's standards.3. The 228				income disadvantaged community. Pillar Ridge						
				additional water accounts from Pillar Ridge communit	tv			community has been experiencing difficulties with						
				will be consolidated into the MWSD's billing and record	rd			maintaining and operating its various water facilities.						
				keeping system. All these activities are expected to be	- 1			including the wells and the water treatment plant						
				exempt from CEOA Categorical Exemption will be file	- ed			securing certified operators, and carrying the high cost						
				by MWSD as Lead Agency. All design and procurement	nt			of maintenance and operations of the water system. In						
				documents and construction hid award and				2006 Billar Bidgo through its surger Adilansium						
				documents and construction bid award and				2000, Pillar Ridge through its owner, Millennium						
				management will be carried out by MWSD,				Housing, has approached MWSD willing to consolidate						
								its water system with the MWSD water system and						
								transfer the ownership to the District. MWSD, although						
								willing to consolidate and assist Pillar Ridge, had no						
								ability to do so due to lack of funds to accommodate						
								228 new metered connections into its water						

system. This project will consolidate the entire Pillar Ridge water system into the MWSD water system and

1031 1510019	1510019-006	Shafter, City of	Bishop Acres Mutual Water System Consolidation	In order to extend Shafter's water system to the Bishop Acres well site, a 12-inch supply line would have to be bored across a Burlington Northern and Santa Fe Railway (BNSF) line and a County of Kern road from the nearest City water line location. The City intends to assume ownership and responsibility of the existing Bishop Acres well but the pump will probably need to be lowered with possibly more impeller stages with an upgraded motor to properly meet the desired discharge pressure. The existing service connection meters should be replaced with City standard automatic meter reading technology to efficiently use staff for meter reads in this remote location. All Bishop Acres pipelines and appurtenances will also be deeded to the City for future operations.BNSF permitting of the water line bore work under their rail lines is expected to be the construction schedule critical path.	2 2 5	30	С	The community of Bishop Acres is located in an unincorporated area of Kern County near the intersection of Seventh Standard Road and Santa Fe Way. An existing mutual water system (System 1.D. No. 1500434) is in place to serve approximately 27 service connections with one well. Although the well complies with drinking water standards, the system is not properly funded to cover all of its operational expenses and it's not properly equipped with a back-up water source if the only well is taken out of service due to power outages or well maintenance work.Representatives from Bishop Acres Mutual Water and the State Department of Public Health have approached City of Shafter officials about consolidating with the City's distribution system which is less than one-half mile away from the Bishop Acres well site.	500,000	3,863	15,609 12	Kern	Ш	2009
1032 1710006	1710006-001	Bella Lago Mobile Home Park	Konocti Bay Group (dba Fords Acres MHP)	Replace with 6 and 8 inch PVC pipe.	М	25	С	Undersized and aged water mains.	7,500,000	43	25 03	Lake	Ш	1998
1033 3600175	3600175-001	Barstow Dagget Airport		Install disinfection equipment, refurbish wellheads and tank, drill new wells	М	25	С	Bacti failures, inadequate source capacity	90,000	29	25 13	San Bernardino	v	1998
1034 2210921	2210921-002	Whispering Pines Apartments	Replace the existing disribution system with adequate sized lines.	Plan and install a properly sized distribution system.	М	25	С	The existing water supply line is 2" and when several units engage the system the supply is defficient. A larger line would also increase public safety from a fire flow perspective.	77,500	16	28 11	Mariposa	Ш	2009
1035 2210921	2210921-004	Whispering Pines Apartments	Replace an existing water tank with a new water tank.	Size and install a news water tank.	М	25	С	The primary water tank in the system is an old plate steel tank that is beyond it's useful life. It does not have a foundation and is slowly sinking into the ground.	47,500	16	28 11	Mariposa	Ш	2009
1036 1400511 1037 4700539	1400511-001 4700539-001	Meadow Lake Apartments Macdoel Waterworks	MacDoel Waterworks	Drill additional well This system will require a through evaluation to determine locations of existing water lines and actual number of service connections. Water system will need to be classified. This well system will need a new pump and pump house, new piping with a large storage tank. It should also be noted that there is possibility that the existing well will need to be drilled deeper. Fire hydrants need to be installed. The Coli form bacteria dr the Nitrate porblems also need to be addressed.	M M J D	25 25	C C	Single source of supply System owner no longer wishes to operate the system. This system will require a through evaluation to determine where water lkines exist and how many homes are seerved. Also, does the existing system fit into appropriate standards. The water system has Nitrate porblems. Also, the system has had a Coloform bacterialogical incident in the last year. The State Department of Public Health has issued a letter to the system owner encouraging him to keep the system operational.	14,500 350,000	16 18	35 13 35 01	Inyo Siskiyou	V I	1998 2009
1038 2210925	2210925-002	Yosemite Westlake Mobile Estates	New well to augment single well	The proposed project consists of the construction of a new well.	М	25	с	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	52	40 11	Mariposa	Ш	2008
1039 3110124	3110124-001	Placer CWA - Monte Vista		Install standby generator. Involves design and construction.	М	25	с	Does not have a standby generator and when power is lost, the plant does not work. The water treatment plant does not have the required level of reliability as stated in SWTR Section 64659.	30,000	18	59 02	Placer	I	2006
1040 1400098	1400098-007	Darwin Community Services District	Darwin water conservatio and distribution system improvement	n Project will replace a key water line and appurtances from a distant well to the distribution system and customers. It would eliminate damage and pressure failures thus minimizing water outages and rationing.	Μ	25	С	System is old and failing, portions of it from the home area to a distant well are exposed to the desert elements and 4 wheel traffic resulting in frequent line breaks and water outages and low pressure. There is no backup and extrememly lengthy time gaps to get to a town for parts or contract support leaving residents without water for periods of time.	475,000	63	60 13	Inyo	V	2009
1041 1000057	1000057-003	WATERTEK-METROPOLITAN		INSTALL NEW PIPELINES	М	25	С	EXISTING PIPE LINES ARE OLD, RUSTING AND LEAKING.	14,000	26	60 23	Fresno	ш	1998
1042 3600345	3600345-001	West End Mutual (Willow Wells)		Construct new mainline and storage facilities	М	25	С	Old distribution system resulting in multiple leaks	340,000	18	63 13	San Bernardino	v	1998
1043 3600071	3600071-001	Chamisal MWC		Replace mainline and storage facilities	М	25	С	Old, substandard distribution system and storage facilities	100,000	23	63 13	San Bernardino	v	1998

1044 4700503	4700503-002	Callahan Water District		Construct new storage tank and install new water mains.	М	25	С	Two inground storage tanks are old and deteriorated with marginal storage capacity. Deteriorated and undersized water mains	650,000	29	70 01	Siskiyou	I	2002
1045 2010013	2010013-002	HILLVIEW WATER CO-COARSEGOLD	New well to augment single well	The proposed project consists of the construction of a new well.	М	25	С	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	24	72 11	Madera	ш	2008
1046 2010013	2010013-003	HILLVIEW WATER CO-COARSEGOLD	Coarsegold 2010013 Infrastructure-Fireflow and Security	Install approximately 230 feet of 6 foot high privacy d fencing with coiled razor wire top, producing three lockable enclosed areas for the well sites, chlorination equipment and the storage tanks. Drill an additional well on an existing approved well lot and refurbish two 20,000 gallon water storage tanks so that both can be i service for fire flow and for maintenance. Install a SCADA system compatible with current systems so that the well sites, tanks, levels and treatment can be monitored electronically 24-7.	M	25	C	The Coarsegold area is growing due to a new casino in close proximity and the well source, chlorination and the storage tanks are unprotected at this time. The remote location exaggerates the risks from vandalism, terrorism and risks to water consumers due to treatment equipment failure. The one tank and one well do not allow adequate redundancy for maintenance and safety in event of a failed well, equipment failure or vandalism. The systems is located 12 miles from maintenance facilities, exaggerating all servicing and response times for problems. Additionally, it would be the closest source of water for firefighting in the area, but only one storage tank would not recover quickly enough for fighting a brush fire or supplemental water for a fire at or around the casino.	246,500	24	72 11	Madera	Ш	2009
1047 3301682	3301682-001	TRAILS END MUTUAL WATER COMPAN		We were donated much larger tank (50,000 gal); assemble, sandblast and paint; or construct a new tank	Μ	25	С	Existing water tank (20,000 gallons) is very old and is leaking around the bottom. It has been repaired with welds; the county has suggested we replace it	50,000	45	75 20	Riverside	v	1998
1048 5403113	5403113-001	SOUTH FORK ESTATES MUTUAL WATER CO	SFE MWC Adddition of new well and upgrade of existing well	Existing well repairs= remove existing casing, set 10" casing; ream existing hole to 10"; 10" seal to 50'; set 8- 5/8" casing; Tulare County permit; downhole perforation of casing; Total estimate for project= \$86,881.00 and then add 10hp grundfos submersible pump; 620' 4/4 subcable; 10hp pump panel plus labor to pull sub, reinstall, electrical, and shop total = \$15,012.00 added to the above for total of \$101,893.00.New well: drill pilot hole, drilling 10" and 8"casing 710'; annulare surface seal to 50'; Tulare County permit; total = \$29,456.00 Additonal costs to upgrade electrical panel, drop new pump, tie in to existing system took total estimate up to approximatly \$100,000.	Μ	25	c	Our Problem: Due to several factors that have contributed to decreasing our well production, we desparately need to properly repair our well and drill another to supply our water needs. South Fork Estates Mutual Water Company is a small rural community water system that currently serves 33 connections and over 100 people. The existing water system has two wells; one deeper than the other. Over the past several years, we have seen decreasing output from both wells in addition to repeated pump failures in the higher producing well. The deep well, the higher producing one, has repeately required significant down time. Both wells are required to supply the residential water needs during the summer/fall months of the year. Over the past three years, the deep well went off line during the winter and spring months, when the other more shallow well had the capacity to supply the residential needs. This has resulted in several public notifications to limit water usage. Should the deep well fail during the summer months when the other well capacity is below the minumin water needs of the households, the system will run out of water within 2 days despite severe conservation attempts. The deep well has consumed over \$48,000 in the last two years and now requires another projected \$100,000 to repair it. In light of the current drought in our area, the projected repairs may not be sufficient to cover the water needs of our Destenciona dirictibution suster lines	201,893	19	85 19	Tulare		2009
1049 1500336	1500336-003	BURLANDO HEIGHTS MUTUAL WATER CO.		Replace approximately 1500 feet of the distribution system water line.	м	25	c	Deteriorating distribution system water lines.	81,693	42	85 19	Kern		2000
1050 1500336	1500336-001	BURLANDO HEIGHTS MUTUAL WATER CO.		Replace 3226' of main line with 6" C-900 pipe; 21 laterals and 2 additional fire hydrants; demolition/removal cost	Μ	25	С	Existing water main line is 4" steel-installed in 1959, problems due to age.	549,400	42	85 19	Kern	111	2006

1051 1500209	1500209-002	ALTA SIERRA MUTUAL WATER CO.	Main Water Line Replacement	Replace the existing 3,300' of 2" galvanized line with 8" C900 plastic water line, including inline block valves and necessary fittings to connection to the existing housing distribution system. As part of the upgrade we would like to include dry barrel fire hydrants at 500' intervals (this portion of the project may have to be funded by the landowners.)	M	25	C	The water distribution main line consist of 3,300' of 2" galvanized threaded line that was installed during the 1930's & 40's. The primary problem is that the metal makeup of the old galvanized pipe contains lead. The Water Company is currently required by the CDPH to test semi-annually for Lead. We have not been able to meet the minimum threshold level for Lead in serveral years despite our efforts to replace portions of the line and improve the system. A secondary problem is the line is undersized and does not adequately serve the community.	350,000	215	100 19	Kern	11	2009
1052 3301276	3301276-001	FULLER MUTUAL WATER COMPANY	Consolidation with Coachella Valley Water District	The goal is to connect with Coacheella Valley Water system and remove the well to provide an adequate and reliable water product to the community members. Discussions have already been started with CVWD and both parties agree with the concept, but details still need to be worked out.	Μ.	25	С	The system is over 40 years old and the well pump and motor are being held together on a "band-aid" basis. The storage tank is also old and leaking. The entire system has no shut off valves to the individual homes causing countless service problems. The community consists mostly of low income families unable to pay for the repair costs. The well also have sand issues of which the homeowners are complaining even after flushing the lines.	175,000	35	100 20	Riverside	V	2009
1053 4700546	4700546-002	Cal Ore Trail Mobile Estates	Pump house and wet well replacement	Replace existing pump house and wet well.	М	25	с	Existing pump house and wet well deteriorated.	10,000	61	102 01	Siskiyou	I	2007
1054 4900584	4900584-004	Timber Cove County Water District		Install new larger water mains.	М	25	С	Some existing water mains too small to adequately serve the needs.	100,000	143	110 18	Sonoma	Ш	1998
1055 4900584	4900584-005	Timber Cove County Water District		Replace undersized asbestos cement pipes with properly sized pipes.	М	25	С	Some water mains overlooked when system upgraded. Pipes are particularly vulnerable during new construction and road repairs.	45,000	143	110 18	Sonoma	II	1998
1056 4900584	4900584-003	Timber Cove County Water District		Larger pressure tank and system for area affected.	м	25	С	Potential low pressure areas.	75,000	143	110 18	Sonoma	Ш	1998
1057 1000186	1000186-001	HELM SCHOOL	New well to augment single well	If current well goes out, a new well or consolidation with a larger system would be needed.	м	25	С	The School is supplied water from one well that if it goes out due to drought conditions would need another well.	200,000	3	150 23	Fresno	Ш	2008
1058 1200671	1200671-003	Benbow W.C.	Zone 3 Storage	Install a 65,000 gallon water storage tank at Zone 3 tank site.	κM	25	С	Water storage for Pressure Zone 3 is extremely limited @ 10,000 gallons and does not comply with GO 103 fire storage standards or allow for time of day, energy optimized pumping.	105,000	101	150 01	Humboldt	I	2009
1059 1200671	1200671-004	Benbow W.C.	Zone 2 Surge Storage	Install addititional 10,000 gallons of surge storage with energy management controls linked to existing SCADA system and automated low level intertie (fire and emergency supply) to Pressure Zone 3 distribution system.	М	25	С	Existing Zone 2 storage @ 5,000 gallons does not allow for time of day, energy optimized pumping or emergency intertie with zone 3 storage system for GO 103 compliance.	30,000	101	150 01	Humboldt	I	2009
1060 1200671	1200671-002	Benbow W.C.	Zone 3 Emergency Power Supply	Install a 15 kW, LPG fueled, standby generator system with automatic transfer switch and genset exercise control system in a weatherproof enclosure	Μ	25	С	Existing Pressure Zone 3 Pump System does not have an emergency source of power.	35,000	101	150 01	Humboldt	I	2009
1061 1200671	1200671-006	Benbow W.C.	Zone 2 Emergency Power Supply	Install a 15 kW, LPG fueled, standby generator system with automatic transfer switch and genset exercise control system in a weatherproof enclosure	Μ	25	С	Existing Pressure Zone 2 Pump System does not have an emergency source of power	35,000	101	150 01	Humboldt	I	2009

1062 1500341	1500341-002	SIERRA BELLA MUTUAL WATER COMPANY	Addition of new 50K Storage Tank on existing Tank Location	Sierra Bella will locate, purchase and install a 50K gallon M tank in its exiting tank location to supplement the existing two 100,000 gallon tanks that currently are in operation. Existing plumbing in the existing valve house has been previously plumbed to accomodate an additional tank. Some source pipes from the pump house (300 ft) will probably have to be replaced to accomplish this project. The tank will be installed on the existing tank site in close approximation to the other 2 tanks. Additional of this new tank will also facilitate regular inspection, cleaning, and repairs for this and the other tanks.	25	c	During summer usage periods (July through October) Sierra Bella experiences high usage of water by customers who are visiting their cabins. During these periods, and especially during years of significant drought, Sierra Bella is exposed to periods of significant water depletion in its existing storage tanks, sometimes delivering to customers "Water Shortage Notices" and restrictions on personal use. The addition of this tank will add 25% storage capacity to the system and can easily be added to the existing valving system that has already been plumbed for this addition. The site is adequate to handle the additional tank. Sierra Bella believes that no CEQA of EIS are required to put this tank on the existing tank site. Sierra believes that is item falls under Category E, water system outages. No customer notices are currently in effect.	75,000	125	165 19	Kern	11	2009
1063 1500341	1500341-004	SIERRA BELLA MUTUAL WATER COMPANY	System Emergency Generator Capability	Sierra Bella will add sufficient emergency generator M capability to operate the system is some limited capacity during an emergency. This will require additions to the existing Pumphouse to house the generators, control and interface systems to the existing electrical panels.	25	c	Sierra Bella has no emergency electricity generating capability for its pumping system. Water is delivered to the storage tanks from a central blend tank by 2 pumps that rely on Southern California Edison. No backup system exists to provide power to these pumps. During any significant disaster situation (earthquake, forest fire etc) where power is lost, Sierra Bella can only provide the existing tank capacilty to customers. This falls under Catagory E, water outages.	15,000	125	165 19	Kern	III	2009
1064 1500341	1500341-003	SIERRA BELLA MUTUAL WATER COMPANY	New System Circulation Interconnects	This project would require Sierra Bella to provide 2 new M system circulation interconnects between several sections of the existing distribution system. Two additional sections of plumbing with appropriate pipes and shutoff valves are anticipated. In addition to providing for better circulation within the system it will allow for more customers to maintain service during periods of repairs and other system shutoffs.	25	c	Several sections of the distribution system are somewhat isolated and adequate circulation of water in the distribution system can be limited during warmer periods of the year. This requires additional system flushing and residual chlorine testing in these isolated areas to assure quality of the water. Although Sierra Bella has had no problems to date, this issue requires regular attention through its Site Sampling Plan to assure quality water. No public notification has been required. The probably fall in the Catagory O, not covered in other catagories.	20,000	125	165 19	Kern	111	2009

1065 2210901	2210901-003	MPWD-Coulterville CSA 1	Coulterville Service Area Well and Storage Tank	This project requires drilling a backup well and constructing storage to increase the capacity serving Coulterville, Ca. The request includes funding for planning, engineering, materials, equipment and construction. Materials and equipment inclu well, pipe, storage tank, pipe, floats, scada, flowter, me,	Μ	25	c	The water system infrastructure in Coulterville is thirtyseven years old and, exept for pump failure - most recently July 19, 2007 - is generally considered not to have reached its maximum service life. The problem in Coulterville is with the lack of backup and storage capacity. Coulterville is located in the rural foothills of the Sierra mountains and every year during fire season the well is drafted from by Cal Fire, Mariposa County Fire, the Roads division of Public Works and other, non- authorized, users. The residence have been left without water a number of times throughout the years because of fire needs. Current water rates in Coulterville are deficient and do not provide enough revenue to maintain operational status quo, and certainly do not provide for any kind of reaerve. A recent rate study conducted by Public Works administrative staff showed a rate increase of 110% was necessary just to maintain operational costs, and it does not provide the revenue needed for infrastructure repairs, replacements and additions. Unfortunately, Coulterville is an economically depressed community and the proposed rate increase was deemed too big a	410,000	98	165 11	Mariposa	111	2007
								burden to be implemented and was subsequently voted down. in addition, Coulterville does not receive any tax revenue.						
1066 1700516	1700516-001	Lake County CSA 16 - Paradise Valley		Conduct capacity analysis and develop master plan, study possibility of consolidation with Kono Tayee water system.	M r	25	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include water supply and quality. The distribution system should be evaluated.	100,000	72	180 03	Lake	II	1998
1067 1500393	1500393-004	RAINBIRD VALLEY MUTUAL WATER COMPA	N Rainbird Valley Water Distribution System Repairs	Replace ten 6 inch and/or 8 inch gate valves on distribution system.	м	25	с	Gate valves on water distribution lines are frozen and need to be replaced. Entire system must be shut down if major repairs are needed. Loss of water supply & pressure	50,000	80	188 19	Kern	Ш	2007
1068 1000267	1000267-001	KINGS CANYON MOBILE HOME PARK		CONSTRUCT A NEW WELL AND REPLACE PIPELINES.	м	25	С	NEED A NEW WELL AND REPLACEMENT OF PIPELINES.	150,000	60	200 23	Fresno	Ш	1998
1069 0800526	0800526-002	Redwood Park C.S.D.		Replace the water tank(s).	М	25	С	150,000-gallon redwood water storage tanks are about 50 yrs. old; one cannot be used; the second tank has rot	200,000	39	200 01	Del Norte	I	1999
1070 2500911	2500911-002	I'SOT Well #3 & #15		Installation of an elevated storage tank and an enlarged pumping station to provide the reliability required by the Waterworks Standards	М	25	C	Water system has low pressure and does not fulfill Section 64566 (system pressure) of the Waterworks Standards	250,000	43	215 01	Modoc	I	1998
1071 5400934	5400934-003	PONDEROSA CSD	Ponderosa Water Project- Repair Existing Tank and Refurbish Wells	The District proposes to have the interior of the 60,000 gallon storage tank cleaned and coated to eliminate leaks in the tank. In addition the inline flow meter and control valve would be installed at the tank outlet. This will allow volume records of water delivery to the system to be recorded and emergency control in the case of a major leak. Major leaks in the past have drained the 60,000 gallon tank so rapidly that the manual valve was unable to be closed. The district would also refurbish the existing four hardrock wells. The wells were drilled in the 1960's and have never been refurbished. Productivity is expected to increase 10-15% as a result of refurbishing.Please note that Ponderosa community has grown to 140 connections and a ppulation of 360.	м	25	С	The goal is to increase water capacity to supply current and peak demand. The district has had to restrict water usage in past years and has a three (3) stage water conservation policy with fines for violations. To increase water production, the district seeks to conserve water resources by repairing the leaky storage facility and refurbishing the four wells. In addition, over the last five years the District has experienced an increase in the cost to repair leaks in the aging storage tank and an increase in the cost of electricity to pump water.Improved well productivity as a result of refurbishing, and system leak reductions will reduce the amount of groundwater needed to be pumped and increase production volume of the sources.	94,286	116	232 12	Tulare	111	2009

1072 2010012	2010012-002	HILLVIEW WATER CO-RAYMOND	Raymond 2010012 Redrill #2 to Public Standards- Security and SCADA	If Raymond Well #2 is re drilled to public standards, it M could be drilled deeper at the same time and likely improve the quantity of water as well as making the well consistently safe. This would also eliminate the shut offs for chlorination and the wasted water used for flushing at critical consumption periods.1100 feet of security fencing with top coiled razor wire and installation of wireless cellular SCADA would secure the wells and facilities as well as allow 24-7 monitoring of low production wells, improve response times and mean substantial savings on service calls. A round trip to the Raymond system from the main office is over and hour. With SCADA the service personnel can be alerted and diagnose problems before leaving the main office in Oakhurst.	л	25	с	Well #2 in Raymond is not built to public standards and as a result occasionally tests positive for total coliform. Chlorination and flushing always produces a clean retest, but water is so scarce in the area that even the few gallons per minute the well has yielded for years is critical in the warmer months. The Raymond area system does not have any security fencing or SCADA. Service personnel come all the way from Oakhurst (20 miles) for all monitoring, maintenance and service calls. The Raymond community would be better served if the water system could be monitored remotely for production, chlorination, public safety and security.	179,000	80	243 11	Madera	ш	2009
1073 1700546	1700546-004	Clearwater Mutual Water Company	Clearwater Mutual Water Co Storage/Distribution	Clearwater Mutual Water Company is a small community water system that has 90 active service connections serving a maximum population of 100 persons. Most residences are retired living on a fixed income. The community is considered disadvantaged due to the median income being approximately less than \$30,000 per year. The census tract is "Census Tract 9." The system has two storage tanks which one is used as a clearwell and the other is for our main storage. The storage tank is a 35,000 gallon redwood tank that is in fair condition but is starting to have problems. By the time we get funded for the project, it will probably be in poor condition. The Department of Health Services recommended the tank be replaced with a 100,000- gallon bolted steel tank to increase storage . The construction of this tank would allow the system to be in compliance.	Λ	25	С	The 35,000 gallon redwood storage for the Clearwater Mutual Water Co. should be replaced in accordance to water permit No. 02-03-98P17005. The storage tank has been in place since 1965. There are several patched holes around the tank, and some leaks on the sides. There is 18 ft. capacity, but can only be filled to 15 ft. due to its condition. If this storage tank were to fail, Clearwater would not be able to supply water to its customers. This would cause Clearwater Mutual Water Co. to be in violation.	140,000	93	250 03	Lake	1	2007
1074 4700513	4700513-002	Hornbrook C.S.D.	Provide New Reservoir (#3) To Service Eastside (95%) Of Water District	This project entails a 250,000 gallon reservoir situated M on the eastside of the District. The reservoir will be connected by two 10-inch lines to existing system in First Street. It will also have an all weather access road, chlorinator, and check valves to circulate the water from the existing system, through a chlorinator into the tank and then looped back down to the existing system. There is a concern that the water on the eastside of the District is not being chlorinated properly because it is too far from initial chlorination. Further analysis of the system, after additional loops are installed, may reveal that only one line is needed up to the tank and no chlorinator would be necessary. This additional reservoir will provide critical backup in the event that the two existing reservoirs fail and/or distribution is curtailed due to main water lines coming from west of the 1-5 freeway being disrupted, which would leave 95% of the District (and the elementary school) without potable water, or means for fire suppression.	Л	25	C	This project entails a 250,000 gallon reservoir situated on the eastside of the District. The reservoir will be connected by two 10-inch lines to existing system in First Street. It will also have an all weather access road, chlorinator, and check valves to circulate the water from the existing system, through a chlorinator into the tank and then looped back down to the existing system. There is a concern that the water on the eastside of the District is not being chlorinated properly because it is too far from initial chlorination. Further analysis of the system, after additional loops are installed, may reveal that only one line is needed up to the tank and no chlorinator would be necessary. This additional reservoir will provide critical backup in the event that the two existing reservoirs fail and/or distribution is curtailed due to main water lines coming from west of the I-5 freeway being disrupted, which would leave 95% of the District (and the elementary school) without potable water, or means for fire suppression.	1,750,000	141	280 01	Siskiyou	I	2009
1075 4700513	4700513-001	Hornbrook C.S.D.		Eliminate deadends by looping. Where looping not M possible, provide flushing valves at end of deadend.	Л	25	с	System has 11 deadends in distribution supply main lines.	550,000	141	280 01	Siskiyou	I	1998

1076 2500503	2500503-002	California Pines C.S.D.	Second 10 inch Main From Storage Tanks	The District has one 10" main line to service our community. When there is a problem within our system we must shut off the whole community to work on it. By doing this not only do we cause problems for our customers, but this puts a damper on any fire protection and causes risks that we are uncomfortable with. If we were able to place a second 10" main and loop our system we would be able to address these problems. This would also solve a possible compliance problem with DWP.We need 1.5 miles of a second 10" would this solve our problems with the above. Not only would be able to offer water services to a larger area in this District. This would replace any wells that would need to be drilled in Unit 1a.Our area is a proverty stricken area and it is hard to come up with the funds needed to do these projects. We would appreciate any consideration you can give us.	M	25	c	California Pines CSD needs to be able to work on our water system without shutting down the whole community. At this point in time we do not have a way to do this. We also must be ready and able to expand the drinking water availability in other areas around this District. The project would include putting into play a second 10° main from our storage tanks. This would enable us to shut down parts of the system and not effect the whole area. One unit here also needs pipe laid for the delivery of water rather than have property owner drill their own wells. We are a very poverty stricken area and try our best to keep our costs down and a reserve. We are unable at this time able to fund this project.	800,000	130	300 01	Modoc	I	2009
1077 1100616	1100616-002	Elk Creek Community S.D.		Construct pipeline across creek. Loop dead end lines to reduce problems.	м	25	С	Vulnerability of transmission mainline. Multiple dead end lines that compromise water quality and pressure.	232,000	90	300 21	Glenn	I	1998
1078 3700922	3700922-001	LIVE OAK SPRINGS WATER COMPANY		Replace existing distribution system, and install pressure system (pressure tanks and pump system).	Μ	25	C	The solution to our system's low head line problem requires construction of a new distribution system, adding into the system a pressurization system to deal with customer elevation problems.	1,000,000	138	300 14	San Diego	V	1998
1079 3900964	3900964-001	SAHARA MOBILE COURT		REPLACE DISTRIBUTION SYSTEM	Μ	25	С	CORRODED STEEL PIPE AND LOW PRESSURE PLASTIC PIPE	500,000	175	300 10	San Joaquin	Ш	1998
1080 3700922	3700922-002	LIVE OAK SPRINGS WATER COMPANY	New Well	new well and pipes	м	25	С	repeated total coliform violations	100,000	138	300 14	San Diego	v	2007
1081 1510016	1510016-002	RAND COMMUNITIES CWD - RANDSBURG		CONSTRUCT THREE NEW 100,000 GALLON STEEL TANK RESERVOIRS. OTHER - DESIGN AND CONSTRUCTION	М	25	С	THREE OLD 100,000 STORAGE TANKS AND FAILING DUE TO CORROSION CONTROL	409,000	295	344 19	Kern	ш	1998
1082 3310081	3310081-002	Palm Springs Crest		Design and construct new well with pump, modify existing Well 25 pump for delivery to a higher elevation, along with 3,000' of new watermain to meet WWS, increase system reliability, and provide redundancy in source-of-supply.	М	25	С	The PZ currently has only one source of supply comprised of Well 25 with pump, providing no redundancy and inadequate system reliability. The existing watermains are old, deteriorated and unreliable with limited remaining useful life, involving freq	397,000	143	378 20	Riverside	v	1998
1083 3310081	3310081-003	Palm Springs Crest		Design and construct new pressure reducing station, along with 2,500' of new watermain to meet the WWS and abandon the intermediate tank/booster facilities.	М	25	С	The lower portion of the PZ has excessive pressures, the existing intermediate tank, booster and pipeline facilities are old, deteriorated and unreliable, with limited remaining useful life invovling frequent leaks, repais, outages, valve work, etc.	219,000	143	378 20	Riverside	V	1998
1084 3310081	3310081-001	Palm Springs Crest		Design and construct new steel tank to replace old tank, along with 3,000' of new water main tomeet the waterworks standards and increase system reliability.	М	25	С	The existing storage tank and water mains are old, deteriorated and unreliable, with limited remaining useful life, involving frequent leaks, repairs, outages, valve work, etc. (see attached documentation)	356,000	143	378 20	Riverside	v	1998

1085 1200701	1200701-001	Orick C.S.D.	Orick C.S.D System upgrades for engery efficiency	Our project goals are as follows: 1.) Install new energy M efficient well pumps with integrated pump panel to closely monitor tank levels which will allow OCSD to reduce over flow and unnecessary pumping. Having the technology to closely monitor tank levels will increase OCSD's efficiency by eliminating unnecessary pumping. The existing pumps and panel are over 30 years old. The pump panel had continual problems during lightning storms and parts to repair our pump panel are no longer available. 2.) Repair broken distribution valve and improperly maintained valve covers.3.) Install Generator connect panel. Orick is located at the 'end of the line' in a remote location. The community is often left for a week at a time without power. Installing a generator connect panel will allow OCSD to maintain tank levels during power outages.4.) Install permanent, auto start generator to power well pumps, fire hall and community center; all buildings are run and maintained by the OCSD. In times of power outages we currently look to the county sheriffs' office to help supply us with a generator to power water pumps. Having a dedicated, onsite generator would allow OCSD to power the fire hall and community center which is designated as our local emergency shelter. Orick is in a rural area, and in the event of a major windstorm, earthquake, flood and or tsunami, we would easily be isolated from the county services. In a major event, the OCSD would	25	c	Currently, the Orick Community Services District (OCSD) is in compliance with all state standards regarding water quality. The proposed project is geared toward upgrading our aging water system to become more energy efficient and reduce operating costs to better serve the community. Orick is a disadvantaged community in a rural area. OCSD has a need for the project as there is one known broken distribution valve and other valve lids were covered by a highway overlay. OCSD well pumps are approaching 30+ years in age; although the pumps are still fully functional, they are far from energy efficient. The water system automated pump panel is old and has been out of service for many years due to poor design and now is out dated with repair parts no longer available.	250,000	139	400 01	Humboldt		2009
1086 5410007	5410007-004	LSID - Tonyville	Tonyville Water Pipeline Deadend Elimination Project	The proposed project includes the installation of new 6- M inch by 1,650 feet long water service piping that will eliminate the dead end piping, increase operation flexibility, system operating pressure. Further, the proposed project will install sectionalizing valves on the proposed 6-inch pipe line and along the existing 10-inch water main. The project is entirely located in the County road right of way. It is anticipated that the project will	25	С	The community of Tonyville's existing water distribution system consists of a 10 inch delivery pipeline that branches into one 4-inch and three 6 inch service pipelines. Each service pipeline has a dead end. During the pipeline installation, there were very few sectionalizing valves installed in the distribution system. Due to the lack of sectionalizing valves, the District is unable to isolate portions of the water system to repair	400,000	50	400 12	Tulare	Ш	2009

be CEQA exempt.

pipeline and service lateral leaks. This requires the draining of the entire or at least the majority of the water system to repair a leak. This can result in all of the residents being without water until the leak is repaired and the distribution system recharged. With the large water demands and small diameter pipelines,

the residents experience low pressures.

1087 0800532	0800532-006	Big Rock C.S.D.	Hiouchi SCADA System	The Big Rock CSD issued a Phase One RFP to install a SCADA system in Hiouchi. The goal for Phase One was to arrive at a system concept. The goals for Phase Two are to engineer and install the chosen system. The only response to the Phase One RFP was presented by Von Hoogenstyn and Associates (VHA) of Cloverdale. The Board of Directors/Trustees accepted VHA's proposed SCADA-system concept and already paid a fee of \$2,500. Von Hoogenstyn and Associates also provided bid for Phase Two. Since then, a second contractor indicated its desire to make a Phase Two proposal. Tha presentation is scheduled for a public hearing on Marcl 19, 2009. Contractor selection decisions for all Phase Two considerations will be made in that meeting. The VHA bid includes the following tasks.Task 1. Pre-design visit. Visit site, meet with district personnel. Document existing panel wiring, and measure for new panel installation. Create a conduit and wire plan. Decign antenna mount and feed line run. Design field wire paths and sensor piping. FCC license site survey. Develop list of electrician tasks.Task 2. Hardware and software acquisition.District order control panels from Control Systems West and ship to Von Hoogenstyn and Associates, Cloverdale. Von Hoogenstyn to order CMI software, pressure transmitters, antennas, feed line and inscending.	M y a at h	25	c	The Big Rock CSD installed the community's water distribution system in 1971 to satisfy Hiouchi's residential, commercial, and fire suppression needs. The township elects a Board of Directors/Trustees to manage the Big Rock CSD's responsibilities, which include water collection from under the Smith River, drinking water distribution, and drinking water storage. This water system is nearing the end of its life cycle. The Big Rock CSD must comply with safe drinking water standards that recently have become significantly more demanding, the relatively new Homeland Security Act along with unanticipated/unfunded mandates, a water- allocation limit imposed by the California Water Resources Control Board that must be adjusted upward in the near future to accommodate consumer growth, and a geographic jurisdiction that has quadrupled in size. Since 2001, Hiouchi has been beset with nearby wildfires on an unprecedented scale. Wildfires regularly occur on three of the jurisdiction's sides that not only present serious recurring threats, but also place extraordinary demands on the Big Rock CSD's water distribution system when federal, state, and local fire protection agencies head for Hiouchi to draw water from any one of its 15 fire hydrants. For instance, the "Signal Hill Fire" recently cost the Special District 130,000 gallons of potable water in three weeks, and	68,183	113	400 01	Del Norte	I	2009
1088 1200729	1200729-002	Orleans C.S.D.	New 100,000 Gallon Storage Tank	A new 100,000-gal bolted steel storage tank will be installed adjacent to the existing 100,000-gal redwood tank. The C.S.D. already has an easement for use of the property for construction of a second storage tank.	M e	25	C	The existing 100,000 gallon storage tank is leaking excessively due to shrinkage of the redwood staves. Additional storage is required in order to have storage while fixing the existing tank and to maintain adequate reserve capacity for fire flows and peak community demands, as the existing storage capacity cannot meet demand plus rural fire flow requirements.	215,000	139	430 01	Humboldt	I	2009
1089 0110012	0110012-001	Town of Sunol-SFPUC		Replace 2" service main with 4" service mains. Install fire service mains and hydrants within the distribution system; Replace the existing transmission/supply pipeline.	Μ	25	с	Aging distribution system, inadequate storage.	533,080	134	450 04	Alameda	II	1998
1090 1500406	1500406-002	TRADEWIND WATER ASSOC.		SYSTEM AND STORAGE TANK WERE REPLACED	м	25	С	REPLACE DISTRIBUTION SYSTEM DUE TO AGF	450.000	214	450 19	Kern	ш	1998
1091 1503270	1503270-001	LAKE ISABELLA COMMUNITY SERVICES DIS	5T	DESTROY WELLS AND REPLACE WATER LINE	M	25	c	ABANDONED WELL SITES NEED TO BE DESTROYED. A 2" LINE CONNECTION TO A TRAILER PARK NEEDS TO UPGRADED TO A 4" LINE TO MEET DEMAND.	29,400	190	500 19	Kern	III	1998
1092 3600504	3600504-001	Knoll Enterprises Inc		Construct new wells or treatment facility	M	25	С	High alkalinity in source water	500,000	28	500 13	San Bernardino	V	1998
1093 1503270	1503270-002	LAKE ISABELLA COMMUNITY SERVICES DIS	ST High arsenic	No project at this time; re-evaluate later if arsenic level increase.	ls M	25	С	Possible high nitrate, was very high in past but recently less than MCL.	100,000	190	500 19	Kern	ш	2007

1094 5410037	5410037-001	LSID-Page Moore System	Page-Moore Water Pipeline Replacement Project	The proposed project includes installing about 8,200 M lineal feet of new 6-inch diameter pipline in the county road right-of-way limits. The pipeline will be installed with sectionalizing valves. It is estimated that 173 new services will be installed to the existing house with a service box and shutoff valve and connect to the existing water meter.	25	c	The existing water distribution system is old and in many locations consists of undersized pipelines. The pipeline sizes range from 4 to 6-inches and the material is primarily steel. Due to the materials utilized, the District has experienced numerous leaks on the water services. During the time of installation, there were few sectionalizing valves installed in the distribution system. Due to the lack of valves, the District is unable to isolate portions of the system to repair pipeline leaks. This requires the draining of large sections of the system to repair a leak. This can result in many of the residents being without water until the leak is repaired and the distribution system recharged. Further, this community is unsewered and relies on individual septic tank and leach field systems. Therefore, the combination of old leaky water pipelines and unsewered residential units present a high risk for contamination of the water supply.With the large water demands and small diameter pipelines, the residents also experience low pressures.	1,800,000	235	550 12	Tulare	11	2009
1095 3310078	3310078-001	West Palm Springs Village		Construct new well with pump, for increasing system M reliability by providing redundancy in source of supply to meet the WWS.	25	С	The PZ currently has only one source of supply comprised of Well 26 with pump, providing no redundancy and inadequate system reliability.	149,000	222	567 20	Riverside	v	1998
1096 3310078	3310078-002	West Palm Springs Village		Design and construct 11,000' of new watermain to meet M the WWS and increase system reliability by interconnecting the PZ source of supply sites and storage site with new watermains.	25	С	The existing bare steel watermains and appurtenances are old, deteriorated and unreliable, with limited remaining useful life, including frequent leaks, repairs, outages, valves work, etc. (refer to attached documentation)	530,000	222	567 20	Riverside	V	1998
1097 1200707	1200707-002	Miranda C.S.D.	Miranda CSD Source and Secondary Water Mainline Replacement Project	The water system for the District was constructed in the M 9 1960's, shortly after the District was established. The system is 50 years old and is reaching the end of its design life. This has been made abundantly clear by four major leaks in the central portion of the system in the last five months. A separate application has been submitted for replacement of mainlines in the central portion of town as these are the lines with the most recent breaks and which are of greatest urgency for replacing. However, there are two other mainlines that service the system that are also almost 50-years old and are in need of replacement. One pipeline is the mainline from the intake gallery on the Eel River, and the second pipeline is the mainline that services the western portion of town. Failure of the mainline from the intake gallery would prevent the refilling of the storage tank. Failure of the mainline to the western portion of town means half of the community would be without portable water and fire protection.For Phase II, the District intends to replacement of the existing 6-inch AC pipe with 6-inch PVC pipe. This piping is located in the roadway of the Avenue of the Giants and approximately 450-square yards of pavement will need	25	c	The Miranda Community Services District is located in south-central Humbold County, covering an area of approximately 280 acres, and serves an estimated 400 people. The District is the only public water supplier in the Miranda area, and was established in 1964 to supply the residents with potable water for domestic, irrigation, sanitation, commercial, fire protection and recreational uses. The District currently has 129 residential and 17 commercial connections. Miranda is located in a High Fire Hazard rating area, and in addition to providing fire protection for the town, the Miranda Fire Department has a mutual aid agreement with the California Department of Forestry and Fire Protection (CDF) and provides water to assist the CDF with fire suppression services for the Public Resource Lands surrounding Miranda. The District also provides water to South Fork High School, which serves more than 350 students and staff which come from a geographically mountainous area half the size of Rhode Island. The water system for the District was constructed in the 1960's. The system is 50 years old and is reaching the end of its design life. This has been made abundantly clear by four major leaks in the central portion of the system in the last five months. The leaks were all in the heart of the system, in the mainlines from main storage tank down to town. Each of these leaks required the District to shut down the entire system, and the entire	310,000	143	600 01	Humboldt	I	2009

1098 1200707	1200707-003	Miranda C.S.D.	Miranda CSD Water Distribution Loop System Installation Project	The water system for the District was constructed in th 1960's, shortly after the District was established. The system is 50 years old and is reaching the end of its design life. This has been made abundantly clear by fou major leaks in the central portion of the system in the last five months. Each of these leaks required the District to shut down the entire system, and the entire town, including South Fork High School, was without potable water for several hours and in the worst case for over a day. The District provides water to South For High School, which serves more than 350 students and staff which come from a geographically mountainous area half the size of Rhode Island. No water means that school must be dismissed, and the financially strapped Southern Humboldt School District incurs additional costs that it can ill afford. For Phase III, the District intends to install a mainline around the northwest corner of South Fork High School that will create a loop system to allow water distribution to the school all the western portion of town if the system needs to be shut down else where. This piping will be located within the right-of-way of the Avenue of the Giants along the southern side of the High School and will cross east underneath Highway 101 to tie into the existing mainline along a portion of the High School perimeter. This portion of the project will ential installing 1,450- feet of 4-inch PVC piping. Approximately 130-souare	ne M ur rk t t t	25	c	The Miranda Community Services District is located in south-central Humboldt County. It covers an area of approximately 280 acres and serves an estimated 400 people. The District is the only public water supplier in the Miranda area, and was established in 1964 in order to supply the residents with potable water for domestic, irrigation, sanitation, commercial, fire protection and recreational uses. The District currently has 129 residential and 17 commercial connections. Miranda is located in a High Fire Hazard rating area, and in addition to providing fire protection for the town, the Miranda Fire Department has a mutual aid agreement with the California Department of Forestry and Fire Protection (CDF) and provides water to assist the CDF with fire suppression services for the Public Resource Lands surrounding Miranda. The District also provides water to South Fork High School, which serves more than 350 students and staff which come from a geographically mountainous area half the size of Rhode Island. The water system for the District was constructed in the 1960's, shortly after the District was established. The system is 50 years old and is reaching the end of its design life. This has been made abundantly clear by four major leaks in the central portion of the system in the last five months. The leaks were all in the heart of the system, in the mainlines from main storage tank down to town. Each of these leaks required the District to	170,000	143	600 01	Humboldt	1	2009
1099 1200707	1200707-001	Miranda C.S.D.	Miranda CSD Emergency Water Main Replacements Project	The District intends to replace the mainlines from the swater storage tank down into the distribution system for the town as Phase I of the entire project. This is the backbone of the system and is the section most need o replacement based on recent leak history. This project will entail the replacement of the existing AC pipe with PVC waterline. This will include 600 feet of 8-inch diameter PVC pipe, and 1,800-feet of 6-inch PVC pipe. <i>J</i> portion of this piping is located in the roadway and approximately 100-square yards of pavement will need to be saw cut, demolished and disposed of and the roadway repaved after completion. Additional work wil include clearing and grubbing thick vegetation along portions of the piping alignment outside of the roadway, and the associated sediment and erosion control measures needed for this are. There are also two 8-inch and six 6-inch gate valves and one 6-inch pressure regulating valve that will also need to be replaced along with their valve boxes. Two separate pri applications will be submitted for Phases II and III of thi project. Phase II is the replacement of two other mainlines that service the system that are also almost 50-years of and are in need of replacement. Phase III the installation of redundancy loops in the water syster to facilitate continued water service to portions of the town when there is a leak in the system and needs to b shut down elsewhere.	M e of a A d d ill re- sis m be	25	C	The Miranda Community Services District is located in south-central Humboldt County, 50 miles Southeast of the City of Eureka and 15 miles north of Garberville. It covers an area of approximately 280 acres and serves an estimated population of 400. The District is the only public water supplier in the Miranda area, and was established in 1964 in order to supply the residents of Miranda with potable water for domestic, irrigation, sanitation, commercial, fire protection and recreational uses. The District currently has 129 residential and 17 commercial connections. Miranda is rated with a High Fire Hazard rating, and in addition to providing fire protection for the town, the Miranda Fire Department has a mutual aid agreement with the California Department of Forestry and Fire Protection (CDF) and provides water to assist the CDF with fire suppression services for the Public and Natural Resource Lands surrounding Miranda. The District also provides water to South Fork High School, which serves more than 350 students and staff which come from a geographically mountainous area about half the size of Rhode Island, covering approximately 773 square miles. The water system for the District was constructed in the 1960's, shortly after the District was established. The system is going on 50 years old and is reaching the end of its design life. This has been made abundantly clear by four major leaks in the central portion of the system in the	280,000	143	600 01	Humboldt	1	2009
1100 1500290 1101 3600114	1500290-004 3600114-005	EDGEMONT ACRES MUTUAL WATER COMF	δ <i>α</i>	CONSTRUCT ELEVATED STORAGE TANK	M	25	c c	GROUND LEVEL STORAGE TANKS DON'T PROVIDE PRESSURE OR QUANITY OF WATER DURING POWER OUTAGES Master plan does not provide for reliable water system	300,000	148	600 19 695 13	Kern San Bernardino	III V	1998 2000
1101 3000114	2000114-003					25	C	operation	1 4 5 4 2 4 0	135	005 40	Can Demandl	,	2000
1102 3600114	3600114-001	CSA 70 W-3 (Hacienda)		Construct 5.25 miles of new mainline	M	25	С	Old, undersized mainline	1,164,240	139	695 13	San Bernardino	V	1998

1103 4710001	4710001-003	City of Dorris	Dorris Water Tank	Construction of 750,000 to 1,000,000 gallon tank. Construction to include all pipes, gates and valves to connect to the existing system.	М	25	С	The City has only one water tank, which at a capacity of 750,000 gallons is less than ½ of the peak day demands. Without a second storage tank available, the tank cannot be taken out of service for coating or other repairs, and it is now 26 years old, with the original coating.	950,000	481	887 01	Siskiyou	I	2007
1104 4710001	4710001-004	City of Dorris	Dorris Water Line Reconstruction	Reconstruction of approximately 11,000 feet of water distribution main line infrastructure along the City streets, alleys, Hwy 97 and under Union Pacific Railroad tracks. This will include 6", 8" and 10" water main line along with service connections, gate valves and hydrants.	M	25	c	Approximately 50% of the City's water distribution system consists of steel pipeline more than 50 years old, including many lines dating from the 1940's and earlier. Those lines are failing at an increasing rate, exposing the distribution system to possible contamination by groundwater intrusion, as well as becoming a maintenance hardship. One of our oldest lines is beneath Union Pacific Railroad Tracks to supply water to our molding mill. This line is critical to replace along with our lines that are parallel to Highway 97.The City has had to notify affected residents and businesses of the shutoff of water services and a boil water order due to a possibility of contamination.	990,000	481	887 01	Siskiyou	I	2009
1105 4710001	4710001-005	City of Dorris	Dorris Chlorinator-Well Project	The City will drill a well at sufficient depth of an estimated 1500 feet to provide a safe, quality water supply. A pump will be installed with sufficient capacity for the City's current and projected use along with the main water and valve pipeline system to connect the City's water infrastructure together. We will construct a chlorine generating system to treat 1500 to 2000 gallons per minute. A well house station of approximately 20° X 25° will be constructed to house th system along with the storage of salt for the hypochlorite system.	M , e	25	c	The City is currently served by one good well, which must be pumped in excess of 21 hours per day to meet the peak day demands. The existing back-up well is of a limited capacity and now does not meet the EPA standards for potable water due to arsenic level and infiltration of sand into the distribution system. It is cost prohibitive to have arsenic and sand removal on this well. With the capacity that the City is running their only well, we are not able to meet our Housing Element projected need for this disadvantaged community as our City Engineer advised the City they are at the maximum functioning capacity. With only one well on- line, we can not schedule maintenance of our pump nor do we have any backup for eventual failure of this well and main pipeline. The City's chlorinating system is beyond its maximum capacity and the City has had to shutdown their water system util it is required. It is not capable of treating the volume of water that is required by our system. The system failed three times in the last year and we received a notice of violation due to the failure. Water customers were given the boil water order due to this failure.	600,000	481	887 01	Siskiyou	1	2009
1106 1310009	1310009-002	Winterhaven WD	Storage tank renovation, water main replacements, & hydrant replacement	There are a # of items that would increase system reliability, reduce service outages and enhance fire fighting capabilities as follows:1. Storage Tank Inspection and Rehabilitation.2. Isolation (Gate) Valves.3. ACP Replacement with PCV.4. PVC Tees with thrust block.5. PVC Cross with thrust block.6. Street cu and pavement replacement.7. Hydrant Replacement.8 Compressor (fore pressure tank), pressure switch, valve.	M u ut	25	С	The system presently has asbestos pipe throughout the plant and distribution system. The valves throughout the town cannot be excercised as they are frozen. In an emergent situation, the entire town's water is forced to be shut down as the valves cannot be isolated. The compressor located at the water plant is outdated as it was installed in 1974. There have been problems on a regular and recurring basis keeping the air level control working properly on our hydro pheumatic tank.	513,110	170	892 14	Imperial	v	2009

1107 1710009	1710009-002	Upper Lake County Water District	Sabini St and Rice St	Completion of this project would eliminate two "dead- ends", and replace more than 1500 feet of AC pipe. Increasing line size will increase capacity for delivering fire flows, increasing fire safety. The project will result in water conservation in two ways, and energy conservation in two ways, providing better fire protection to both a residential neighborhood and a business district, and protect district personnel from possible asbestos exposure.	Л	25	с	Sabini St. is an undersized asbestos-cement line that "dead-ends". Rice St. is also an undersized asbestos cement line that "dead-ends". Both lines are over 40 years old and must be flushed frequently, wasting water and energy. Both lines are undersized, decreasing fire flows and fire safety. Rice St has already had to be repaired several times. Repairs to AC pipe can expose personnel to asbestos fibers.	430,681	327	989 03	Lake	Π	2009
1108 1710009	1710009-001	Upper Lake County Water District	Old Lucerne Rd to Hillcrest tank site	t This project consists of two parts.Part 1 - Eliminates an M old, undersized, and dead-end asbestos-cement pipe with a large diameter flexible pipe. Potential leaking from the aged a.c. pipe will be prevented and the goal of water conservation will be advanced. Extension of the line to the tank site will provide a complete diameter transmission system between the community and the storage tanks. Acquisition of easements for this extension will also be required. With this line in place, fire flows will be increased from approximately 500 GPM to an estimated 2500 GPM, specifically in the area of the three public schools. Pressure drops will be reduced, pumping will be more efficient and less electricity will be used.Part 2 - Two of the districts smallest tanks will be replaced with a tank more than twice as large as the two combined thus, providing enough storage to allow the district to utilize off peak pumping for increased energy efficiency. The increased storage will also allow for future commercial development which would benefit the local economy.	Л	25	c	This project is intended to address and resolve fire safety concerns including pressure and storage issues within the community including the area of the three public schools, the historic business district, and future development.	1,366,022	327	989 03	Lake	Η	2009
1109 1210017	1210017-003	Manila Community Services Dist.	Manila Community Services District 2009 Pre- Application	In order to meet the state's mandated compliance and M prepare for expected growth of the community, the district proposes to build an additional 100,000 gallon storage tank of concrete construction with addional piping from the booster pump station and the existing redwood storage tank. The additional piping scheme is needed to isolate each storage tank from the other to allow for repairs and routine maintenance on indivdual tanks without interruption in service.	л	25	С	Our current storage capacity is 100,000 gallons, but according to Department of Health Services's (DHS) 2005 annual report, by Ronnean Lund December 8th, 2005, we are well below DHS's recommended standards for water storage capacity. According to Craig Bunas, of DHS, our storage capacity should be 130,000 gallons. 130,000 gallons would meet the current demand, but the proposed Humboldt County General Plan projects growth of approximately 150 more living units, above and beyond the 68 applications for proposed development, we currently have on file. These expected increases will in effect double our storage requirement.	250,000	343	1,000 01	Humboldt	I	2009
1110 1710018	1710018-003	Lake County CSA 2 - Spring Valley		Conduct capacity analysis and develop master plan. M	Л	25	С	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include filtration and storage. The distribution system should also be evaluated.	100,000	420	1,018 03	Lake	II	1998
1111 4710010	4710010-001	City of Tulelake		Replace old pumps and electrical equipment. Replace M chlorination facilities with more reliable and effective equipment.	Л	25	С	Have had occasional outages due to old pumps and electrical equipment. Hydrogen sulfide in water is inadequately treated by existing chlorination facilities causing occasional taste and odor complaints.	200,000	484	1,058 01	Siskiyou	I	1998

1112 0510005	0510005-005	C.C.W.D., West Point	West Point Pipeline Replacement	CCWD is seeking funding to leverage an existing federa grant award to assist this recognized low-income community with a significant Native American Indian population meet its water system's Health & Safety and Fire Protection needs. Increasing the community's ability to provide a high quality water supply while meeting adopted fire flow standards will increase the potential for growth and business development. The project will replace most of the distribution system in the West Point service area. Pipeline diameters range from 6-12 inches for a total of 21,100 LF of pipeline replaced. Project will replace main valves and fire hydrants, split dual service lines, and replace water meters where appropriate. The existing redwood Bummerville Storage Tank will be replaced with a 100,000 gallon steel tank. A 3,000 gpm fire flow pumping system will be installed at the Bummerville Tank site. The planning for this project began in 2006, with results indicating a construction cost of over four million dollars. The project was given a low priority due to the high cost and burden on the water customers. With the prospect of state and Federal loans, the project design was started. A grant of 51,000,000 and al loan of \$3,290,000 was awarded from the USDA. However, in the current state of the economy, the system does not have sufficient funds to incur the loan debt and the project was put on hold again. The District	e a	25	c	Existing water system is failing due to deterioration. Water leakage from the pipelines and Bummerville storage tank is estimated to be up to 30 percent of total system demand. District is concerned that the system currently exhibits water quality issues and insufficient fire flows and pressure . The community's only school is located in this area and the District is concerned proper fire flows cannot be maintained for the school. The community is an economically disadvantaged community and would suffer economic hardship if burdened with the full cost of water system replacement. In addition, the community is unable to develop additional commercial land uses in the downtown area due to insufficient fire flow protection.	2,000,000	556	1,400 10	Calaveras	11	2009
1113 1610009	1610009-006	Kettleman City CSD	Water Storage Tank Rehabilitation	The Water Storage Tank Rehabilitation project will include the complete sandblasting of the interior and exterior of the tanks. The Commercial Tank Facility (CTF) would be retrofitted with the current safety appurtenances and cathodic protection system. The CTF hydropuematic tank, booster pump station and electrical controls and equipment would be replaced to the current standards. The CTF chlorination station would be installed to meet the current health and safety standards. An emergency diesel generator will be installed to provide emergency power as required. The above modifications and replacement will improve the operation and maintenance of the water storage tank facilities.	M D	25	c	The Kettleman City Community Services District has three (3) water storage facilities in the system. The residential tank was installed in 1986 with a capacity of 400,000 gallons and the commercial tanks were installed in 1969 with a capacity of 165,000 gallons each for a total nonimal water storage capacity of 330,000 gallons. The interior and exterior coatings of the water storage tanks have expired and needs replaced. The commerical tanks were constructed without the current safety design standards and need to be modified. The existing cathodic protection system is inoperable needs to be replaced. The commerical tank facility installed in 1969 included a hydropnuematic tank, booster pump station, chlorination system and electrical equipment and needs to be upgraded to meet current design code requirements. The existing KCCSD booster pump system in the Commerical Area has no emergency backup power supply. In the past, KCCSD booster pump system and outages are frequent. The Commercial Area businesses, based upon recent outages, have been without power for a period of six (6) to ten (10) hours three (3) to four (4) times per year. Commercial businesses baceuse of no water supply and fire protection. We have included an emergency disel generator to	1,700,000	356	1,499 12	Kings	11	2009
1114 1610009	1610009-002	Kettleman City CSD		DRILL A NEW WELL - PROVIDE TREATMENT IF NECESSARY. OTHER - DESIGN AND CONSTRUCTION	м	25	с	TWO GROUNDWATER WELLS SUPPLY WATER TO THE SYSTEM - THEY RUN CONSTANTLY TO MEET THE SUMMER DEMAND	840,000	356	1,499 12	Kings	Ш	1998
1115 1210022	1210022-009	Resort Imprvmt. Dist. #1		Engineering design and construction of tanks.	М	25	С	Corrosion problems with John Tank, Omar Tank, West Tank, Dick Tank, and Kennedy Tank. Structural inspections are needed to assess damage.	464,600	513	1,500 01	Humboldt	I	1998

1116 1610007	1610007-004	Home Garden CSD	Well and Water Meters for New Well and LandTwo of the District's wells are within M Treatment Plant Expansion the proximity of 100 feet of each other. As a result, they do not operate efficiently. Therefore, the District needs to separate these wells and establish a distant solar power well site. This would entail the District purchasing land, drilling a well and installing a pump. In addition, the District needs to establish new lines from the new well back to the current Arsenic removal treatment facility. This entails excavation to install the pipe line. The existing facility currently complies with federal and state water standards. Booster Pumps The District needs to replace the booster pumps on three of its existing wells, due to age, general usage, and lift strain. This entials extracting the booster pumps out of the well and replacing old booster pumps and assemble pumps, and reinstalling booster pumps and assemble pumps on well. As a result of the continuing draught these pumps become a vital component of service delivery. In the spirit of conservation, the District would convert electric pump grid power to solar electric pump power. This entails purchasing land and establishing a solar energy field. Residential Water MetersThe installation of water meters would permit the District to more efficiently regulate and conserve water, and maintain the water at an acceptable level. The installation would require the excavation of each residents' home (450 residents) and install water	25	C	In Spring 2007, the Home Garden Community Services District began an Arsenic Removal Project. The Project's facility provides water to approximately 1800 residents in the grass root community of Home Garden, Kings County, Hanford. The State of California has designated Kings County as an extreme draught region. During 2007-2008, precipitation in the Hanford area was only 83% of the normal to date. Dry years impact the water supply for the District. In the last two years, ground level waters have dropped approximately 60 feet. The lowered water levels indicate groundwater pumping exceeds the recharge and the resulting increased lift adds to the District's operation and maintenance costs. Landscape watering accounts for greater than 50% of the water demand during the summer months and without restrictions this use can occur during the maximum hour demand period of the day. This, coupled with the anticipated growth in the District, would continue to place a strain on the water usage.To continue to meet the water demands of the overall community and business and residential expansion, the multi-year California draught, and the need to consume water, it is necessary that the District install a new well. The District would need to acquire additional land upon which it would install the well; in addition, install three new booster pumps on the existing wells, install residential water meters and have adequate work space	3,997,000	450	1,750 12	Kings		2009
1117 2210001	2210001-008	MARIPOSA PUBLIC UTILITY DIST	Mariposa PUD Water Tank Rehabilitation and Additional Storage d-100 and seismic requirements would be cost prohibitive. The inspecting engineer reccomends a second tank be constructed in the distribution pressure zone to act as a back up in the event the existing tank becomes compromised. The existing tank should be rehabilitated to at least meet current safety requirements and arrest further structural damage including the following:.Tank interior to be abrasive blast cleaned to SSPC-SP 10 and coated with an NSFapproved epoxy system Installation of one entryway 180 degrees from the existing entryway to meet Cal/OSHA requirements for confined space . Installation of anti-fall bars on the interior and exterior ladders (safety climbs) Install expansion joints on the two discharge nozzles.The new tank will be constructed either at the WTF next to the existing tank or at an alternative site within the distribution system. A minnimum 500,000 gallon capacity steel structure lis proposed.	25	C	In February of 2007 the Mariposa Public Utility District (MPUD) contracted with Los Osos Engineering to clean and provide recommendations for maintenance of an existing 1,000,000 gallon steel water storage tank near the MPUD water treatment facility (WTF). The result of the inspection was that the tank is in need of major repairs. The interior shell wall, floor, center column and roof surfaces all exhibited checked and cracked coatings with large areas of steel surface corrosion. This water tank is the primary storage for the entire distribution system within the service area. It is also the only option for the provision of disinfectant contact time for the treated surface water sources. The tank inspector conducted "pit depth" measurements and found areas of metal loss 2-3 mm, almost half of the steel tank wall thickness. The engineer estimated that penetration of these more serious corroded sections could occur eight years from the date of inspection. The tank ladders inside and out do not meet current OSHA employee safety requirments. The tank sits on a gravel bedding with no foundation or stabilizing structre. The nozzle outlets to the distribution system are not designed in complince with the construction standards for the seismic area. The Engineers report is available at the MPUD administrative office.	1,200,000	671	2,000 11	Mariposa	111	2009
1118 1810002	1810002-001	Westwood C.S.D.	Construct additional 500,000 gallon storage tank. Install M	25	С	Winter power outages cause water shortages.	500,000	910	2,000 02	Lassen	I.	1998

generator unit, new pump/tank control system and water meters.

Pump/level controls need replacing.

1119 3310047	3310047-011	Cabazon Water District	New Production Well for the Southeast Pressure Zone	The project proposed is to drill and equip a new well pumping plant in the Southeast Pressure Zone consisting of a well, well pumping plant, electrical switchgear and instrumentation, discharge and blow-off piping, masonry block control building, emergency standby generator, and required site work. It is anticipated that the new well would be capable of producing 1,000 gallons per minute, similar to the District's other two well pumping plants.	25	c	The District has a total of approximately 1,050 service connections. Of these, nearly 500 are located in its lowest pressure zone (the 1713 or Southeast Pressure Zone). The Southeast Pressure Zone's single 0.5 MG water storage reservoir was once supplied by Well #3, which was also a low producing well (250 gallons per minute at its best) and is currently inoperable (it literally will not turn on). The well also has no chlorination facilities, flow meter, building to house electrical equipment, or security. The District has determined that it would make more sense and be more cost effective to drill a new production well rather than perform the necessary repair and corrective work to make Well #3 operable. Currently, all of the water that is supplied to the Southeast Pressure Zone, the 2156 and 2021 Pressure Zones. All of the water that is supplied to the Southeast Pressure Zone must travel through a pressure reducing station located at the corner of Almond Street and Esperanza Avenue. From a planning and practical standpoint, it is not desirable to rely so heavily on pressure reducing stations, nor is it desirable to move such a large quantity of water between zones. Since the Southeast Pressure Zone consists of nearly one half of the District's current service connections, it would be much more efficient to provide the zone with	1,100,000	875	2,229 20	Riverside	v	2009
1120 3310047	3310047-010	Cabazon Water District	Replacement Interconnection with Morongo Indian Reservation to Provide Emergency Water Supply	Morongo has recently expressed an interest in M reactivating this emergency interconnection. Since most of the existing facilities are not usable, the District plans to remove all of the existing facilities and replace them with new, functioning facilities that are properly designed and specified. The new interconnection will primarily consist of the same facilities, except that the masonry block vault will be replaced with a precast concrete vault, the existing meters will be replaced with aggregate base, and the above ground piping will include pipe supports. The project will involve demolition of the existing interconnection, and construction of the following:Chain Link Fence and Gate Enclosure8" Piping and Fittings4" Piping and FittingsPrecast Concrete VaultFour 4" Gate ValvesTwo 8" Gate ValvesTwo 4" Compound MetersOne Double Check Detector Backflow AssemblyPipe SupportSAggregate Base	25	c	Cabazon Water District used to have a standby water service agreement with Casino Morongo to provide emergency backup water to the old casino if the need arose. Since the new casino was constructed, the metering station has been inactive and is no longer operational (verified on January 25, 2007 by District). The old metering station (located on Morongo property along the easterly boundary of Section 8, Township 3 South, Range 2 East, or the westerly side of Millard Canyon Road). The old metering station is not salvageable. The piping was never coated and is deteriorating rapidly. The gate valves are leaking. The double check detector backflow assembly is not functional or repairable. The masonry block vault is not in accordance with OSHA standards. In order to re- establish an emergency supply in this area, the District needs to replace the existing metering station and waterline inter-connection.	125,000	875	2,229 20	Riverside	v	2009

1121 3310047	3310047-008	Cabazon Water District	Replacement Pipelines in Southeast (1713) Pressure Zone within the Southeast Pressure Zone in the areas that essentially built out. In the areas that are not built new developers will be required to either construct new, adequately-sized pipelines or to extend exist adequately-sized pipelines. The existing pipelines were placed with 8" diameter PVC pipelines that will n current District standards and will also ensure that flow will be able to be provided for nearly one half the residents of Cabazon.In addition to replace the existing pipelines, the District intends to replace the existing service connections with new service connections. The service connections will be install accordance with the District's current standards, consisting of a service saddle, corporation stop, ser line, angle meter stop, curb stop, meter and meter in the area where existing streets are paved, the proposed project will also include trench paving rej and paving overlay, all in accordance with Riverside County standards. The total linear footage of 8" PV replacement pipelines is approximately 23,900 PV replacement pipelines. The otal linear footage of 8" PV replacement pipelines is approximately 23,900 PV replacemen	M tt are put, """ """ """"""""""""""""""""""""""	25	c	The District has approximately 1050 service connections. Of these, nearly 500 are located in its lowest pressure zone (the 1713 or Southeast Pressure Zone). The Southeast Pressure Zone is one of the oldest portions of the District's system. The District acquired the system from a private water system approximately 10 years ago. The system is ageing and undersized, with pipelines ranging from 1" diameter to a maximum 6" diameter.Most of the pipelines in the Southeast Pressure Zone are well past their service life, and are of insufficient diameter to provide adequate fire protection service for the area. It is not uncommon for the District to record maximum available flow in the Southeast Pressure Zone of 300 GPM. The County of Riverside generally requires a minimum of 1000 GPM. Additionally, existing pipelines are unable to handle even minor pressure increases without developing leaks. Due to the lack of shutoff valves, many residences are left without water until the leaks are fixed.	5,300,000	875	2,229 20	Riverside	v	2009
1122 3310047	3310047-009	Cabazon Water District	Security System for Water Supply Facilities and the security upgrades, the District plans is supply Facilities install weather-resistant video cameras, tilt & pan capabilities, motion detector based on the change - pixels with thermal imaging to determine whether movement is an animal, vehicle, person, etc. This capability will reduce false alarms due to debris beil blown by high winds common in the Pass (Cabazon area. Once an intrusion is detected, an alert will be to an off-site alarm monitoring facility. Alarm monitoring personnel will immediately view the "re time" images. Additionally, the District plans to inst Supervisory Control and Data Acquisition (SCADA) system. SCADA is a common process automation sy which is used to gather data from sensors and instruments located at water facilities to transmit display this data at a central site for either control monitoring purposes. The collected data will be vie	o M of the sent al- all a stem nd or wed	25	c	The community's water distribution and treatment system has been the target of vandalism, particularly during the past two (2) years. District management and security personnel have been working closely with the Riverside Sheriff's Department, Cabazon Station, in investigating these criminal acts against water facilities, property, and personnel. Patrol Deputies and District security team members patrol District water lines and facilities. The Sheriff Posse and the District deploy a mounted patrol periodically.Numerous criminal incidents have gone undetected until after the fact, and often no evidence has been left for law enforcement to determine the perpetrators. Incidents have included damage to the District's Jensen water treatment and reservoir facility, and theft of District owned vehicles. With limited District funds and the Sheriff's Department's minimal manpower due to their budget	225,000	875	2,229 20	Riverside	v	2009

constraints, it is essential to district operations to

equipment.

repair, improve, and upgrade security measures and

on one or more SCADA Host computers located at the

operators, specially during non-business hours,

weekends, and holidays to be able to monitor water levels at the three (3) tanks and wells operated by the District. In the event when the water level exceeds a preset threshold, SCADA will activate the system pumps to move water to the tanks with low water levels. Other common analog signals that SCADA systems monitor and control are levels, temperatures, pressures, flow

central or master site. It is imperative that District water

1123 3310047	3310047-007	Cabazon Water District	Construction of New Interconnection to Provide Emergency Service to Pressure Zones 2156 and 2021	Cabazon Water District's Well No. 2 serves the district's M highest pressure zone, Zone 2156. The district currently lacks a backup supply if Well No 2 fails. the Manager of Morongo Indian Reservation's Water Department recently informed the District that the Tribe has two parallel 16" pipelines that could service the 2156 pressure zone in the event that Well No 2 fails. The pipelines have pressures of approximatley 100 psi and 20 psi. In order to connect to the Tribe's pipelines, the District will need to construct a new interconnection within the District's existing reservoir No. 2 site. The construction would require the following:Chain Link Fence and Gate Enclosure8" Piping and Fittings4" Piping and FittingsPrecast Concrete VaultFour 4" Gate ValvesFive 8" Gate ValvesTwo 4" Compound MetersOne Double Check Detector Backflow AssemblyPipe SupportsAggregate BaseConstruction for this project could begin in the near term.	25	С	The District currently lacks a backup water supply or distribution system tobe used in the event of an emergency. If an emergency were to happen, water service could fail to portions of the District, with potentially devastating impacts. To provide for an emergency supply for the District's highest pressure zones, specifically those served by District Well No. 2, the District is planning to construct an interconnection with two existing water lines owned and operated by the nearby Morongo Indian Tribe. This interconnection will provide District ratepayers with access to a backup water supply in the event of a failure associated with Well No. 2 and its supply lines.	300,000	875	2,229 20	Riverside	v	2009
1124 5410038	5410038-006	Terra Bella Irrigation District - TBT	Electronic Water Meter Reading Project	The project includes installing 700 5/8-inch x 3/4-inch M water meters with data transmitting capabilities and a laptop to receive water consumption data for billing and water system management purposes. Further, it is estimated that 350 meter boxes, lids and meter stops will be removed and replaced with new meter boxes, lids and water stops. The installation of these meter reading and transmitting devices will significantly reduce the amount of District staff time devoted to meter reading and will free up staff time for other needed operation and maintenance activities.	25	с	The Terra Bella Irrigation District (District) furnishes potable water to residential users located in the District's service area. As the District's treatment, production and distribution system ages, there is more demand on the District's personnel to perform operation and maintenance activities. The periodic reading of the meters reduces the amount of time District staff has to devote to operation and maintenance duties.	550,000	714	2,340 12	Tulare	III	2009
1125 5410038	5410038-004	Terra Bella Irrigation District - TBT	Vandalia Intertie	A pipeline that interties the Terra Bella Irrigation District M (TBID) and the Vandalia Irrigation District (VID) is needed to provide TBID with water during canal water supply interruptions. The proposed Project consists of the installation of an intertie pipeline between the VID distribution system and the TBID's Pump Station 3. The TBID has existing chlorination facilities at Pump Station 3. This intertie will allow TBID to receive water from VID during periods when the Friant-Kern Canal is out of service. The TBID can return water to VID during the fall months of the year, if necessary. This will assist VID during dry years. The Project provides a dependable water supply during canal outages or periods of poor quality water in the Friant-Kern Canal. In addition, this intertie will provide TBID with a backup water supply that is developed from local sources. The proposed Project will consist of the design and construction of the interconnecting pipeline. The districts will also need to develop the terms and conditions for the operation and maintenance of the pipeline. The design component of the Project will consist of surveying, California Environmental Quality Act (CEQA) procedures, right-of-way acquisition and the detailed design of the improvements. The design of the	25	c	The Terra Bella Irrigation District (TBID) primarily receives its domestic and agricultural water supply through the Friant-Kern Canal of the Central Valley Project. The source of this supply is from the San Joaquin River Watershed. This surface water supply represents 96 percent of the TBID's total supply with the remainder coming from groundwater wells. The surface water supply from the Friant-Kern Canal is typically of excellent quality. During the year, however, the water quality can be degraded due to surface inflows into the canal. The canal is also dewatered every two to three years during the winter months for maintenance activities. In addition, the canal is subject to unscheduled outages that would disrupt the water supply. These situations result in the TBID having insufficient water supply available. The Vandalia Irrigation District (VID) lies northeast of TBID. VID has a well field that is recharged naturally and artificially with water retained from the Tule River. These water supplies are of excellent quality. The major irrigation demands within VID occur during the summer and fall months. During the winter, VID has additional capacity available within their system. TBID relies primarily on surface water for its domestic and agricultural water supply. Interruptions to its	650,000	714	2,340 12	Tulare	111	2007

1126 0310021	0310021-006	Amador County Service Area #3/Unit 6	Lake Camanche Groundwater Management Plan & Supply Study	The project proposed is to develop a local groundwater M management plan for the Lake Camanche area in Amador County. By analyzing this groundwater basin's sustainability and volume, it could lead to a conjunctive use recharge area being identified and used in conjunction with San Joaquin County as part of the Intergrated Regional Conjunctive Use Project (IRCUP). The project consists of three parts: 1) a phased paper collection and field data collection and analysis program to fill gaps in the conceptual groundwater model; 2) a public outreach program to identify key stakeholders to be involved in the Plan development process and relevant issues and concerns to be addressed by the plan, and to form the basis for a regional forum for long- term implementation of the Plan; and 3) Preparation of the IRGWMP itself.	25	С	The Ca Department of Public Health has imposed restrictions on the Lake Camanche Water System which places a moritorium on any new connection until a grounwater managment plan/water supply study has been completed. CDPH ahs required that we verify the sustainability of the groundwater supply before any new connection are allowed.	250,000	723	2,386 10	Amador	111	2009
1127 1710001	1710001-011	Clearlake Oaks County Water District	Rehabilitate Distribution System	Funds from this project would be used to replace a M redwood storage tank with a 465,000 gallon reservoir and booster station with telemetry and back-up propane generator. Another tank would be replaced with a 100,000 gallon reservoir and booster station with a propane back-up generator. A third booster station with telemetry and a propane back-up generator would be installed.4,500 feet of PVC main would replace existing asbestos mains in the Caltrans right-of-way.	25	c	Major storage components (redwood tanks) are deteriorating and will potentially fail causing a loss of system storage, pressure and massive property damage. Current redwood tank design limits the ability to circulate and improve water quality to reduce disinfection by-products. Existing storage does not meet current waterworks standards. Asbestos mains are failing due to age and ground movement, causing potentially catastrophic highway failure. Booster stations have no back-up power causing low pressure problems, potentially allowing backsiphonage and contamination. Project funds would be used to replace 4,500 feet of asbestos main.	2,100,000	1,667	2,458 03	Lake	Π	2009
1128 1710001	1710001-009	Clearlake Oaks County Water District	Clearlake Oaks 2007 Infrastructure Improvements-Storage Tank	Install a 465,000 gallon reservoir and booster station M with telemerty and back-up propane generator. Install a 100,000 gallon reservoir and booster station with a propane back-up generator. Install a new booster station with telemetry and a propane back-up generator.	25	с	Major storage components, (redwood tanks) are deteriorating and will fail causing massive property damage, redwood tanks limit the ability to cycle water to reduce disinfection by-products. Existing storage does not meet current waterworks standards.	863,500	1,667	2,458 03	Lake	I	2007

1129 1210015	1210015-003	Willow Creek C.S.D.	Hodgson Tank & VFD Pump Replacement	The scope of work of the Hodgson Tank & Pump Replacement will consist of the following:A. Install a 10,000 gallon poly tank to provide customers with water during the demolition and construction period.B. Install new pump and level control mechanisms.C. Demolish and remove old tank & foundation. Remove old pumps.D. Install cement foundation for the installation of the new tank.E. Instal valve and drain system.F. Install new 150,000 gallon welded steel tank with OSHA safety ladders, rails, etc.G. Replace two existing 20 horsepower motors and pumps. The replacement motors will be heavy duty, vertical, low energy use muti stage units.H. Install variable frequency drive unit on each motor for additional energy conservation.I. Install a six foot chainlink fence with security wire on top surrounding the entire tank site perimeter.	M	25	C	We have water facility storage tanks and pump stations that are in serious deterioration due to their age. The tank and pump station that we would like to address in this cycle of funding is within the Hodgson pressure zone. The District would like to replace the 41 year old redwood storage tank and install two new energy efficient variable frequency drive motors and pumps. The Hodgson tank is a 100,000 gallon redwood tank that has deteriorated over the years. The seals and most of the lower and upper staves are victim of dry rot. The condition of the tank is at the end of its life cycle. Despite annual maintenance and repairs, the District has allocated more than \$ 22,000 dollars the last eight years in maintenance. The tank can leak up to 30,000 gallons per day before temporary repairs slow down leaks with stop gap measures. Pumping costs add thousands of dollars to our operation each year due to the failed redwood tank. The replacement of the tank with a steel welded poxy coated tank would extend service many decades for our community. Energy costs are a high priority for the District. The replacement ot the two pumps and motors would achieve that goal. The pumps would be multi-stage with heavy duty motors that are variable frequency driven. The replacement would improve management of energy use at this cite Security is a bith priordy with this projert. We	349,000	889	2,500 01	Humboldt	I	2009
								propose to install a security fence. This part of the						
1130 1510009	1510009-001	ERSKINE CREEK WC		Interior mainline replacement program	М	25	С	Insufficient source and supply capacity for reliablity.	350,000	1,211	2,500 19	Kern	Ш	1998
1131 5510005	5510005-005	TWAIN HARTE COMMUNITY SERVICES DIS	TR Ponderosa Drive and Poppy Lane	Install new 6-inch PVC water lines and water services. (Ponderosa Dr and Poppy Ln)	М	25	C	Old and deteriorated water services and water lines. The lines are leaking and causing low pressure problems.	70,000	1,530	2,568 11	Tuolumne	Ш	2003
1132 4510007	4510007-001	Cottonwood County Water Dist.		Construct 1,000,000-gallon tank.	М	25	С	Inadequate storage capacity.	750,000	1,065	2,700 02	Shasta	1	2001
1133 4810021	4810021-003	City of Vallejo-Lakes System		replace old pipes in the area with 4,750 lineal feet of 6" PVC pipe including the installation of four new hydrants	' M s.	25	C	Water under risk of microbial contamination due to old and corroded cast iron pipes.	321,000	842	2,800 04	Solano	Ш	1998
1134 4810021	4810021-002	City of Vallejo-Lakes System		To consolidate with that of the Green Valley Water System.	М	25	с	Water system does not meet requirements of SWTR.	3,600,000	842	2,800 04	Solano	П	1998
1135 4710009	4710009-001	City of Weed	City of Weed Water System Health and Reliability Improvements	<ol> <li>Replace existing Bel Air storage tank with new 0.625 MG steel tank2. Add new well to meet demands and overall system reliability3. Approximately 1000' of 10" water line for looping water system for health and saftey4. New 0.75 MG steel water tank needed storage for new comerical and new housing</li> </ol>	M	25	С	CDPH in their letter of March 12, 2008 to the City of Weed regarding proposed water system improvements stated "This office fully supports all of the proposed work since it would increase the reliability of the City's water system." Regarding the Bel Air Tank the letter states "that a structural evaluation performed by your engineer has determined that the corrosion is serious enough to endanger the structural integrity of the tank roof and possibly the floor. We agree that this tank should be replaced as soon as possible." On the water lines the letter reads "The water mains to be replaced are generally old, undersized steel pipes. The	2,079,900	1,042	2,963 01	Siskiyou	I	2009

replacement of these water mains will help ensure uninterrupted service to the affected customers, increase the reliability of the distribution system, and conform to the California Waterworks Standards." For the water well the letter informed the City "An additional well source within the community would help meet future demands and greatly increase the overall system reliabilty." A water tank is also needed

for for system storage and reliability.

1136 2010007	2010007-010	HILLVIEW WC-OAKHURST/SIERRA LAKES	Oakhurst 2010007 Source Storage - Fireflow and Infrastructure	E- This project would replace 15,000 feet of 12" mains with M 14" HDPE pipe. The new mains would be installed outside of the fog lines on Highway 41 and 49 to eliminate the need to excavate existing road bed. A new source well would be drilled on an existing well lot (Pine Ridge Way) to provide more continuous water supply and an existing 437,000 gallon storage tank that has deteriorated beyond the point of repair or refurbishing would be removed and replaced with a 600,000 gallon storage tank for additional distributed system storage and fire flow reserves. Approximately 1900' of 6' high privacy fencing with razor wire and lockable swing gates would complete the security needs for the remaining vulnerable water delivery facilities.	25	c	Aging 12" mains in Oakhurst threaten safe consistent service due to failure and limit the systems ability to deliver required fire flow. Because of the varying terrain and elevations, in this high fire danger area, extreme pressure fluctuations can occur in the lower part of the water delivery system when there is high or irregular flow. There is also a lack of storage to provide reserves for fire flow. In emergency or drought conditions current ground water sources would not be able to recharged the existing storage tanks in a timely way. Drought conditions and higher consumption in warmer months serve to magnify all the existing problems of the aging inadequate infrastructure. In addition to the aging infrastructure problems, there are about half of our well or storage sites that do not have security fencing to discourage vandalism, theft or terrorism.	4,655,100	1,007	3,006 11	Madera		2009
1137 3310018	3310018-001	Home Gardens County WD		A water treatment plant with biological denitrification, M filtration and disinfection, plus stroage tank for blending, detention and equalization.	25	C	NO3 contamination of the local groundwater has caused shut down of the District's most productive wells, and requires purchase of water from City of Riverside at high costs and there is no guarantee of supply.	1,000,000	811	3,044 20	Riverside	v	1998
1138 2410007	2410007-003	PLANADA CSD	Replace Failing Water Lines, Phase 1	The existing thin walled PVC pipe will be replaced with M AWWA C900 rubber gasketed PVC Class 150 pipe. Undersized pipelines (i.e., 2" & 3") will be replaced with 6" pipe. Fire hydrants will be added to provide for proper flushing. Existing water services will be reconnected to the new water lines	25	C	Much of the existing water system consists of water lines that are pressure rated PVC, probably per ASTM 2241. This is a thin walled PVC pipe that is normally used for agricultural or landscape purposes. This pipe has aged to the point where it has become brittle. When hit with a shovel it can split and leak. Maintenance personnel have a difficult time doing repairs due to the fragile nature of the pipe. There is a real concern about contamination from leaking pipes. Also, there are portions of the piping system that are 2" and 3" in diameter, and in these areas the water pressure can fall below 20 psi. In addition, some areas of the system do not have sufficient flushing points, so fire hydrants will be added. This is the first phase of a three phased project.	1,300,000	1,335	4,000 11	Merced	11	2009
1139 1710006 1140 0310003	1710006-002 0310003-014	Konocti County Water District AWA Sutter Creek	Broad Street Water Improvement Project	Construct new 0.5 MG storage tank. M The project includes the installation of 1,105 feet of 10 M inch water main along Broad street in Sutter Creek. The addition of this water main will avoid high velocities and low pressures in the pipe system which is anticipated to occur once the City begins service during the peak demand periods.	25 25	C C	Aged water storage tanks. The Water Agency has been working with the City of Plymouth for approximately five years to get a treated water main to the City from the Amador Water System (Tanner WTP) to provide a reliable water supply. The City has been under a water moritorium for approximately ten years. A pipeline construction project has just begun which uses a combination of new and existing water mains. The Water Agency determined that once the service is established for the City, on of the existing mains will begin experiencing high velocities (greater than 7 Ft/s) and low pressures at higher demand periods. In order to maintain presuures and adequate flows to both the City and the existing customers in the Sutter Creek area, 1105 feet of 10 inch water main needs to be installed along Broad street in Sutter Creek.	625,000 305,570	1,744 1,654	4,986 03 5,458 10	Lake Amador	11 11	1998 2009

1141 0310003	0310003-013	AWA Sutter Creek	Leak Detection Water Conservation Project	The purpose of the study will be to quantify disparity N between water production and retail deliveries, known as unnacounted for water. Recommedations from the study will identify opportunities for water conservation improvements. The water audit will delineate production and retail discrepancies, help identify programmatic improvements to water conservation. Surveys would identify specific actions of systme improvments that can be made to promote water conservation to large landscape and commercial accounts and quantifying potential water losses. Infrastructure improvement study of the entire distribution system, which includes reporting and monitoring to ensure that the project moves forward as planned.	и	25	c	The Amador Water Agency's unaccounted for water is estimated between 800 and 1,000 AFY, and at least 95% of this lost water is derived from the Mokelumne River. The source of the losses are attributed to raw water ditch delivery system, pipeline and storage tank leaks, unauthorized water uses, and unmetered users. Parts of the system are antiquated and aging faster than can be maintained, such as 7 wooden tanks that leak 1-5 gallons per minute on average. An extensive water audit and leak detection study would establish a water balance and identify oppurtunities for water conservation.	150,000	1,654	5,458 10	Amador	111	2009
1142 0410004	0410004-002	City of Gridley	Water Main Replacement Project	The City of Gridley will install approximately 3,300 feet M of 6-inch and 8-inch diameter distribution system piping in Peach Street from Idaho Street to Oregon Street; in Nevada Street from Peach Street to Oak Street; in Oak Street from California Street to Maine Street; in Maine Street from Oak Street to Spruce Street; in the north- south alley between Indiana Street and Vermont Street from Bridgeford Street to Vermont Street; and include all fittings, fire hydrants, valves and other appurtenant equipment required to connect to the existing distribution system and homes.	и	25	С	Portions of the City's water distribution system were installed in the early 1900's. Areas within the City have old galvanized iron pipe and dead end water mains. The old galvanized iron pipe is undersized and does not meet water system flow or pressure requirements. Replacement of old water mains and services, and providing looped water mains will improve water distribution pressure and fire hydrants flows.	493,000	2,058	6,403 21	Butte	I	2009
1143 4710011	4710011-001	City of Yreka		Construct 1.5 MG storage tank for north end of town. N	И	25	с	Experiencing low pressures at north end of town during	1,000,000	2,876	7,290 01	Siskiyou	I	1998
1144 1010044	1010044-002	Huron, City of		PROVIDE A SECOND SOURCE OF SURFACE WATER BY M CONNECTING TO LATERAL 22R WHICH IS ABOUT 5,000 FEET AWAY FROM THE PLANT SITE.	И	25	с	RAW WATER FROM THE CALIFORNIA AQUEDUCT IS DELIVERED VIA LATERAL 23R WHICH CAN BE PERIODICALLY SHUT DOWN FOR MAINTENANCE FOR 2 TO 4 DAYS.	155,000	860	7,306 23	Fresno	Ш	1998
1145 5110001	5110001-018	City of Live Oak	City of Live Oak SCADA System and Controls Upgrade Water Main Replacement Project	The City's SCADA system will be upgraded in order to improve water delivery to residents and improve the coordination of the storage tank and booster pump station with the other wells on the City water system. The project will include installation of a new central radio at the storage tank site to improve system-wide communication, two new SCADA computers, a new fill valve and control appurtenances at the storage tank to allow Wells 3, 4 and 5 to fill the storage tank during periods of low demand, installing a variable speed drive and appurtenant controls at Well 4, and installing new control panels and motor controls at Wells 1A, 2A and 5 to allow the SCADA computers to control all 5 wells simultaneously.	и	25	C	In 2003, a 1.4 MG water storage tank was constructed at the City's Memorial Park. The tank is filled by two City wells on the same site (Wells 1A and 2A). Discharge from the tank is through a booster pump station capable of pumping 4200 GPM. The remainder of the City's supply is from three individual wells. Two of the wells are connected to the City's existing SCADA system but the existing system does not allow the wells and the storage tank to operate efficiently together on the distribution system. This results in hard on-off operation of Well 3. Neither of these wells can currently be used during periods of low demand to fill the storage tank.	400,000	2,186	7,475 21	Sutter	I	2009
1146 1510041	1510041-008	North of the River MWD	Disinfection By-Products Reduction Project	This project would install Solarbee tank mixing devices, N along with associated electronics, and chlorination equipment. The tanks being fully mixed will allow for a uniform chlorine level, reducing the amount of chlorine added, and provide a better quality water.	М	25	С	Poor mixing within the two 750 elevation and two 900 elevation reserviors has at times produced high TTHM readings.	200,000	2,025	7,500 12	Kern	III	2009

1147 1510041	1510041-004	North of the River MWD	North Highland Park Turn- out Project	This Project would create another Turn-out, connected to the Oildale Mutual water system; thereby reducing the water velocities upstream.	Μ	25	с	The North Highland Park portion of the District is served by one turn-out. The District has received complaints about fine silt within the water. This area was once served water from wells. We believe that the source of the silt. Our investigation has shown that silts trapped within the pipe collars are being stirred up during times of high use due to the significant velocities of the ditribution water. The District performs a unidirectional flushing twice a year, and has repeatedly flushed this problem area to no avail.	150,000	2,025	7,500 12	Kern	111	2009
1148 5410020	5410020-003	Woodlake, City of		INSTALLATION OF 500,000 GAL RESERVOIR. OTHER - DESIGN AND CONSTRUCTION	м	25	С	NEW WELL AND RESERVOIR CAPACITY TO MEET DEMAND	450,000	1,784	7,524 12	Tulare	Ш	1998
1149 5410020	5410020-002	Woodlake, City of		ENGINEERING TO LOOP THE SYSTEM. OTHER - DESIGN AND CONSTRUCTION	М	25	С	DEAD ENDS IN DISTRIBUTION PIPES RESULTING IN POSITIVE BACTERIOLOGICAL SAMPLING	75,000	1,784	7,524 12	Tulare	Ш	1998
1150 5410020	5410020-004	Woodlake, City of	Water System Improvements and water meters	VARIOUS SYSTEM IMPROVEMENTS PER "WATER MASTER PLAN". OTHER - DESIGN AND CONSTRUCT. Install water meters on all unmetered services	м	25	с	LOW WATER PRESSURE AND INADEQUATE FIRE FLOWS IN SOME AREAS OF SYSTEM	1,600,000	1,784	7,524 12	Tulare	Ш	2007
1151 5410020	5410020-008	Woodlake, City of	Woodlake Water Supply Project	The proposed project is the drilling of a new water well (preceeded by the drilling of a test well) that meets Titl 22 requirements with a capacity of approximately 700 gpm. The new well would be drilled on land already owned by the City in an area where other good quality wells have been drilled in the past.	l M le	25	с	The City has lost two wells due to contamination. Well #6 is out of service due to high nitrates and Well #1 is no longer active due to recurring bacteriological problems. These wells reportedly produced about 620 to 400 gpm respectively. Reactivating these two wells is not considered a viable option. The drier climate has lowered the ground water in the area. Due to this, there is an insufficient supply of water for maximum day demand and fire protection. The existing water supply source capacity is 450 gpm deficient in meeting system needs.	1,030,000	1,784	7,524 12	Tulare	11	2009
1152 5410020	5410020-001	Woodlake, City of		CONSTRUCTION OF ADDITIONAL WELL WITH STANDBY POWER. OTHER - DESIGN AND CONSTRUCTION	М	25	С	CAN NOT SUPPLY PEAK DAY AND PEAK MONTH DEMANDS	300,000	1,784	7,524 12	Tulare	Ш	1998
1153 5410020	5410020-006	Woodlake, City of		Construct additional water tank to meet needs and provide adequate fire flow.	М	25	С	Capacity issue due to size of elevated water tank being too small.	1,500,000	1,784	7,524 12	Tulare	ш	2004
1154 1710002	1710002-001	Golden State Water CoClearlake System		Replace with 1,000 ft of 8 inch PVC in Lakeshore Dr.	М	25	С	Existing 2 inch steel pipe has deteriorated beyond it's economical life. The existing main has had numerous leaks, requiring shutdown for repair.	90,000	2,238	7,544 03	Lake	II	1998

1155 2310004	2310004-002	Willits, City of
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## Phase II

Main Street Water Main The City proposes to replace approximately 2,200 linear M Replacement Project, feet of compromised water main and associated connections along Highway 101, which travels through the heart of Willits and serves as our Main Street. The proposed project would replace the existing undersized failing line with a 12" Ductile Iron Pipe Class 350 water main. This project would also replace 3 fire hydrants, 14 water meters with boxes, 7 tie-ins, 13 valves and miscellaneous fittings. The project will also require a bridge crossing and water meter relocation. Due to traffic restrictions on Highway 101, some construction will occur at night. Pending funding, the City expects to begin the project in July of 2009.

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water main servicing the northern most section of town has deteriorated to a condition of guestionable reliability and is in dire need of replacement. This section of main is not only undersized for the area it services, but it is also putting additional demand on the City's dwindling water supply due to leakage. It is anticipated that by replacing this line the City will save an estimated 84 million gallons of water per year. Along with a reduction of leakage and improved reliability, this project would serve to bolster fire fighting capabilities to both the school district and industrial properties along the Highway 101 corridor. This project will gualify for an exemption under CEQA because it proposes to replace an existing line. Recent replacement of the connecting section of this main line has proven that the amount of water produced at the water treatment plant and introduced into the system will be greatly reduced as a result. This, in turn, promotes increased contact times for disinfection, more accurate accounting of water loss (UAF), and a reduction of overall expenses now dedicated to water production and failing infrastructure. This project would reduce production, reduce unaccounted for water (UAF), promote conservation, and will assist us with our efforts to increase our source capacity as mandated by CDPHS.

2,260,226

2.168

8,062 03

Mendocino

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2009

2.500.000	2.558	8.508 10	Amador	111	2009

1156 0310012 0310012-009 AWA Buckhorn Plant

Storage Project

CAWP Emergency and Fire The Project includes the installation of a bolted or М welded steel tank on a centrally located parcel already owned by the Water Agency and zoned for a water storage tank. The project also includes an emergency generator at the Mace Meadows Pump Station which is utilized to pump water to three of the system water tanks. The balance of the system tanks can be fed by gravity from the proposed 2.0 million gallon treated water stoage tank. The project also includes monitoring and control devices wich communicate to the Buckhorn water treatment plant. This project will enhancve the commercial and residential fire protection and emergency storage for mor than 10 communities in CAWP water system which are located in rural Amador County.

Amador Water Project which serves communities along Highway 88, a steep and heavily wooded area of Amador County. The existing system of storage tanks and distribution water mains are not adequately sized to provide fire protection and provide for emergency water supply in case of outages in much of the area. Many of the existing undersized storage tanks are more than 40 years old. The placement of a treated water storage tank in a centrally located area will greatly enhance the ability to fight fires even during power outages. Water flows by gravity to most areas; however an emergency generator will be added for a pump station that serves a portion of the system.

The Water Agency owns and operates the Central

2,558	8,508 10	Amador	Ш	2009

1157 3610025	3610025-006	JOSHUA BASIN CWD	Pipeline Replacement Project	The project consists of constructing approximately 15,000 linear feet of 8-inch PVC or ductile iron water pipelines. The location of these pipeline replacements are spread out over the various pressure zones of the District. For cost effectiveness, the District has packaged these replacements together to provide for increased contractor interest and competitiveness. The pipeline construction will also include various appurtenances, including valves, air-vac valves, blow offs and fire hydrants.	Μ	25	C	A large portion of the District's water system is comprised of an aging and relatively small diameter distribution system network, with distributed groundwater wells for water supply. The system is arranged in pressure zones with booster stations and reservoirs moving the water from the lower zones into the upper zones. The distributed nature of the groundwater wells results in smaller pipeline diameters for conveyance of water from source to consumer. The water system was coalesced from several smaller localized private waters systems, eventually connecting in a regional distribution system. As a result, large portions of the system were originally constructed of 4- and 6-inch welded steel pipeline materials. As the District's service population has grown over many years, these smaller diameter pipelines have become overtaxed, particularly in the area of providing required fire flow protection. Additionally, the small diameter pipelines have begun to deteriorate, resulting in numerous system breaks and outages. The District has developed a small diameter pipeline replacement project to systematically replace these pipelines. Replacement of these pipelines results in consumer health protection by reduction of breaks and elimination of potential contamination, increases system reliability and safety, and provides the ability of the District to meet current fire flow requirements for	1,500,000	4,370	9,000 13	San Bernardino	V	2009
1158 0410008	0410008-003	Thermalito Water & Sewer District		Replace old steel mainline. Design and construct new 2.5 MG storage tank.	М	25	С	Critical need of steel main line replacement. The district also requires an additional 2.5 MG enclosed reservoir and appurtenances.	4,000,000	2,779	9,513 21	Butte	ļ	1998
1159 4510006	4510006-001	City of Shasta Lake	Intake Piping in Shasta Dam	Project implementation would result in a third intake pipe being placed in Shasta Dam to allow withdrawal of water at the elevation 850 piping gallery. This would create an additional mechanism (opportunity) for increasing the volume of warmer surface water being withdrawn, thereby decreasing the draw on the deeper cold water pool. The new piping would connect to the existing elevation 850 piping gallery at four locations, and then extend out the existing ventilation/drainage shaft and connect to the existing 16-inch raw water main on the face of the dam. The preliminary layout for the proposed piping is very similar to the piping previously installed at the elevation 750 and 950 piping gallery levels, except that a flow meter and temperature sensor will be incorporated at the new piping in order to monitor the temperature of water being withdrawn at the 850 level. The data from these instruments will be sent to the raw water pump station at the City's water teatment plant by a radio telemetry system. This additional piping will allow the City's transferred water to be withdrawn above the cold water pool in all but the most extreme drought conditions. The proposed piping could also be extended in the future to four additional withdrawal points to allow for withdrawal of additional transferred water and/or the existing City and USBR allocations from the Elevation 850 piping gallery.The estimated cost of this	M	25	c	The City of Shasta Lake has reached a critical turning point in the maturation of its water system. The City cannot accomodate the inevitable growth of the future or protect against a water shortage during drought periods without being able to access additional quantities of water during periods of high demand.Transfer surface water, beyond the Central Valley Project (CVP) allocation from Shasta Lake, is the sole source of supplemental municipal and industrial water for the City. The City's present supply system consists of an intake piping system from inside Shasta Dam, a raw water pump station at the base of the dam, a treatment plant , and a 16-20 inch treated water transmission main to the City. All water transfers are subject to prior approval from the US Bureau of Reclamation (USBR). The City is allocated and withdraws water through two intakes from inside Shasta Dam at the 750 and 960 foot levels. When the level of Shasta Lake drops below approximately elevation 970, all of the water withdrawn must be taken from the 750 foot level, reducing the amount of water available in the cold water pool for the Salmon fishery downstream of Shasta Dam. The city experiences hot, dry summers with little or no precipitation occurring from November to April. Supplementing the City's surface water supply with groundwater is not a viable option because the City lies outside the Redding	615,000	3,609	10,293 02	Shasta	I	2009
1160 1010025	1010025-002	PARLIER, CITY OF	New Well	Construct a test well and a new production well.	м	25	С	Need additional water supply to maintain adequate pressures for domestic and fire flows.	601,000	2,229	12,058 11	Fresno	Ш	2002

1161 1510022	1510022-004	West Kern CWD	WKWDPA04 Installation of 1 MG Welded Steel Storage Tank, Station G	The scope of the project includes the earth work, piping M and the installation of a new one million gallon tank at Station G. Underground piping consists of inlet, outlet and overflow piping. Earthwork inclueds over excavation and comapction of the tank pad area and installation of a concrete tank ring with seismic anchors. Upon completion of construction the new tank would tested and painting and coating of all steel surfaces would follow. The tank sould also be fitted with a new cathodic protection system which would be activated approxiamtly one year after completion of painting and coating.	25	с	During peak demand periods at Pump Station G, the pumps located at Pump Station B (up gradiant) are required to run due to lack of storage at Station G. When Station B is pumping under this scenario it requires additional electric powered pumps during peak energy demand periods. If additional storage could be added at Station G, Station B could pump the additional one million gallons of water at night during off peak periods using existing natural gas engines. The power savings during the summer demand periods would equal a substantial portion of the project cost.	1,272,700	7,589	16,630 12	Kern	Ш	2009
1162 1510022	1510022-003	West Kern CWD	WKWDPA02South Taft Water System Replacements/Improveme nts	The proposed scope of work includes the installation of M approximately one mile of 12" transmission mainline and five miles of 8" distribution line, appurtenance and thirty three fire hydrants. The new facilities will be replacing the existing undersized and deteriorated infrastructure and re located to the street front within public rights of way. The project scope shall also include new service lines and meters.	25	с	South Taft is comprised of approximately 40 blocks of low income residential housing. The existing water system infrastructure originally installed in the mid 1920's, is primarily composed of 2.5, 3.5 and 4.5 inch steel water lines typicaly located in alley ways. In addition to the above pipelines, there is also a small amount of 6 inch transite waterline. Due to age, material type, internal condition and effective pipe diameters, the current water quality, fire flow and fire protection are currently inadequate within the South Taft Area and do not meet current water works standards.	4,311,515	7,589	16,630 12	Kern	Ш	2009
1163 1510022	1510022-005	West Kern CWD	WKWDPA03 Re Coating Tank#8, Pump Station A	The subject tank was originally constructed in 1926 of M rivited steel plates and wooden roof. The cathodic protection system as well as an agressive inspection and coating program has enabled this tank to remain in service to date. The tank currently serves as one of three, primary storage reserviors at the District's Pump Station A. The proposed scope of work for this project includes the complete interior and exterior re coating of the 920,000 gal water storage tank whose dimensions are 115' x 15'. Recoating of the tank is necessary due to extensive coating failures and exposure of bare metal as was noted in a recent dive and video inspection conducted 01/27/09. Preservation of this crucial storage tank is critical to the District storage requirement needs and ability to operate.	25	c	The problem is promarily an issue of protecting the steel plates from further corrosion. The secondary issue is water quality. Station A is the destination for all water pumped from the well field, which has very small amounts of sand, which settles out on steel surfaces over time. Steel surfaces that are protected with coating are unaffected. Steel surfaces which are not protected will corrode rapidly, collect sand deposits and provide a more suitable environment for bacteria.	240,120	7,589	16,630 12	Kern	III	2009
1164 1210001	1210001-004	City of Arcata	Downtown Steel Water Line Replacement Project	There is approximately 11,000 linear feet of water M distribution main lines that need replacement at several locations in Arcata's downtown "core". These aged mains are made of various materials, including asbestos concrete. Arcata has experienced catastrophic failures of water mains in the recent past, and only expects this to continue without replacement. The scope of work would include excavation and replacement of these water mains, along with all necessary valves, laterals, and other ancillary equipment to provide safe, reliable service to customers.	25	с	Arcata's downtown water distribution system is quite aged in some locations, and seriously deteriorated along portions of the mains. Replacement of lines at key locations will renew the life of the downtown water system that is so important to Arcata's well being.	1,550,000	5,278	16,651 01	Humboldt	I	2009
1165 1210001	1210001-005	City of Arcata	New Panorama Water Storage Tank and Pump Station	The project scope involves the construction of a 600 M square foot valving and treatment building, approximately 800 linear feet, and a hot tie-in with the Water District's 33" water transmission line. The City of Arcata has right-of-way for this project.	25	С	The City of Arcata purchases 60-70% of its water from the Humboldt Bay Municipal Water District, and currently has a single tie-in point to access this water. In the interest of redundancy and safety, a second tie-in point is desired so as to have a back-up water supply in the event of a natural or other emergency.	50,000	5,278	16,651 01	Humboldt	I	2009

1166 1210001	1210001-003	City of Arcata	Tank 4 to Zone 1 Mainline Replacement	The scope of work for this project is the replacement of M a mainline consisting of 6" and 8" diameter sections with a 12" line. The length of pipe is approximately 1700 linear feet. The project includes all excavation and backfill, pipe replacement, and appurtenances.	25	С	The current configuration of this portion of Arcata's water system is inadequately sized to transfer water to Water Storage Tank #4 during off-peak periods. The resulting problem is inadequate storage at certain times, along with inefficient pumping.	200,000	5,278	16,651 01	Humboldt	I	2009
1167 1610002	1610002-012	Avenal, City of	Water Tank No. 4 Replacement	The Tank No. 4 replacement at the Tank Site No. 3 M would be connected to both the 12" and 18"/14" transmissions pipelines and continue to serve the City's distribution system as well as the Prison. The construction of an additional water storage tank at Tank Site No. 3 will allow the City to provide annual maintenance, cleaning and inspection on one of the storage tanks during off peak periods while maintaining water service and fire protection from the other tank. The construction of an additional water storage tank at Tank Site No. 3, equivalent in size to the existing Tank No. 3, will allow the City to provide annual maintenance, cleaning and inspection on one tank during off peak periods while maintaining water service and fire protection from the other tank. The storage capacity will improve future water supply operations and provide the city with a better ability to have a supply of water available to meet shortages caused by transmission pipeline failures. The second tank will also allow the same type of maintenance opportunity on the single water storage tank, at Tank Site No. 6, which serves the California State Prison. The Water Tank No. 4 Replacement Facilities project includes the welded steel tank and appurtenances, interior and exterior coating, cathodic protection, earthwork, grading, reinforced concrete, oiled sand, inlet and outlet manifolds, chainlink fencing and gates, guard post installations,	25	C	Water Storage Tank No. 4, a 750,000 gallon welded steel tank, installed in the early 1950's has exceeded its anticipated life expectancy. Tank No. 4 is approximately sixty-five (65) feet in diameter, thirty feet in height, and is supported by a crushed rock foundation. The tank does not meet current seismic design standards, or the operational and maintenance requirements of the American Water Works Association Standards (D-100), and the Department of Public Health. No bypass exists around the tank for emergency or operational and maintenance needs. Furthermore, the City is located near Coalinga, California, an area which has experienced recent seismic activity. In the early 1990s's a major leak developed at the outlet connection to the City's distribution system causing both Tank No. 4 and Tank No. 3 (upstream) to drain. This leak also created major erosion to the adjacent hillside and endangered the foundation of Tank No. 4. With all leaks at tanks or in pipelines, the pumps at the treatment plants. Since there is no bypass around the tank, a total failure would cause a major water outage to the City, leaving it without water, fire protection and operational sanitation facilities for approximately five to eight days. In August 2007, a tank inspection was performed	4,000,000	1,892	16,737 12	Kings	111	2009
1168 1610002	1610002-010	Avenal, City of	Water Distribution Upgrades	The water distribution upgrades project will include a temporary bypass / pressure reducing piping around the existing Tank No. 4 until completion of the project. The existing steel Tank No. 4, miscellaneous appurtenances, gravel foundation, chain link fencing, inlet and outlet manifold manifolds, pressure reducing enclosure, electrical poles and equipment will be removed from the site. The site will be graded and a drainage system installed. The proposed Tank No. 4 pressure reducing station w/ bypass piping will be installed in a below ground concrete vault. The pressure reducing station will include a meter station to monitor and record flow rates into the water system. Chainlink fencing, walk and vehicle gates will be installed near the completion of the project. The existing graded surface shall be recompacted and 6" of compacted aggregate base installed within the chainlink fence enclosure. The existing access roadway shall be improved with an all weather surface. The distribution system pressure reducing and meter (PR&M) station will be located below ground and connected to the 14" steel pipeline with butterfly valves. There will be 8" connection into the pressure reducing station. 8" Class 200 and Class 150 PVC piping will connect the PR&M Station to the distribution system.	25	C	Water Storage Tank No. 4, a 750,000 gallon welded steel tank, installed in the early 1950's has exceeded its anticipated life expectancy. Tank No. 4 is approximately sixty-five (65) feet in diameter, thirty (30) feet in height, and is supported by a crushed rock foundation. The tank does not meet current seismic design standards, or the operational and maintenance requirements of the American Water Works Association Standards (D-100), and the Department of Public Health. No bypass exists around the tank for emergency or operational and maintenance needs. Furthermore, the City is located near Coalinga, California, an area which has experienced recent seismic activity. In the early 1990's a major leak developed at the outlet connection to the City's distribution system causing both Tank No. 4 and Tank No. 3 (upstream) to drain. This leak also created major erosion to the adjacent hillside and endangered the foundation of Tank No. 4. With all leaks at tanks or in pipelines, the pumps at the treatment plants continue to supply water "on demand" until the leaks are discovered and isolated. Due to the deteriorating condition of the tank, a possibility of failure exists. Since there is no bypass around the tank, a total failure would cause a major water outage to the City, leaving it without water, fire protection and operational sanitation facilities for approximately five to eight days. In August 2007, a tank inspection was performed	1,700,000	1,892	16,737 12	Kings	III	2009

## 1169 1610002 1610002-011 Avenal, City of

Groundwater Deepwell The proposed groundwater deepwell would be located M on the westside of the Water Treatment Plant No. 2 near the entrance gate. The groundwater well would be designed for 1,200 to 1,600 gpm depending on the groundwater test hole information. We are assuming the groundwater test would be drilled to a depth of 1,250 feet. The past water quality information would require aquifer zone testing be performed on the test hole. Based upon past experience a 16" diameter casing would be installed for the proposed groundwater deepwell. The groundwater deepwell will include a vertical turbine pumping unit, well manifold, 12" Class 150 PVC piping to the clearwell. clearwell inlet manifold, electrical controls and equipment and a new electrical service meter.

1170 1610002 1610002-008 Avenal, City of 12" Transmission Pipeline The 12" Transmission Pipeline Replacement project will M include 12" Class 200 and Class 150 PVC pipelines, ductile iron fittings and concrete thrust blocks. The proposed pipeline alignment will cross existing county, state and interstate highways that will be required to be bored and jacked. We have included road, highway and interstate crossings in the project costs. The 12" Transmission Pipeline Replacement project will include 12" Class 300 and Class 150 sectionalizing valves, air release & vaccum valves and blowoff valve installations.

Replacement

facilities located adjacent to the Aqueduct and near the Avenal Cut Off Road. This water provides for the City's domestic, municipal and industrial needs as well as the needs of the California Department of Corrections Prison.The City presently has a contract with the U.S. Bureau of Reclamation (USBR) for delivery of 3,500 acre feet per year (AFY). This amount, however, is subject to shortages. In 2007, the City experienced a 25% reduction in contract water due to lack of adequate rainfall in the state. This reduction forced the City to buy a minimum of 250-300 acre feet (AF) of water from outside sources at a higher cost. In the dry years of 1977, 1991, 1992 and currently 2009 the water supply was subject to a 50% reduction which left the City with only 1,750 AF from this source. The City was able to obtain additional waters over the 1,750 AF allocation due to carryover from previous years, hardship water and other waters purchased from third parties. The current 40 year contract between the City and USBR is in effect through December 31, 2008. At this time, the City and the USBR are in negotiations for a new interim

The City of Avenal receives its water supply directly

the California Aqueduct, through water treatment

from the San Luis Canal, a federally owned portion of

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plant for additional water supply during drought and The 12" diameter transmission pipeline, installed in 1972, is approximately eight (8) miles in overall length. The majority of the pipeline travels through hilly terrain, operating under a maximum pressure of 250 psi, with total lift requirements exceeding 1,000 feet. The cement lined and coated steel pipe has welded joints with a maximum spacing of forty feet. All of the leaks on the 12" pipeline, major and minor have been reported at the field joints. Over the past 10 to 15 years, joint failures have increased at an alarming rate. In 2006, available records showed a minimum of nine major failures in the pipeline. In 2007, City staff has reported breaks in the 12" pipeline are occurring at a frequency closer to 1 ½ to 2 breaks per month. With over 1,050 joints, a huge potential exists for many more future leaks and breaks in the transmission system. Due to the remote regions of the pipeline alignment, it is not uncommon for leaks to go unnoticed for a few days to several weeks. Undetected leaks can lead to ground failure at the site. In one instance, it was once necessary to rescue a cow from a cave-in caused by a break in a joint. Cave-ins pose a safety threat not only to pastoral and wild animals, but also to repair crews. In March of 1995, the 12" diameter transmission pipeline had an undetected leak for a long enough period of time to cause ground failure that ultimately disrupted both the 12" pipeline and the adjacent 18" prison

renewal contract. The City is proposing to install a groundwater deepwell at the existing water treatment

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1,060,000

2009

1171 1210009	1210009-003	Humboldt C.S.D.	Ridgewood Tank and Water System Improvements	Humboldt Community Services District – Ridgewood Water Tank and Water System Improvement Project.In January 2007, the District contracted with an engineering consultant to determine the required improvements necessary to provide adequate maximum daily demand and fire protection to serve the existing Ridgewood/Cutten service area. The results of the study indicated the following:1. Upsize the existing District Yard water booster pump station pumps from 400 gpm to 1250 gpm and replace undersized yard piping (\$45,000).2. Replace or supplement approximately 1650 LF of undersized 6-inch and 8-inch distribution main with 12-inch PVC transmission main (\$195,000) within the County roadway. 3. Supplement the existing 0.5 MG steel water tank with an additional 1.0 MG welded steel tank (1.5 MG total) of storage (\$500,000). The proposed tank will be placed next to ar existing 0.5 MG tank on leased property that does not have any property rights issues or environmental contraints. The District has completed design of these improvements and specifications and is in the process of completing the permitting. The project qualifies for a CEQA exemption consisting of a Negative Declaration, with the District as Lead Agency. The only other permitting required is Department of Public Health review and approval of the Improvement Plans and a County Encroachment Permit to be obtained by the	M e	25	c	The Humboldt Community Services District Ridgewood Tank and Water System Improvement Project.Currently, the existing Ridgewood / Cutten water system is not capable of maintaining maximum daily demand. This situation results in "Low Pressure" problems and customer complaints and requires 24-hr (excess) pumping during PG&E on-peak pumping periods. The existing storage tank does not provide adequate fire protection storage per State standards. The Project will provide additional water storage, transmission and pumping capability to provide maximum daily demand and fire protection in conformance with State of California Safe Drinking Water Act, Title 22, Chapter 16, Article 2 (Regulations and Standards for Quantity of Water Supply). The project will also reduce energy consumption, especially during the critical "On-Peak" energy demand periods.	740,000	7,266	19,000 01	Humboldt	I	2009
1172 3310016	3310016-008	Hemet, City of	Echo Hills Water Tank and Line Improvement Project	Installation of a 2 million gallon above ground reservoir tank and approximately 5,000 linear feet of 24-inch transmission main line.	r M	25	С	The City's current water storage capacity does not meet California Waterworks standards for a system of its size. Storge capacity needed has been determined by CDPH to be approximately 6 million gallons. Currently, the City's reservoirs are only able to provide a maximum of 5 million gallons.	3,000,000	8,667	20,047 20	Riverside	V	2009
1173 3310016	3310016-009	Hemet, City of	City of Hemet Well No. 17	Installation of new well.	М	25	С	The City's current source productions are not sufficient to meet the maximum daily demand of 7.7 million gallons. CDPH has strongly recommended that the City consider the addition of new water sources to allow for more reliability in the event that higher capacity wells fail and/or the City is unable to rely on its connections with neighboring water agencies.	750,000	8,667	20,047 20	Riverside	V	2009
1174 1610004	1610004-005	Corcoran, City of		WATER MAIN UPGRADING FROM 4" WITH 6" AND 8"	м	25	С	UNDERSIZED MAINS IN THE "NILES AREA" -	240,000	2,878	26,047 12	Kings	Ш	1998
1175 1610004	1610004-008	Corcoran, City of		REPLACE C.I. PIPES WITH AWWA C-900 CLASS 150, IN 6", 8", 10" AND 12" SIZES. OTHER - DESIGN AND CONSTRUCTION	М	25	с	CAST IRON PIPES THAT ARE 60 YEARS OLD - EXPERIENCING CONSIDERALBE PIPE	510,000	2,878	26,047 12	Kings	Ш	1998
1176 1610004	1610004-002	Corcoran, City of		DRILL 3 NEW WELLS AND ASSOCIATED PIPING. OTHER DESIGN AND CONSTRUCTION	- M	25	С	EXISTING PEAK DEMAND EXCEEDS THE WELL PRODUCTION CAPACITY	2,160,000	2,878	26,047 12	Kings	Ш	1998
1177 1910013	1910013-002	BELLFLOWER - SOMERSET MWC		Acquire other adjoining system in the city and create one looping waterworks system.	М	25	С	Inadequate water supply when one main or source of supply is interrupted. Undersized water mains in need of renlacement	13,357,700	6,790	28,000 07	Los Angeles	IV	1998
1178 1910077	1910077-002	GSWC - FLORENCE/GRAHAM		REPLACE WATER MAINS IN CRITICAL AREAS	М	25	С	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	500,000	9,729	31,340 15	Los Angeles	IV	1998
1179 3310008	3310008-001	Mission Springs WD		Replacement of 10,240 linear feet of waterlines, 313 service connections and 18 hydrants - Project No. 28	м	25	С	Upper Dos Palmas area distribution system has undersized waterlines, shallow depth of cover, and numerous leaks on the mainlines and sercie connections to homes.	1,025,000	11,773	38,500 20	Riverside	v	1998
1180 3310008	3310008-003	Mission Springs WD		Replacement of 10,870 linear feet of waterlines, 251 service connections and 20 hydrants - Project No. 28	М	25	C	East side of Dos Palmas area distribution system has undersized waterlines, shallow depth of cover, and numerous leaks on the mainlines and sercie connections to homes.	975,000	11,773	38,500 20	Riverside	v	1998
1181 3310008	3310008-002	Mission Springs WD		Replacement of 10,240 linear feet of waterlines, 306 service connections and 24 hydrants - Project No. 29	М	25	С	Lower Dos Palmas area distribution system has undersized waterlines, shallow depth of cover, and numerous leaks on the mainlines and sercie connections to homes.	1,000,000	11,773	38,500 20	Riverside	v	1998
1182 5410010	5410010-005	Porterville, City of	water main replacement	DESIGN AND INSTALL WATER MAINS IN R/W, RESERVE CUSTOMERS FROM FRONT YARD SERVICES. OTHER - DESIGN AND CONSTRUCTION	М	25	С	SMALL REAR YARD WATER MAINS DETERIORATING DUE TO AGE, BREAKAGE BY TREE ROOTS	250,000	14,562	51,467 12	Tulare	Ш	1998
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1183 5410010	5410010-007	Porterville, City of	Well #3 - treat for nitrate near mcl	Design and construct wellhead treatment facilities (ion exchange).	М	25	С	Well L-3 exceeds nitrate MCL and is shut off. The well produces about 300 gpm.	650,000	14,562	51,467 12	Tulare	ш	2004
1184 5410010	5410010-002	Porterville, City of	Porterville City - Airport WS intertie	INTERTIE WITH AIRPORT WATER SYSTEM WITH MAIN CITY SYSTEM ALLOWING AIRPORT WATER WELL TO SUPPLEMENT CITY SYSTEM. OTHER - DESIGN AND CONSTRUCTION	М	25	С	ADDITIONAL WATER SUPPLY TO MEET PEAK SYSTEM DEMANDS	330,000	14,562	51,467 12	Tulare	Ш	1998
1185 5410010	5410010-004	Porterville, City of	emergency generators	DESIGN AND INSTALL TEN STAND-BY ENGINES AND ALTERNATE FUEL SUPPLY SYSTEMS. OTHER - DESIGN AND CONSTRUCTIONN	Μ	25	С	PROVIDE SOME WATER SUPPLY DURING ELECTRICAL POWER OUTAGE DUE TO MAJOR CATASTROPHY	1,500,000	14,562	51,467 12	Tulare	Ш	1998
1186 1210013	1210013-005	Humboldt Bay MWD	HBMWD Fieldbrook Booster Pump Station at Korblex	This project would include construction of a booster pump station, which would include 2 pumps with variable speed drives, capable of producing between 400 and 850 gpm. The pumps would discharge to the existing 16 inch pipeline and would be housed in a small building that would also include a generator to provide standby power. The electrical controls would be tide into the District's existing SCADA system. The pump station would be located on the District's property referred to as Korbex, where they have and existing water treatment plant and storage facilities.	Μ	25	c	The purpose of this project is to correct low water pressure issues in portions of the Humboldt Bay Municipal Water District's distribution system, particular where it feeds into the Fieldbrook CSD. A study was completed in 2003 that identified the size and other aspects of the project. The preferred location for this booster station is on the District's Korblex site and would provide improved pressure to customers of both HBMWD, Fieldbrook, Glendale and possibly portions of the McKinleyville CSD. In addition, it would reduce pumping costs for the City of Blue Lake, as their system is located downstream on the same transmission line. Residences off of Glendale Road, in the Glendale Heights area have also contacted Fieldbrook CSD with complaints of low water pressures. Water pressures are susceptible to being lowered below the State standard of 20 psi when water is being pumped either at the Lymann Road pump station or the Blue Lake pump station, and especially if both stations are running at the same time. During any fire flow conditions, water pressure would not meet the State standard.In addition to the low pressure cocurrences in the Fieldbrook system, the HBMWD serves residence off of West End Road, Warren Creek Road and Lindley Road and this project would also improve pressure to these users. The Lindley Road extension off of West End Road has also experienced occurrences of low	600,000	224	80,000 01	Humboldt	1	2009
1187 3610039	3610039-008	SAN BERNARDINO CITY		Replace 16 inch Cajon Canyon well field line built in the 1920's with a 24 inch	М	25	С	Undersized transmission main	750,000	42,301	173,359 13	San Bernardino	V	1998
1188 2500515	2500515-001	MJUSD-State Line School		Replace old pressure tank with modern bladder type tanks to provide the reliability required by the Waterworks Standards.	М	25	Ρ	Existing pressure tank frequently waterlogs and therefore does not fulfill Section 64560(a)(6) (minimize the effects of equipment failures) of the Waterworks Standarki	10,000	1	35 01	Modoc	I	1998
1189 2500513	2500513-001	MJUSD-Arlington Elem. School		Drill a new well into a different higher flow strata to provide the reliability required by the Waterworks Standards.	М	25	Ρ	Insufficient supply to fulfill Section 64562 (quantity of supply) of the Waterworks Standards.	17,345	1	35 01	Modoc	I	1998
1190 1400042 1191 5305107	1400042-001 5305107-003	Olancha Elementary School So Trinity Unified School Dist.	Southern Trinity Backup water system	Construct new distribution system and tank A 5000 gallon storage tank was abandoned when our second well was put out of service. Our desire is to incorporate the existing storage tank into our current system. The tank must be inspected and approved. An inline pump must be installed and fitted into our existing distribution system. Due to numerous power outages during winter storms a generator needs to incorporated into the system to insure water distribution. A good portion of our distribution pipe can still be used but some retrofitting will be needed with the new additions.	M	25 25	P P	Lead levels less than action level We are in need of a backup water system here at our school. We have 1 deep well and had to abandon our second well due to surface water contamination. A backup system is needed once again since we have had several days of down time (no school) due to problems with our existing system.	18,000 25,000	1 4	40 13 200 01	Inyo Trinity	V I	1998 2009
1192 4901105	4901105-001	Camp Royaneh-Boy Scouts of America	New Piping	Complete repipe all new connections, fire hydrants, automation of level control	Μ	25	Ν	80+ year old system. Many leaks, not mappying, single line, pipe size ranges 1/2-1/4".	200,000	16	70 18	Sonoma	Ш	2007

1193 5402055	5402055-001	CAMP KEEP SIERRA		Install 600' transmission main; reokace existing fixtures with low flow fixtures (9toilets, 2 urinals); install sediment strainers at 4 locations; install 3 flow meters.	s M	25	N	Need backup delivery system to main camp when repairs made to existing transmission main; high water use fixtures (toilets/urinals); sediment in lines; no means to measure water consumption.	10,200	7	110 12	Tulare	III	1999
1194 1900994	1900994-002	MALIBU CONSERVATION CAMP		REPLACE FRESH POTABLE WATER SYSTEM WITH NEW LINES AND CONNECTIONS	М	25	Ν	PROBLEM WITH CONTAMINATION OF WATER SYSTEM (CAMPYLOBACTER) WITH LEAKS IN FRESH WATER LINE AND POSSIBLE CROSS CONNECTION IN THIS OBSOLETE WATER SYSTEM.	800,000	1	240 16	Los Angeles	IV	1998
1195 5510003	5510003-001	TUD-RAILBED DITCH CONVEYANCE PROJEC	Tuolumne Utilities District	CONSTRUCT PVC PIPELINES TO REPLACE DETERIORATED PIPES AND TO LOOP THE SYSTEM.	DM	25	х	DETERIORATED PIPELINES AND INADEQUATE LOOPS IN THE SYSTEM.	26,000	15	80 11	Tuolumne	ш	1998
1196 3200505	3200505-001	Johnsville Public U.D.		Water available above present springs and dam. Construct 300 to 400 feet of pipeline.	М	20	С	Additional water required for existing system. Complete fire loop in town.	100,000	46	20 02	Plumas	I	1998
1197 0202504	0202504-001	MARKLEEVILLE WATER CO.		Locate additional water source and replace pipeline.	Μ	20	С	Creek source inadequate to meet demand and distribution system leaks badly.	2,000,000	167	25 09	Alpine	I	2006
1198 5500127	5500127-001	HIDDEN VALLEY TRAILER PARK, INC		CONNECT TO PUBLIC WATER SUPPLY. OTHER -DESIGN AND CONSTRUCTION	м	20	С	DUE TO AGE UNDERGROUND PIPES MUST BE REPLACED AND THE COUNTY REQUESTS WE CEASE USING THE WELL AND HOOK UP TO PUBLIC WATER	65,000	13	29 11	Tuolumne	Ш	1998
1199 5800824	5800824-001	COUNTRY VILLAGE MOBILE HM PRK	2nd Water Source	This project would include the construction and development of a new production well. The pump, panel and pipelines would also be installed after completion of the new well.	м	20	C	This community PWS currently has only one source of water - a groundwater well. Due to the current drought conditions in California, the need for another water source may be imminent.	250,000	10	30 21	Yuba	I	2008
1200 5301102	5301102-002	Trinity Knolls Mutual Water Company	Trinity Knolls MWC Supply Well Installation	The water system would like to install one or two additional groundwater supply wells to increase their source capacity and prevent summer outages. The project would include engineering and permitting, drilling, well construction, aquifer testing, pump and motor installation, main installation and tie-in to existing system, electrical work, instrumentation and controls, chlorination equipment, construction of a pump house, and required initial source water testing.	Μ	20	c	Trinity Knolls MWC supplies their 61 connections (one includes a very large campground) with groundwater from six wells. In wet years, the combined maximum capacity of these wells is 100,000 gallons per day (gpd). In recent dry years, maximum capacity has been 75,000 gpd. Note, the wells run dry and cannot sustain these pumping rates continuously. Trinity Knolls MWC's maximum day demand is approximately 100,000 gallons per day. In the summer, Trinity Knolls MWC is unable to keep up with demands. This problem is heightened by increased needs from the campground in the summer and a declining water table. Lower regional groundwater elevations in the summer are the result of both seasonal variations as well as the current statewide drought. The water system currently charges a flat rate for their services. Consequently, despite conservation notices issued by the water system, customers have not reduced their usage.	80,000	60	36 01	Trinity	I	2009
1201 0400026 1202 3301947	0400026-002 3301947-001	MEADOWBROOK OAKS MORNING SKY SCHOOL	New distribution lines Replace pump & outfit well	New water lines for distribution Replacement of failing equipment and outfiitting of alternate well.	M M	20 20	C C	Aging system Failure of main well pump and boost pump. Need to develop alternate well as back up water resource including tank, goost pump and pressure tank.	75,000 10,000	25 15	50 21 50 20	Butte Riverside	I V	2004 1998

1203 1900801	1900801-005	COLORADO MUTUAL	Upgrade storage capacity and Support Programs	It will be necessary to subdivide and purchase a porton of adjacent land to accomodate the larger tank.We propose to purchase a 90,000 gal tank which will have a charge for erection by a contracting company.The new tank will need monitoring devices, pipeline and valves (from the well and then to the pressure tank and distribution system. There will be approx 200 feet of 6" pipe and at least four 6' valves involved in the upgrade.The entire electrical system will have to be replaced/rehabilatated to provide for the additional needs. In addition, it will be necessary to purchase a new compressor to support the hydroneumatic tank.We will hire a company to perform hydrological studies at the proposed tank installation, and grading compacting and land fill.We propose to construct a concrete ring for placement of the tank and the necessary gravil fill.Also, in our estimate is an approx. cost for Engineering of the upgraded system.	Μ	20	c	This water system has inadequate storage to provide fire protection and drinking water to shareholders. There is less than 14,000 gal of storage, which does not provide the regulation for fire flow, necessary to provide protection. This system has periods of low pressure and inadequate supply due to lack of storage.	448,200	12	50 16	Los Angeles	IV	2009
1204 1900801	1900801-004	COLORADO MUTUAL	Loop system and install required fired hydrants	Currently, the mains in this system are 4". We propose to replace these lines with 6" C-900 lines. We also propose to loop the system to alleviate dead ends and make maintenance accessible to all areas in the distribution system. We propose to install 10 fire hydrants. It will be necessary to install 13 new service meters, including all necessary corp stops, service lines, etc. Most of the current service lines are 50 + years. The main thrust of this project is to provide adequate fire protection.	Μ	20	с	This system does not have adequate fire protection. It is proposed that we install 10 fire hydrants with necessary valves.It is also in this proposal to loop the system as it is now operating in a treesystem creating dead-ends, with current lines running through adjacent properties making maintenance inexcessible.	385,000	12	50 16	Los Angeles	IV	2009
1205 5200013	5200013-002	WOMACK SUBDIVISION M.W.C.	Womack feeder pipe replacement project	our plan is to replace the entire distribution line system from our collective tanks to each of the 16 homes. Then place valves in front of each house, and then replace the supply line going to the side of the house.	М	20	С	our distribution lines are breaking at an alarming rate. It is diminishing our funds so fast that it is breaking our bank account fast. we have to keep raising our rates to try and keep ahead of repair expenses.	50,000	16	51 21	Tehama	I	2009
1206 5500092	5500092-001	PONDEROSA MOBILE HOME PARK		CONSTRUCT AN ADDITIONAL WELL.	м	20	С	SYSTEM'S SOURCE CAPACITY COULD BE IMPROVED.	60,000	59	54 11	Tuolumne	Ш	1998
1207 3500552	3500552-001	Venture Estates MWC		Construct a pipeline to connect to Sunnyslope water	м	20	С	System is aging and has high TDS - 1300 ppm, and high Na - 500nnm	60,000	18	60 05	San Benito	Ш	1998
1208 4300526	4300526-002	Oakmont Water System	Oakmont Water upgrades for consolidation	All of the exisitng 2600 LF of mains will need to be replaced with 6 inch DIP. All of the exisitng 26 service connections (5/8th) will be replaced along with the main replacement. The exisiting 22,000 redwood water storage tank will need to be replaced with a 30,000 gallon bolted steel tank. Further studies are needed to determine if a new concrete foundation pad is required for this tank. Additional upgrades to Oakmont's water system may be required after further investigation by SJWC staff.	Μ	20	C	Oakmont Water is currently served by a "wholesale" connection to San Jose Water Co (SIWC) (paying retail water rates). Oakmont has requested SIWC acquire Oakmont (consolidation) but they require our system be upgraded to PUC standards. This will require the replacement of 2600 LF of main with 6" DIP and the replacement of the existing 22,000 gal redwood storage tank with a bolted steel storage tank of 30,000 gal (min) capacity. The existing Oakmont water system serves 26 households and so does not have the resources to effectively operate and maintain a water system to current standards. Water quality, system reliability and fire protection would all be improved with the proposed consolidation. While consolidation could occur easily (the plumbing is already connected) SJWC refuses to accept Oakmont's system without these proposed upgrades for consolidation.	420,000	24	63 17	Santa Clara	Π	2007

1209 1400072	1400072-004	North Lone Pine Water District	Project Title: North Lone Pine Mutual Water Company Main and Latera Replacement	Install new mains, laterals and fire hydrants	Μ	20	C	Our mains and laterals were installed in the 1940's with used military surplus pipes. Some of the mains were replaced in 1972 with welded steel pipe, the life expectancy of which is 35 years. We are regularly experiencing lateral breaks. Our local plumbers will not work on the system any more as the pipes are so rotted. Each repair can result in several feet of pipe being replaced to find a solid piece to attach to. Our fire hydrants and standpipes are not functional. The Fire Chief will not hook up to the hydrants as he feels that this will collapse our mains.	350,000	32	70 13	Inyo	V	2009
1210 5800823	5800823-001	COUNTRY AIR MOBILE HOME PARK		Upgrade current system to ensure adequate safe supply.	м	20	с	Aging wells, valves and distribution lines.	10,000	36	70 21	Yuba	I	1998
1211 3700937	3700937-001	LAZY H MUTUAL WATER COMPANY		Replace 11250' mains and laterals with 8" and 4" C900 pipe, upgrade service connections.	М	20	С	Substandard old water distribution system with 1 1/2" - 6" tuberculated mains, allowing low flow capacities - inadaquate fire protection	213,500	37	70 14	San Diego	v	1998
1212 0202522	0202522-002	SIERRA PINES MOBILE HOME PARK		New pump and pressure system using larger storage tank	м	20	С	Single well source lacks reliability. Pressure is low.	50,000	31	70 09	Alpine	I	1998
1213 1500540	1500540-005	PINON HILL WATER COMPANY	Develop New Source or Consolidate	Drill new well or consolidate with neighboring water system, if possible	м	20	с	Inadequate water supply; no outages but rationing required to meet summer demand.	200,000	38	75 19	Kern	ш	2007
1214 4500023	4500023-005	HAT CREEK HIGHLANDS MUTUAL WATER C	0	Replace storage tank to provide the reliability required by the Waterworks Standards.	М	20	С	Aging storage tank not fulfilling Section 64560(a)(6) (minimize effects of structural failure) of the Waterworks Standards	65,000	39	75 02	Shasta	I	1998
1215 5400647	5400647-001	YOKOHL MUTUAL WATER CO.	Water Main Line / Meters Replacement	Replace approximately 3000 feet (+/-) of 4" main water line by utilizing the new trenchless method using polyethylene pipe. This method uses the path of the existing water line and would only utilize trenching at the service connections. Currently, there are no isolation valve in place and when the water is turned off for repairs, the entire system is down for all connections. Install isolation valves in four (4) different locations within this loop. Install water meters at all 32 service connections. Provide computer program to read meters, water usage statistics and billing.	м	20	C	Our water system was established in 1972 which provides service for 32 connections. The water main line consists of 4" tranzite pipe in a "loop" system. This tranzite pipe has an asbestos lining and has been linked to different cancer causes. Over the past two years, there have been two different major escavations to repair main line breakage indicating that this system is deteriorating and starting to fail. The last breakage gave the appearance that the ground is shifting and settling in differnt locations throughout the loop and only indicates more future problems and expenses. For a disadvantaged community, this has been very costly. Currently there are no water meters in place and all residents pay a monthly flat rate fee for there service. There are several residences within this community that abuse and waste our water and obviously the cost for that abuse is passed on to all the rest of the community it serves. In today's time, it is essential for all to conserve our most precious resourse. If water meters were in place, those abusers would pay for the water they use above their monthly flat rate and would ultimately be a detourant for all. There have been no improvements or upgrades since 1972 and this 35 year old water system is in dire need for replacemet or refirbishing.	200,000	32	75 12	Tulare	Π	2007
1216 4700638	4700638-001	Oak Valley Acres P.O.A.		Purchase and install a new booster pump and recondition the existing pump and use it for a backup.	М	20	С	Booster station for upper pressure zone consists of a single booster pump which is old and near the end of its	10,000	26	80 01	Siskiyou	I	1998
1217 1500434	1500434-002	BISHOP ACRES MUTUAL WATER COMPANY	New Well/Intertie with City of Shafter	Construct a pipeline and consolidate with the City of Shafter. If that is not feasible, construct a second well.	М	20	С	userul me. Bishop Acres MWC has only a single well as a source and therefore lacks required system reliability.	500,000	28	81 19	Kern	Ш	2008
1218 0400028	0400028-002	BIG BEND MOBILEHOME PARK	Increase Storage Capacity	Install new storage tanks with increased capacity to 35,000 gallons.	м	20	С	Water system only has 10,000 gallons of storage capacity. Per the engineering report of 10/4/2007, title 22 section 64564, indicates the MDD is 35,000 gallons daily and a such should have storage capacity equal to the amount.	42,000	35	85 21	Butte	I	2009

1219 0400028	0400028-001	BIG BEND MOBILEHOME PARK	Backup electric system	Install a propane (or other alternative fuel) generator to power the water system in the event of electrical outages.	Μ	20	С	Water system is powered by a well pump and booster pump, during an electrical outage the water system will not operate. Outages have extended in excess of 3 days forcing tenants to obtain water by some other means. When water is restored an immediate boil order notice is issued from the loss of pressure.	28,000	35	85 21	Butte	I	2009
1220 4300741	4300741-001	Mireval Improvement Association	Mireval Association Wate	r We will work with San Jose Water to design a system 0 that will replace the 5000 feet of failing pipe. We have had preliminary meetings with San Jose Water to establish rough costs and required pipe materials. San Jose Water requires 6 inch ductile iron or blue bell pipe.	м.	20	с	Mireval Improvement Association consists of 16 homes connected by 55 year old galvanized iron piping. There are more than 5,000 feet of deteriorated-leaking pipes that supply these homes. This includes 2,800 feet of 3 inch galvanized water main that is in desperate need of replacement. The system is in near complete failure. We will replace the existing system with materials complying with San Jose Waters specifications. Once this has taken place, San Jose Water will take the system over and all homes will be part of the local public water system. Ensuring safe, high quality water for all users.	420,000	15	90 17	Santa Clara	Ι	2011
1221 4900514	4900514-001	Rancho Del Paradiso-Cal Water Svc (PUC)		(Install approve filtration system,) NOW replace existing 5,000 gal tank with 10,500 gal concrete tank and new transmission lines.	ξM	20	С	System WAS in non-compliance with swtr, NOW needs ONLY storage and fix inadequate sized mains.	158,500	59	90 18	Sonoma	Ш	1998
1222 5500353	5500353-002	SIERRA VILLAGE MOBILE HOME PARK		Install storage and water lines.	м	20	с	Need more storage and system reliability.	75.000	16	90 11	Tuolumne	Ш	1999
1223 0400016	0400016-003	BERRY CREEK COMMUNITY SER DIST	Replacement for well	The project will consist of drilling a new well, to replace	М	20	С	The water system was designed with four wells and a	20,000	36	99 21	Butte	I	2009
			number four	well number four. Install pump, pipe lines and electric,				90,000 gallon holding tank. Well number four has never						
				to incorporate the new well to our system.				worked as it was drilled in the wrong location. Well						
								number 3 can only be operated a half capacity for						
								approximately one week, and then it has to rest for a						
								few days, or plugs up with sand. With only two fully						
								demand this summer						
1224 0500068	0500068-001	DUNROVIN MOBILE HOME VILLAGE		INSTALL GENERATOR AND SMALL BACK-UP PUMP	М	20	С	LACK OF BACK-UP POWER AND A BACK-UP PUMP	20,000	42	99 10	Calaveras	Ш	1998
1225 4300504	4300504-001	Arrowhead Cooperative Company		Run new 10-inch mains from SJWC to all streets.	М	20	с	Replace mains and consolidate.	1,642,632	38	100 17	Santa Clara	Ш	1998
				Abandon existing system. The study and design has										
				already been done by SJWC.										
1226 0400013	0400013-004	MERRY MOUNTAIN MUTUAL	New Well, Pump and, Tan	k new well, pump, and tank	М	20	С	lack of adequate source and storage capacity	300,000	77	100 21	Butte	I	2002
1227 2000557	2000557-001	MD#43 MIAMI CREEK KNOLLS		CONSTRUCT A NEW DISTRIBUTION SYSTEM AND A	м	20	С	THE WATER SYSTEM WAS INSTALLED IN THE FARLY 60'S	250.000	37	100 11	Madera	ш	1998
				50.000 GALLON STORAGE TANK.				AND IS VERY UNRELIABLE. IT CONSISTS OF 4 VERY LOW						
								PRODUCTION WELLS AND A DETERIORATED						
								DISTRIBUTION SYSTEM. THE SYSTEM MUST BE						
								CHLORINATED TO MEET THE TCR.						
1228 2701789	2701789-001	HOLLY HILLS MWC		New pumping station, new well, and increase storage.	М	20	С	Insufficient water pressure, insufficient storage, and	150,000	27	108 05	Monterey	П	1998
								insufficient pumping volume.						
1229 3900543	3900543-001	MAURLAND MANOR WATER SYSTEM		INSTALL PRESSURE TANK, REPLACE LINES WITH LARGER	м	20	C	SINGLE WELL SYSTEM WITH PRESSURE PROBLEMS.	400,000	28	110 10	San Joaquin	III	2006
				PIPES AND CONSOLIDATE WITH SYWSTEM 3901348.										
				OTHER = DESIGN AND CONSTRUCTION										
1230 1700549	1700549-001	Corinthian Bay Mutual Water Company	generator power back up	Purchase and installation of a propane powered	м	20	C	Lose of electrical power prevents pump motors from	45,000	74	125 03	Lake	II	2009
			for electrical outages at	generator to supply emergency electrical power for use				maintaining adequate system pressure through the						
			the well	as required with the existing system to properly				holding/chlorination tank which could allow a back flow						
				maintain adequate system pressure during loses of				and contamination into the main source lines.						
				public electrical power. Will include required base for										
				the generator and all electrical safety bypass switches										
				required to interact with existing system.										
1231 1200592	1200592-001	Big Lagoon CSD		Purchase water system; overhaul electrical system; and	м	20	с	Interruptions in water delivery during power outages	100,000	35	140 01	Humboldt	I	2006
		-		add a generator to ensure continuous water delivery.				which occur frequently in winter months and may be 3						
								to 5 days duration. No emergency power supply and no						
								gravity tank.						
1232 3900563	3900563-001	GAYLA MANOR PWS		REPLACE EXISTING WELL AND ADD AUXILIARY POWER.	М	20	С	SINGLE WELL SYSTEM HAS OLD WELL. NO AUXILIARY	450,000	54	146 10	San Joaquin	III	2006
				CONSOLIDATE WITH NEIGHBORING WATER SYSTEMS.				POWER.						
				OTHER = DESIGN AND CONSTRUCTION										

1233 0500091 1234 1400020 1235 2000849	0500091-001 1400020-001 2000849-001	RITE OF PASSAGE/SIERRA RIDGE Aberdeen Resort MD#60 DILLON ESTATES	MD-60 Dillon Estates and Miami Creek consolidation	REPLACE DISTRIBUTION SYSTEM. Replace mainline and loop system Complete consolidation with maintanance district 43 Miami creek. Drill high production well. Replace storage tank,distribution system and boost pumps to meet fire flow requirements.	M M M	20 20 20	c c c	DISTRIBUTION SYSTEM NEEDS REPLACEMENT Undersized mainline Water System does not meet fire flow and storage requirements. System has no back up generator for possible power outage. System is in critical fire zone and cannot provide adequate fire protection.	73,000 105,000 1,800,000	13 75 35	150 10 150 13 150 11	Calaveras Inyo Madera	III V III	1998 1998 2007
1236 1700516	1700516-003	Lake County CSA 16 - Paradise Valley	Water Distribution Piping Project	The project includes construction trenching and 1,200 lineal feet of 4" C900 PVC plastic pipe to connecting Well #3 to the Paradise Valley Water System, as well as restoration of construction area.	Μ	20	с	The project is designed to provide the pipe and connection of additional water supply (well) to the Paradise Valley Water System. The water system provides drinking water for the customers within County Service Areas # 16. The system is currently under a County imposed urgency ordinance and connection moratorium. Connection of Well #3 to the system is critically needed to address the current situation.HEALTH BENEFITS include additional available drinking water and fire flow.ECONOMIC BENEFITS include construction (engineering, materials and labor).REGULATORY BENEFITS include compliance with DPH goals and recommendations.	50,000	72	180 03	Lake	II	2009
1237 1400036	1400036-002	Keeler CSD		Construct new 150k tank	м	20	с	Inadequate storage capacity	125,000	88	180 13	Inyo	v	1998
1238 1400036	1400036-004	Keeler CSD		Replace mainline	М	20	С	Old substandard mainline	125,000	88	180 13	Inyo	V	1998
1239 1700516	1700516-004	Lake County CSA 16 - Paradise Valley	50,000 Gallon Storage Tank	The 50,000 gallon storage tank will include a seismically engineered concrete foundation, one 50,000 gallon capacity anchored bolted steel storage tank, and the associated piping and controls to connect to the Paradise Valley water system. The facility will be protected with a security fence.	М	20	с	This project will provide additional needed storage for customer drinking water needs and fire flow.HEALTH BENEFITS include additional available drinking water and fire protection.ECONOMIC BENEFITS include construction (engineering, tank, materials and labor).REGULATORY BENEFITS include compliance with DPH storage requirements.	250,000	72	180 03	Lake	Ι	2009
1240 1700501	1700501-001	Adams Springs Water District		System rebuild.	м	20	с	Outdated system with many nonworking valves, fire hydrants, service lines.	500,000	71	200 03	Lake	II	1998
1241 5400504 1242 1000359	5400504-001 1000359-001	A & A MHP FCSA #32/CANTUA CREEK		Drill new Well INSTALL AN ADDITIONAL STORAGE TANK TO INCREASE STORAGE CAPACITY FOR SYSTEM RELIABILITY.	M	20 20	c c	Needs back-up storage tank and well SURFACE WATER IS PROVIDED FROM THE WESTLANDS WATER DISTRICT. DURING THE LAST 12 MONTHS, WESTLANDS' WATER LINES HAVE BROKEN TWICE LEAVING THE COMMUNITY WITHOUT WATER.	150,000 200,000	60 35	200 12 230 23	Tulare Fresno	 	1998 1998
1243 1700546	1700546-006	Clearwater Mutual Water Company	Instrumentation/SCADA	A SCADA system will installed to monitor and record signal output from all monitoring equipment and alert system operator in the event of a system failure. A continuous turbidity and pH meters will be installed. Coagulant flow alarm, clearwell tank flow meter and low level tank sensor and alarm to be installed. Chart recorders for chlorine, pH and turbidity will be installed. This project is eligible because the system is required by its water supply permit. The system is a small public water system that is considered disadvantaged due to the median income being approximately less than \$32,000 per year. The census tract is "Census Tract 9." If this project is granted, it would allow the system to be incompliance with its water supply permit and the Enhanced Surface Water Treatment Rule.	Μ	20	c	Alarms and monitoring is required for the Clearwater MWC in accordance with provisions in the water supply permit. The system does not have turbidity, pH, tank flow meter and tank level monitoring and recording. There are no alarms for these systems and no coagulant alarm. The system is in violation of the Enhanced Surface Water Treatment Rule. The project is intended to address the above deficiencies and bring the system into compliance with its water supply permit and the Enhanced Surface Water Treatment Rule.	32,000	93	250 03	Lake	Ι	2009
1244 5500193	5500193-001	TAMARRON MOBILE HOME PARK		REPLACE PUMPS AND PIPING. OTHER - DESIGN AND	М	20	С	LOW WATER PRESSURE, BROKEN LINES AND ONE TIME	75,000	85	273 11	Tuolumne	ш	1998
1245 3200188	3200188-002	Greenhorn Creek Services District	Greenhorn CSD Distribution System	Replace undersized water mains, increase capacity of booster stations, construct additional storage tanks.	М	20	С	Undersized water mains and insufficient storage and pumping facilities to provide fire flow.	1,135,430	90	280 02	Plumas	I	2006

1246 0400014	0400014-001	LAKE MADRONE WATER DISTRICT	Lake Madrone Water District Storage Facility Improvement	The purpose of this project is to replace Three (3) M leaking and deficient redwood community water storage tanks with new steel tanks and retro fit the associated plumbing as required to complete the upgrade. This will correct the deficiency, enhance the water quality, safety and reliability of the community drinking water system. Site FoundationsThe sites for each of the existing redwood tanks are very close to "turn key" in their current condition. Only minor improvements to the grading of the site would apply due to a slightly larger footprint of the new tanks. • Electrical The electrical upgrades required will include replacing old wiring and upgrading circuit panels to meet current state and county safety regulations. • PlumbingThe plumbing upgrades required will include replacement of old PVC and steel piping as well as fittings, installing increased capacity pumps and replacing valves with more reliable modern types. • PermitsPermitting for this improvement is easily obtained. Anticipated permit times to begin construction are within 30 days. The permiting requirements will be at a minimum due to the readiness of the existing system and sites. • Regulatory Testing and AcceptanceOnce the retro fits are completed the necessary water quality testing requirements will be completed. Recently completed retro fits to wells within this community have the same or similar testing	20	c	Department of Public Health, Division of Environmental Health, County of Butte, State of California recorded a System Deficiency in 1998, describing the following water system defect: "Redwood holding tanks are starting to leak. Moderate bowing between bands noted as well. Repair as necessary. Explore replacement of older redwood tanks."There were inspections in 2001 and again in 2005 where the defects continued to be observed. The oldest tank is more than 25 years old. Over the past 10 years the leaking and bowing have increased. Replacing the old redwood tanks with steel tanks is the recommendation of our Certified Water System Operator.Due to the fact that in recent years we have lost our portion of property tax revenue from the County and since we are a Special District, the limits placed upon us by Proposition 218 have made rate increases that much more difficult, we have put off replacing these tanks making the possibility of a major failure more likely.	63,800	115	297 21	Butte	I	2009
1247 2500503	2500503-001	California Pines C.S.D.		Drill a new well to provide the reliability required by the M Waterworks Standards. Recoat the interior of the water tank.	20	C	Existing wells have insufficient output to fulfill Section 64562 (quantity of supply) of the Waterworks Standards. Water tank needs new inside coating.	50,000	130	300 01	Modoc	I	1998
1248 3301775	3301775-001	HIGH VALLEYS WATER DISTRICT		For the past 3 yrs. We have replaced approx. 1 mile a M year of the bade pipe with ductile iron. This is approx. all that the budjet will allow. Although replacing pipe in the worst areas has helped, to save cost we replace all the pipe in house.	20	С	The tank transmission pipeline is improperly installed and has had major leak problems. From main tank we have miles of pipe in the same condition.	3,000,000	168	300 20	Riverside	V	1998
1249 0410018	0410018-002	Del Oro Water CoStirling Bluffs	Stirling Bluffs - Storage Tank Project	The scope of work for this project would include the M installation of one 500,000 gallon welded or bolted steel storage tank, ringwall tank foundation, and inlet/outlet piping to the distribution mainline.	20	С	The Stirling City water service area does not currently meet the emergency and operational storage requirements as detailed in the California Waterworks Standards. The existing water system does not have sufficient storage available to meet one maximum day demand event in the event of a water outage emergency.	500,000	162	313 21	Butte	I	2009
1250 1700554	1700554-005	Lake County CSA 13 - Kono Tayee	Pumps and Controls for CSA #13	The project will include the replacement and upgrade of M the pumping network and controls at all three tank sites, including pumps, level and operational controls, and communications.	20	с	The Kono Tayee Water System provides drinking water for County Service Area #13. A system of wells and distribution piping serves the community. The water system experienced a tank failure last year and the tank replacement is being constructed at the Tank 2 (midlevel) location. The Tank 2 site includes the tank, pumps and controls. In conjunction with piping upgrades (separate application), additional pumps and controls are required to bring the community water system into operational stability.	200,000	136	333 03	Lake	Ι	2009
1251 1700554	1700554-004	Lake County CSA 13 - Kono Tayee	Water Distribution (pipe) Upgrades for CSA #13	Piping replacement and upgrades to the Tank 2 site in M conjunction with the District constructed water storage tank project.	20	с	Undersized distribution piping and non-looped portions of the distribution system. HEALTH BENEFITS include improved supply and quality of drinking water and fire flow.ECONOMIC BENEFITS include construction (materials and labor).REGULATORY BENEFITS include compliance with DPH requirements.	90,000	136	333 03	Lake	II	2009

this much needed project. HEALTH BENEFITS include additional storage of drinking infrae flow.ECONOMIC BENEFITS include construction (engineering, tank, materials and labor).REGULATORY BENEFITS include compliance with DPH regulations.	
1253 1700574 1700574-002 Lake County CSA 18 - Starview 50,000 Gallon Storage Tank The project will include a seismically engineered M 20 C This project is for the construction of a 50,000 gallon 250,000 140 38 03 L   1253 1700574 1700574-002 Lake County CSA 18 - Starview Tank concrete foundation, an anchored 50,000 gallon storage tank to serve the customers served by the storage tank to serve the customer served by the storage tank to serve the customer demand additional storage needed to supply customer demand additional storage needed to supply customer demand and fire flow.HEALTH BENEFITS include additional water availability of drinking water and fire flow through increased storage.ECONOMIC BENEFITS include increased storage.ECONOMIC BENEFITS include actiniced increase storage.ECONOMIC BENEFITS include actiniced increased storage.ECONOMIC BENEFITS include actiniced	Lake II 2009
1254 1700574 1700574-003 Lake County CSA 18 - Starview Water Distribution System This is a simple pipe upgrade project replacing smaller M 20 C The Starview Water System provides drinking water for 80,000 140 338 03 L   Upgrades diameter pipe with 6" and 8" lines. The project will the customers in County Service Area #18. The Distribution System Upgrades for the water system will provide 500 feet of needed upgrades within the system, including main distribution piping.HEALTH BENEFITS includes improved and reliable supply of drinking water and frie flow.ECONOMIC BENEFITS include construction and frie flow.ECONOMIC BENEFITS include construction labor).REGULATORY BENEFITS include construction labor).REGULATORY BENEFITS include construction   labor).REGULATORY BENEFITS labor).REGULATORY BENEFITS include construction labor).REGULATORY BENEFITS include construction labor).REGULATORY BENEFITS include construction	Lake II 2009

1255 1200553	1200553-010	Weott C.S.D.	Replace sub-standard distribution lines.	There is approximately 9,500 feet of 4 inch mainline needed to be installed parallel to the existing (to be abandoned) 2" lines, hooked up to existing metered laterals and install a total of 8-4" hydrants at the ends and proper intervals to facilitate adequate flushing of system. "Resilient" 4" gate valves will be installed at all connections, hydrants and proper intervals. There are 7 separate locations for these installations. The longest replacement is almost a mile and the shortest is 300 feet. Some of these lines to be replaced have abandoned laterals with known/ unknown locations which will be eliminated in the process. Only one 400 foot section will require the removal and replacement of asphalt in the roadway, the rest of the roads are graded base/rock surfaces.	м	20	C	This application is for improvements/upgrades to the oldest part of our distribution sytem which was not replaced for financial reasons when we installed a new water system (in 1989) for 80% of WCSD's service area. They installed C 900 lines with new parts throughout. The lines that didn't get replaced in the outlying areas are either 2 inch boiler pipe or 2" poly(most of which is partially exposed). with almost no structural integrity. These old lines have low flow, low pressure and need leak repairs on them often. There are many rusted sections that are always wet. Several times since I became the operator here I have had to go past my high end filtration parameters (compromising our treated water quality) to keep up with the loss from a bad leak until it was found and/or repaired.WCSD has recently completed the metering of all the residences and we now have an approximation of our substantial losses in the distribution system . In November 2008 we produced 1,232,358 gallons, while the metered consumption was 489,985 gallons. Over half of our produced water is leaking out through our old distribution lines. There are almost 2 miles of these 70 year old 2" lines that have no adequate way of being flushed, are hard to keep a Clresidual in them and are a constant problem, as leaks appear almost weekly. We fix the ones that we find, but there are many more that are oneside. In Col 2007 we had a Coliform Presence.	2,000,000	150	364 01	Humboldt	I	2009
1256 1700544	1700544-005	Lake County CSA 7 - Bonanza Springs	Bonanza Water System Distribution System Upgrades	400 ft of 6" and 8" inch pipe will be installed to replace f undersized portions of water main in the vacinity of Loch Lomond Road.	Μ	20	С	This project will include the replacement of 400 ft. of undersized water main. The preliminary engineering report recommends a pipe upgrade will improve distribution and fire flow to the customers of Bonanza Springs.HEALTH BENEFITS include better distribution and flow resulting in improved availability for drinking water and fire flow.ECONOMIC BENEFITS include construction (engineering, materials and loabor).REGULATORY BENEFITS include compliance with DPH permit requirements, and increased flow for fire protection.	75,000	151	375 03	Lake	Ι	2009
1257 1700544	1700544-004	Lake County CSA 7 - Bonanza Springs	100,000 Gallon Water Storage Tank	The project will include the construction of a seismically I engineered foundation, an anchored 100,000 gallon bolted steel tank, pipes and controls to connect to the Bonanza Springs water system.	Μ	20	С	This project will provide an additional 100,000 gallon storage tank for the water system serving County Service Area #7. The water storage tank will provide additional availability of drinking water and fire flow for the Bonanza water System customers.HEALTH BENEFITS include additional storage and availability of drinking water and water for fire supression.ECONOMIC BENEFITS include construction (engineering, tank, materials and labor).REGULATORY BENEFITS include compliance with DPH permit requirements.	400,000	151	375 03	Lake	Ι	2009
1258 3700938	3700938-002	YUIMA MUNICIPAL WATER DISTRICT IDA		Replace 10,840' of main lines with CML/C or C900 PVC 1 pipe.	Μ	20	с	Various pipe segments are very old and troublesome with many repairs per mile. Some will not support fire four	314,300	241	400 14	San Diego	v	1998
1259 2310013	2310013-006	Point Arena Water Works	Water Mains	Upgrade a 60 year old 540 foot section of the existing 6" I main line to a 12" main line. This upgrade will increase the Fire flow protection of the City of Point Arena as well as secure the integrity of the infrastructure of the distribution pipes in that part of the water system.	м	20	С	Installation of approximately 540 feet of 12" main line on Mill Street, Point Arena to replace a deteriorated section of 6" main line, which is over 60 years old.	75,900	210	465 03	Mendocino	II	2009
1260 5410036	5410036-002	LSID-Strathmore System		MANIFOLD DISTRICT GROUND WATER WELLS TO INCREASE CAPACITY AND YIELD. OTHER - DESIGN AND CONSTRUCTION	Μ	20	с	WELL WATER CAPACITY AND AVAILABILITY INADEQUATE DURING WINTER MONTHS-AS BACKUP SUPPLY	100,000	158	500 12	Tulare	ш	1998

1261 5400903	5400903-005	TRACT 92 C S D	Tract 92 CSD Water Distribution Replacement Project	Water Distribution Replacement Project	М	20	С	Water Distribution Replacement Project	1,000,000	91	500 12	Tulare	Ш	2007
			nget	The proposed project will include the replacement of the existing water distribution system including water mains and service connections. It is estimated that approximately 15,000 linear feet of water main and 95 service connections will need to be replaced. In addition one dead end line would be looped back into the system to equalize pressure and eliminate stagnam water.	t			Tract 92 Community Service District provides water to the unincorporated area known as Union Addition. This unincorporated community consists of approximately 135 households and one church and is located Southeast of the City of Visalia. This economically disadvantaged community is a mix of retired people, farm workers, and low-income families. The community's water system was established in the early 1960's.						
								The water distribution system was installed over 40 years ago. It consists primarily of asbestos/cement water mains and galvanized water services. Leaks have been an issue primarily around the water valves. In one incident for example one leaking valve flooded an open trench that was open during construction. There is a concern of cross contamination in this un-sewered community due to the presence of on site septic tank sewage disposal systems. Other distribution issues include undersized mains, service connections that are filling with deposits of rust and a dead end line.						
1262 4500195	4500195-003	STARLITE PINES MUTUAL WATER CO INC		Repair complete reservoir to provide the reliability required by the Waterworks Standards.	М	20	с	Reservoir aged and repairs are required every year. System not fulfilling Section 64560(a)(6) (minimize the effects of structural failure) of the Waterworks Standards.	10,000	170	510 02	Shasta	I	1998
1263 1909006	1909006-002	WEST VALLEY COUNTY WATER DISTRICT	Replacement Well	We propose 3 possible alternatives for construction of new water source that meets the Arsenic MCL and provides reliable water to meet system demand. The project will be based on the most cost effective solution. All project alternatives are based on the abandonment of Well 1 and purchase of property for a additional water source site.1) Drill a new well includin appurtenances, provide standard and backup power sources-generator- construct a pump house and install security fencing for the perimeter; or2) Construct a well, and an arsenic treatment facility for the new well including storage tanks, monitoring equipment, and security fencing around the perimeter; or3) Drill a new well and install pipelines and storage tanks to blend water from both wells to reduce the arsenic concentration to below the MCL. Length of pipeline unknown until property is purchased.	a M In g	20	C	This system has two wells. Well 3 is active and yields adequate water to supply current demand. Well 1 is inactive and unavailable due to Arsenic MCL exceedance. Well 1 is also more than 40 years old and does not provide adequate water to meet demands. This is a sole source system and the only active well does not have an emergency interconnection or alternative power supply. If well 3 fails or loses power, the system will not have enough drinking water. We need an additional source of water that meets the Arsenic MCL, and a backup power supply generator.	650,000	274	530 22	Los Angeles	IV	2009
1264 1909006	1909006-003	WEST VALLEY COUNTY WATER DISTRICT	Backup Well power source	We propose to install a generator capable of providing backup power for our existing sole operating well. One ~ 200 kW Diesel generator, including switchgear and accessories on site at well #3. Security fencing is currently in place.	M	20	с	This is a sole source water system and the only active well does not have an emergency interconnection or alternative power supply. If well 3 fails or loses power, the system does not have drinking water.	60,000	274	530 22	Los Angeles	IV	2009

1265 1710019	1710019-003	Lake County CSA 6 - Finley	Finley Water Distribution System Upgrade	This project will include approximatly 2,200 lineal feet of 8' C900 PVC pipe replacement within the Lands End development along Clear Lake. The project will include the replacement of water mains within the development and installing additional pipe to loop the dead legs of the system.	Μ	20	С	The Finley water system serves customers within County Service Area #6. Portions of the existing distribution system (Lands End area) are in need of replacement (upsizing) and dead ends (also Lands End area) require looping.HEALTH BENEFITS include a better flow of drinking water through the distribution system.ECONOMIC BENEFITS include construction (engineering, materials and labor).REGULATORY BENEFIT includes improved water quality, increased reliability and fire flows.	350,000	207	590 03	Lake	Ι	2009
1266 5510033	5510033-001	TUD-Scenic View/Scenic Brook	consolidation w Apple Valley and Phoenix Lake Park	EXTEND THE HEIGHT OF THE SHORT TANK. ALSO CONSOLIDATE THIS SYSTEM WITH THE APPLE VALLEY AND PHOENIX LAKE PARK SYSTEMS.	Μ	20	С	THE HEIGHT OF ONE OF THE TWO STORAGE TANKS NEEDS TO BE RAISED TO PROVIDE ADEQUATE STORAGE CAPACITY TO MEET PEAK SYSTEM DEMANDS.	40,000	265	625 11	Tuolumne	Ш	1998
1267 5510033	5510033-005	TUD-Scenic View/Scenic Brook	replace water storage tan	k CONSTRUCT A 200,000 GALLON STEEL STORAGE TANK.	М	20	С	THE CINDER BLOCK TREATED WATER STORAGE TANK IS	142,000	265	625 11	Tuolumne	Ш	1998
1268 5510033	5510033-008	TUD-Scenic View/Scenic Brook	Phoenix Water Treatment Plant	The District owns a parcel of land that is adequate for the construction of a surface water treatment plant that could meet the needs of existing customers, committed parcels and existing residents of the community. The proposed project would provide for the consolidation of three groundwater systems, one surface water system, one groundwater and surface water system into one large surface water system. The surface water source for the WTP is currently approved by the State for treatment.	M	20	C	The District owns and operates 14 water treatment plants (WTP) that serve 13,000 treated water customers. The majority of these WTPs are of limited treatment capacity and capability. There are an excessive number of water treatment plants for the number of customers primarily due to the fact that these once independent systems were acquired by TUD from private and mutually owned water companies and special districts which were financially or managerially unable continue system operation due to failing infrastructure and/or drinking water standards violations. Most of these customers are below the State MHI. There are several WTP's and well systems that need upgrading and replacement. One of well systems is experiencing reduced production and extended run times (Apple Valley), not meeting drinking water standards for uranium (Mono Village), exceeding secondary standards (Phoenix Lake Park) and the surface water treatment plants do not have the capacity to meet the L2 ESWTR and the needs of existing customers (Mono Village and Scenic View). In addition, the Mono Village system does not have the capacity to meet the needs of an existing senior citizen mobile home park, which is currently served by privately owned, deteriorating well water system that has requested support from the TUD in the past.	5,342,625	265	625 11	Tuolumne	11	2007
1269 5510033	5510033-007	TUD-Scenic View/Scenic Brook	New SWTP	Construct a new SWTP to serve the Scenic View, Mono Village, and Sonora systems.	м	20	С	Capacity shortfalls are experienced during peak demands in the Scenic View, Mono Village, and Sonora	10,825,000	265	625 11	Tuolumne	Ш	2007
1270 5510033	5510033-002	TUD-Scenic View/Scenic Brook	main replacement Midline	REPLACE THE DETERIORATED PIPELINE IN MIDLAND	М	20	С	systems. THE DISTRIBUTION SYSTEM ALONG THE UPPER END OF	48,500	265	625 11	Tuolumne	ш	1998
1271 5510033	5510033-003	TUD-Scenic View/Scenic Brook	main to intertie w Apply Valley ws	CONSTRUCT A PIPELINE TO INTERCONNECT WITH THE APPLE VALLEY SYSTEM AND DRILL A NEW WELL.	М	20	С	DURING PEAK PERIODS, THE WATER TREATMENT PLANT IS A MAXIMUM CAPACITY.	60,000	265	625 11	Tuolumne	ш	1998
1272 3200148	3200148-001	Feather River RV and MHP		Shut down entire system and install pipes where needed and valves where necessary.	М	20	с	Valves and pipes need replacement where damaged or stressed from age. Shutoff valves inadequate.	15,000	70	700 02	Plumas	I	1998
1273 3610023	3610023-002	GREEN VALLEY MWC	gvl ac main replacement	Project is to replace existing 45 year old aspestos cement pipe distribution system with minimum standard of 6" inch or greater (as needed) of PVC C-900 pipe. Included in this project will be the replacement of metered service line replacement for domestic use, system isolation valves, hyrants, hydrant valves and all associated appurtances.	м	20	С	This project is for the purpose of water distribution system replacement. The project covers replacement of aspestos cement (a.c.) pipe that is approximatly 45 years old. Much of the distribution system is substandard in size 4 <sup>st</sup> inch diameter and does not meet the minimum size of 6 <sup>st</sup> inch diameter for distribution systems and fire flow requirements.	5,000,000	1,135	700 13	San Bernardino	v	2007
1274 0410009	0410009-001	Del Oro Water CoMagalia		Will be alleviated with the current construction of an intertie and new storage tank.	М	20	с	Water shortage. Degradation of water quality.	376,000	275	707 21	Butte	I	2006

1275 4510015	4510015-001	Del Oro Water CoJohnson Park	Source, storage, & distribution	New 12" and replace 6" & 8" water mains, new 50 MG tank, new 10 HP booster facility, replace well pumps, emergency generator	i M	20	C	System does not meet CA Waterworks Standards for water pressure, line size, and line looping	3,900,000	316	760 02	Shasta	I	2003
1276 2400172	2400172-003	Sandy Mush Detention Center	Merced County Correctional Complex Arsenic Treatment Project	The project will provide an additional arsenic treatmen vessel to assure un-interrupted reduction of arsenic concentrations in the drinking water to acceptable levels, in compliance with the Federal and/or State MCL, whichever is more stringent. Currently, there ar two treatment vessels that are connected to the distribution system. However, the connection is accomplished through temporary piping only. Two looped 8 inch (8") water mains provide both domestic and fire suppression water to each facility. No irrigati water is associated with this system. A significant amount of reconfiguration to the existing water distribution system will be required to combine the water from all three wells into a single point of confluence for the most cost effective treatment system. The project locates the water storage tanks. Water will first be pumped from the supply wells into the water treatment plant, then from the water treatment plant into the storage tanks. This will requi the water treatment plant be sized to provide peak hour domestic demands of 100 gpm and rely on storat to provide supply of fire flow demands. The temporary piping connecting the treatment plant muss be removed and the new infrastructure will include permanent piping to connect the wells to the treatment plant and the treatment plant to the storage tanks. Th	nt M e on t t t t t t t t	20	c	Arsenic levels in all three ground water wells that serve the County's juvenile justice and adult correctional facilities currently range from 15 ppb to 49 ppb. These levels exceed the Federal Maximum Contaminant Level (MCL) for arsenic, which was lowered from 50 ppb to 10 ppb (effective January 23, 2006). A similar, or more stringent, MCL is expected to be adopted by the State of California. No other source of water exists in this isolated vicinity. The ground water in this area of Merced County contains naturally high levels of arsenic. Potential long-term, non-cancerous health effects associated with arsenic ingestion include development defects, stillbirth, spontaneous abortion, heart attacks, strokes, diabetes mellitus, and high blood pressure. Potential cancerous effects include skin, bladder, lung, kidney, nasal passages, liver, and prostate cancers. A Notice of Violation of the Federal Arsenic Rule Exceedance was issued by the Merced County Division of Environmental Health on September 24, 2007 and remained in effect until April 11, 2008.	375,000	157	800 11	Merced	II	2009
1277 1010030	1010030-001	Tranquillity Irrigation Dist		REPAIR WELLS NOS. 4 AND 5, CONSTRUCT NEW WELL NO. 6, IMPROVE TELEMETRY SYSTEM, REPAIR EXISTING ELEVATED STORAGE TANK, INSTALL NEW CHLORINATION SYSTEM, AND INSTALL A NEW STORAG TANK.	M G GE	20	C	THE SYSTEM'S RELIABILITY NEEDS TO BE IMPROVED BY THE REPAIR OF TWO WELLS, CONSTRUCTION OF A NEW WELL, REPAIR OF STORAGE TANK AND INSTALLATION OF A NEW STORAGE TANK AND CHLORINATION SYSTEM.	570,000	326	820 23	Fresno	Ш	1998
1278 1010042	1010042-001	MALAGA COUNTY WATER DISTRICT	Loop Distribution System	LOOP THE SYSTEM. OTHER - DESIGN AND CONSTRUCT	т м	20	С	PROBLEM LONG DEAD END LINES. INABILITY TO SERVE	875,000	472	900 11	Fresno	ш	1998
1279 1010042	1010042-004	MALAGA COUNTY WATER DISTRICT	New Storage Tank	INSTALL NEW 750,000 GALLON WATER STORAGE TAN OTHER - DESIGN AND CONSTRUCTION	к. м	20	с	LACK OF AVAILABLE STORAGE TO MEET PEAK AND FIRE FLOW	750,000	472	900 11	Fresno	ш	1998
1280 2700511	2700511-001	Normco WC		Acquire and install all of the above.	м	20	С	System needs standby generator, two sets of disinfection equipment, and two pumphouses.	90,000	271	928 05	Monterey	Ш	1998
1281 3910009	3910009-002	San Joaquin County - Thornton		Construct replacement well including engineering, feasibility study, environmental and property acquisition.	М	20	С	Continuing source water bacteriological failures (total coliform) at Well No. 2 in Thornton.	881,550	290	957 10	San Joaquin	Ш	2002
1282 1210017	1210017-004	Manila Community Services Dist.	H2O Storage Tank Addition Sept. 2009	In order to meet the State's mandated compliance and prepare for expected growth of the community, the District proposes an additional 100,000 gallon storage tank of concrete construction with additional piping from the booster pump station and the existing redwood storage tank. The additional piping scheme i needed to isolate each storage tank from the other to allow for repairs and routine maintenance on indivdue tanks without interruption in service, as is the need no for repairs of our redwood tank and temporally not having any storage capacity at all.	M E s al Sw	20	С	Our current storage capacity is 100,000 gallons, but according to Department of Public Health's (DPH) 2005 annual report, by Ronnean Lund December 8th, 2005, we are well below DPH's recommended standards for water storage capacity. According to Craig Bunas, of DPH, our storage capacity should be 130,000 gallons. 130,000 gallons would meet the current demand, but the proposed Humboldt County General Plan projects growth of approximately 150 more living units, above and beyond the 68 applications for proposed development, we currently have on file. These expected increases will in effect double our storage requirement. Our current redwood tank is starting to develope some major leaks and will need to be taken out of service for replacement of rotten staves. Tank will be out of service	250,000	343	1,000 01	Humboldt	I	2009

for 1-2 weeks this fall, with no back-up storage capacity.

1283 1710018	1710018-008	Lake County CSA 2 - Spring Valley	Spring Valley Water Treatment Facility Standb Emergency Generator	This project will include the construction of a concrete y pad, the purchase and installation of a 175kW propane fired emergency generator, and necessary switchgear and wiring. It is intended to locate install the emergency generator within and as close to the existing treatment plant facilities as possible.	M g	20	c	Spring Valley experiences periods of commercial line power interruptions. The water treatment facility only operates when power is avaiable. Power outtages have occured during peak demand periods, requiring the use of portable generators from outside the area. This project will provide emergency standby power through the installation of a 175 kW propane fired emergency generator installed at the water treatment facility.HEALTH BENEFIT includes uninterrupted water treatment, minimal air pollutants from propane combustion compared to dieseI.ECONOMIC BENEFITS include construction (engineering, materials and labor)COMPLIANCE BENEFITS include uninterrupted treatment	125,000	420	1,018 03	Lake	Π	2009
1284 1710018	1710018-007	Lake County CSA 2 - Spring Valley	100,000 Gallon Water Storage Tank	The project will include the construction of an seismically engineered concrete tank foundation, a 100,000 gallon bolted steel storage tank anchored to the foundation, piping and controls to connect to the existing distribution system.	Μ	20	С	This project is to provide needed additional 100,000 gallons of water storage for the Spring Valley Water System. The additional storage will provide for Peak Day Demand and fire flow, well into the future.HEALTH BENEFITS include and adequate supply of drinking water and fire flow.ECONOMIC BENEFIT includes construction (engineering, materials and labor )COMPLIANCE BENEFIT includes the ability to provide sufficient storage capacity.	450,000	420	1,018 03	Lake	II	2009
1285 4910003	4910003-001	Penngrove Water Company (PUC)		Add 1 MG tank to adjacent system and consolidate.	м	20	с	No storage.	1,750,000	505	1,200 18	Sonoma	П	1998
1286 1010020	1010020-002	Laton Community Services District		CONSTRUCT A NEW WELL ON THE EAST SIDE OF THE SYSTEM.	Μ	20	С	THE TWO ACTIVE WELLS ARE LOCATED ON THE SAME SIDE OF TOWN AND CAN NOT PROVIDE ADEQUATE WATER TO THE OTHER SIDE OF TOWN IN A RELIABLE MANNER.	348,000	454	1,236 23	Fresno	Ш	1998
1287 1010020	1010020-001	Laton Community Services District		REPLACE EXISTING LINE WITH A NEW 8" PVC LINE AND RECONNECT SERVICES.	Μ	20	С	EXISTING DISTRIBUTION SYSTEM ON LATONIA AND ARMSTRONG AVENUES IS OLD STEEL PIPE AND IS	163,000	454	1,236 23	Fresno	Ш	1998
1288 1510011	1510011-001	Buttonwillow CWD		REPLACE 4" LINES WITH 8" LINES AND LOOP THE SYSTEM. OTHER - DESIGN AND CONSTRUCTION	М	20	С	INSUFICIENT WATER FLOW FOR FIRE PROTECTION. NEED TO REPLACE THE EXISTING DISTRIBUTION LINES FOR PROPER WATER DELIVERY.	250,000	444	1,266 12	Kern	ш	1998
1289 1510011	1510011-003	Buttonwillow CWD	Buttonwillow Arsenic Mitigation Project	The District proposes to install 1,300 feet of 10 inch water line to supply water from the Districts' clean well (#2 and #3) to blend with well #4's Arsenic contaminated water at wellsite #4. A blending station and a 0.5 MG storage tank will be installed to store the blended water at wellsite #4. The water will be blended during offpeak hours and stored in the new 0.5 MG bolted steel ground storage tank. Water will be supplied back into the distribution system during peak hours from a new booster pump station, through the new 10 inch main. Blending will allow the District to meet Safe Drinking Water Standards without the expensive operating costs of Arsenic treatment or the	M Is d	20	c	Water well number #4 is contaminated with Arsenic (11 to 14 PPB) in excess of State and Federal Safe Drinking Water Maximum Contaminant Level (MCL) of 10 PPB.	780,000	444	1,266 12	Kern	III	2007

high construction costs of drilling a new well.

1290 4710006	4710006-010	McCloud C.S.D.	Northwest Water Distribution System Replacement	Installation of a new water delivery system in the northwestern corner of the District's service area which includes approximately 12,410 linear feet of 6"-1.2" PVC pipe, two connections into the existing Phase 2 Bypass Pipeline system, three railroad crossings and 123 public water service lines. This installation will be performed within Siskiyou County road right-of-ways with minimal easement acquisitions necessary. This installation constitutes a new infrastructure footprint since the existing, antiquated system runs helter-skelter through private properties and under residential structures. This installation will require open trench construction.	20	c	The project is located in the northwestern section of the boundaries of the McCloud Community Services District. McCloud's company-owned mill town legacy includes deeded inheritance of approximately 12,410 linear feet of piping in this area of the water distribution system predominantly installed in the 1940s without benefit of design planning or engineering. The existing helter-skelter pipelines include mains running through now private properties since the company divested itself of ownership. Homes sit atop infrastructure. Valves are located on private properties and frequently lie under residential structures. Infrastructure was deeded to McCloud with minimal documentation to facilitate accurate location of water mains, service lines and appurtenances. Although MCSD employees have developed a map book based on the minimal documentation, it is difficult and sometimes impossible to accurately establish the location of lines or appurtenances. An inordinate amount of staff time must be spent performing open trench investigations of infrastructure prior to performing what should be minor repairs or replacements since unknown factors often cause significant, negative consequences. A 2006 engineering report identified multiple causes of concern in the distribution system including an estimated 65% upper latent fragment to the oper devicement with the system including an estimated 65% upper latent fragment and a programmer and a system including an estimated 65% upper latent fragment and a set instructure prior to performing the attimet for the set of	4,200,000	641	1,300 01	Siskiyou	I	2009
1291 4710006	4710006-009	McCloud C.S.D.	Rehabilitation of Lower E Springhouse	Ik Identified renovations necessary to protect this public M water source include: Construct missing sections of the interior concrete retaining wall to keep the spring area intact. Uncover the spring inside the building by removing dirt over the existing French drain area. Cap the spring area with support beams and concrete/steel decking. Install 3 screened air vent/overflow pipes above the concrete cap. Replace the existing 10" WS inlet pipe from the Upper Elk spring with a new 16" WS fusion-bonded epoxy coated pipe and install rubber strips underneath the pipe to prevent damage on the pipe coating by pipe supports. Replace riveted steel surge tank with a WS fusion-bonded epoxy coated tank approximately 3.5" in diameter and 8" tall. Provide a	20	c	McCloud's Lower Elk Springhouse has multiple deficiencies that require renovation to address the potential for water supply contamination to both the Upper and Lower Elk spring water supply. A 2006 engineering study determined that the springhouse has met its useful life. The antiquated structure, approximately 27' by 80' consists of a perimeter concrete foundation, wood siding, framed wooden support system and a metal roof. Water that overflows or leaks from the springhouse is collected by a culvert which leads to a ditch that flows to Mud Creek. The engineering study identified corrosion hot spots that have either failed and are leaking or that could fail at any time at the lower end of the Upper Elk Spring	550,000	641	1,300 01	Siskiyou	I	2009

pipeline suspended inside the springhouse. The

distribution box has experienced significant corrosion as

well and has been identified as having reached its useful

life, requiring replacement. An existing old riveted steel

surge tank which controls pressure and flow before

condition. A wooden wall diffuser is located inside the

tank; the tank exterior is coated with what appears to

be a paint similar to that used on MCSD's old water

tested and identified as lead-based paint that is

storage tank. The paint on the old storage tank was

discharging the Upper Elk Spring water into the

distribution box inside the springhouse is in poor

pipeline located between the surge tank and

sealed cover and install a new baffle wall inside the

tank. Replace the 12" WS pipe that discharges from the

surge tank to the concrete distribution box with a 16"

pipe from the surge tank. Replace the existing 20-24"

WS pipe from the distribution box to the Lower Elk

Spring pipeline with a 24" WS fusion-bonded epoxy

coated pipe. Install a 16" WS fusion-bonded epoxy

coated overflow pipe from the distribution box and

outside the springhouse. Replace the 12" drain from

install a rubber check valve at the outlet into the

from the Lower Elk Spring to the drainage ditch located

the Lower Elk Spring with a new 12" WS drain pipe and

drainage ditch. Remove the existing wheeled gate valve

1292 1710022	1710022-005	Lake County CSA 20 - Soda Bay	Four (4) 50,000 Gallon Water Tanks	Construction of the 4 new tanks will include seismicall engineered foundations, anchored 50,000 gallon bolt steel tanks, piping and controls to connect to the Soda Bay Water System. Security fencing will complete the construction.	ly M ed a	20	C	The Soda Bay Water Treatment Facility treats surface water from Clear Lake to drinking water standards for customers within County Service Area #20. Drinking water is stored in a network of water tanks spread out over the service area. Tanks 1, 2, 3, and 4 are old redwood tanks that according to DPH inspections are in need or repair and/or replacement. This project is to replace all four failing tanks with four 50,000 gallon bolted steel tanks.HEALTH BENEFITS include new clean secure storage tanks.ECONOMIC BENEFITS include construction (engineering, components, and construction labor). Secondary economic benefits for the water system include less maintenance and less water loss through leakage.COMPLIANCE BENEFITS include compliance with DPH 7/9/08 recommendations.	1,000,000	596	1,342 03	Lake	Π	2009
1293 1210002	1210002-003	City of Blue Lake	Blue Lake Water Distribution System Improvement Project	The City of Blue Lake's 1999 Water System Capital Improvement Plan identified a number of necessary water system improvements to ensure the long term viability of reliable community water service. Current the operating system is not properly functioning due aging infrastructure. While some of the recommende improvements (water storage tank modifications) wei completed, a number of vital water system needs hav not been implemented due to local budgetary constraints. The necessary system modifications are the replacement of gate valves in the distribution network, modifications to the booster pump station a motor control center, an upgrade of the emergency backup disinfection system. Along with these modification priorities, a building needs to be constructed to house the portable system backup generator. Replacing the 1973 obsolete electrical 200 amp motor control center. The existing system has been upgraded with a third 30 Hp pump. However, all three pumps cannot be run at the same time without an upgraded motor control system. The current system has insufficient power for its current use. Repair/replacement of the two 36 year old pump would provide for repair parts and pump operations would become interchangeable, increasing the	M ly, to d re re nd i i	20	c	The City of Blue Lake receives treated potable water from the Humboldt Bay Municipal Water District. The City owns and operates the Booster Pump Station, which houses pumps, electrical controls, and an emergency chlorination system. The existing distribution system consists of 51,050 feet of pipeline ranging in size from 2"to 12" in diameter. Most of the pipe is asbestos cement installed in 1973. The distribution system also includes about 125 gate valves, and approximately 18,000 feet of %" to 1" diameter service lines. The system has needed major repairs due to aging infrastructure as identified in the City's 1999 Capital Improvements Plan, many of which have been deferred due to budget constraints. The repairs to the system include gate valve/ cluster replacement (200), energy efficient motor control center and booster pump replacement, chlorine system upgrades, and looping existing waterlines. These repairs and improvements will result in a more reliable operating water system. The aging gate valve system is 36 years old, and in need of replacement and repair. The ability to operate existing gate valves sproperly is unknown; and the system could be a trisk of failing if a main line break occurred. It is not known whether the line could be isolated for repair. Attempting to close a valve to isolate a break may result in additional problems if that valve were to fail. The ten year Capital Improvement Plan	720,000	651	1,500 01	Humboldt	I	2009
1294 1210020	1210020-003	Fieldbrook Glendale C.S.D.	Booster station to verve	Booster pump near Korblex water tank.	м	20	С	Pressures in distribution system in Glendale area below	700,000	531	1,670 01	Humboldt	I	2004
1295 5410025 1296 2410011	5410025-001 2410011-004	Woodville Public Utility Dist LE GRAND COMM SERVICES DIST	Glendale area Le grand Community Services District pipeline replacement project	DRILL NEW WELL Le Grand Community Services DistrictWater pipeline replacement projectThe project would be to go throug the district and replace the pipeline in those location that require an increase in size to provide additional preseure in the usage zone, add fire hydrants for flushing of the system and replace aging pipelines tha have had many breaks of leaks in the recent past. The project would involve the placement of new pipeline main and the switch over of water service connection to the new main pipeline. The project would add valving and firehydrants for beter system operation a to allow for flushing of water service zones when	M M gh t e s	20 20	c c	20 psi during high demands. HOLE IN WELL CASING - WELL SANDING Le Grand Community Services DistrictWater pipeline replacement projectThe existing distribution system fo rthe district has about 5 miles of under sized or pipeline that has exceed the useful life of the material. the District is seeing failures in the existing pipe material and due to under sized pipelines in areas of the community the pressure levels drop close to the minimum pressure of 20 psi for health and safety concerns.	300,000 2,640,000	484 501	1,678 12 1,700 11	Tulare Merced		1998 2009

system.

1297 2210001	2210001-002	MARIPOSA PUBLIC UTILITY DIST		REPLACE DETERIORATED WATER MAINS WITH NEW MAINS IN CONFORMANCE WITH THE CALIFORNIA WATERWORKS STANDARDS.	М	20	С	EXCESSIVE WATER LEAKS IN THE WATER DISTRIBUTION SYSTEM.	1,185,000	671	2,000 11	Mariposa	Ш	1998
1298 0610001	0610001-001	Arbuckle Public Utility District		Replace or install 2,300 feet of water main.	М	20	с	Small main lines (1 1/2" and 2"). Low water pressure for domestic service.	125,000	760	2,100 21	Colusa	I	1998
1299 1710012	1710012-004	Cobb Area County Water District		Replace existing steel mains with pipes more impervious to corrosion.	М	20	с	Several areas of the District are served by steel pipe that has become less and less reliable due to its age.	195,000	708	2,500 03	Lake	Ш	1998
1300 1710012	1710012-003	Cobb Area County Water District		construct new storage tanks.	м	20	С	Bolted steel tank, circa 1940, has obvious signs of metallurgic failure.	94,000	708	2,500 03	Lake	Ш	1998
1301 1710007	1710007-003	Kelseyville Co Waterworks District 3	Water Distribution System Upgrades	Each of the identified projects involve replacing and upsizing the water main in the distribution system. Replacement pipe will be C900 PVC. Locating, trenching, replacing pipe, disinfection, re-establishing flow, fbackfilling and pavement restoration is included. Distribution lines crossing major roadways (i.e. State Hwy 29) will be examined for pipe-bursting techniques where roadways will not be disturbed or traffic interrupted.	Μ	20	с	There are currently eight (8) distribution system deficiencies totaling 21,300 lineal feet identified in this project. They each address improvements to capacity, supply, fire flow and maintaining a healthful water supply throughout the Kelseyville system. Each is characterized below:1. Merritt and Main - project to close looping: 500 ft 12" pipe.2. Bell Hill Road to VanEck- project to upsize water pipe: 500 ft. 8" pipe.3. State Street to Konocti Road - project to upsize pipe: 800 ft 8" pipe.4. Douglas/Live Oak Drive to Hwy 29 crossing, upsize: 975 ft 8" pipe.5. Valley Vista upsize: 700 ft 8".6. Gaddy Ln at Post Office to State St.: 800 ft 8" pipe.7. Main St. at Fire House to State St.: 900 ft 8" pipe.8. 4th St. at State to N. Main: 700 ft 8" pipe. HEALTH BENEFITS include a safer stable distribution system for drinking water and increased flow for fire protection. ECONDMIC BENEFITS include construction (engineering, materials and labor).REGULATORY BENEFITS include an increase in overall system reliability.	2,060,000	950	2,550 03	Lake	Ι	2009
1302 1710007	1710007-004	Kelseyville Co Waterworks District 3	200,000 Gallon Water Storage Tank	The project will include site acquisition, rights of way, the construction of a seismically engineered foundation an anchored 200,000 gailon capacity bolted stell tank, and the necessary piping and controls to supply the Kelseyville system.	М 1,	20	c	This project is the construction of a 200,000 gallon storage tank to serve the customers within the Kelseyville and County Waterworks District No. 3 water system. The tank will provide the additional storage needed to supply customer demand and fire flow.HEALTH BENEFITS include an additional supply of drinking water and fire flow.ECONOMIC BENEFITS include construction (engineering, tanl, materials and labor).REGULATORY BENEFITS include compliance with	500,000	950	2,550 03	Lake	II	2009

DPH storage recommendations.

1303 1510046	1510046-003	Lost Hills Utility District	Arsenic Facility Improvements Project	Project Location:Site 1: Project will be located at the current Arsenic Removal Treatment Facility. Site is located at the northeast corner of Gun Club Road and McCombs Avenue in Kern County. The parcels associated with this site are APN 059-160-19 and APN 059-160-18. Site 2: The Chemical Treatment for corrosion prevention is to be located at the 2.5 MG storage tank site located on the northeast corner of Highway 46 and Brown Material Road. The parcel associated with this part of the project is APN 058-180- 13.Site 3: The pipe to be replaced will cross Highway 46 near the intersection of Highway 46 and the on-ramp to Interstate 5. The parcel associated with this site is APN 069-171-02.Site 4: The pipe to be replaced will cross Highway 46 north of the Lost Hills Elementary School. The parcel associated with this site is APN 069-171-02.Site 4: The pipe to be replaced will cross Highway 46. The parcels associated with this site are APN 058-330-04, 058-330-03, and 058-33- 06.New ConstructionSite 1: Installation of two sludge beds with three bays each at the existing Arsenic Removal Facility. Site 2: A Chemical Addition facility will be constructed for the 2.5 MG water tank.Rehabilitation: Replacement of two sections of pipe are needed at Sites 3 and 4 to improve drinking water conditions. The original pipes are 8" steel and are to be rendeed by a method of jacking and horing using	20	C	More Sludge beds are needed at the existing Arsenic Treatment Facility to contain excess backwash produced by the treatment process. Currently the sludge beds available do no provide enough capacity limiting the effectiveness of the Arsenic Treatment Facility. Treatment for arsenic has improved drinking water conditions, but in the process has changed the chemistry of the water throughout the distribution system. This change has clients complaining of brown water. This brown water indicates that the piping in the distribution system is corroding. It has been investigated that the piping replacements at site 3 and site 4 are prime locations to remedy the brown water problems for clients complaining in those designated areas. Chemical addition for corrosion prevention at the existing storage tank would not experience the brown water effect. Residents within the Lost Hill Community District would benefit by ensuring quality drinking water.	474,308	360	2,772 12	Kern		2009
1304 1510046	1510046-005	Lost Hills Utility District	Water System Improvements	The proposed project will replace and upgrade existing water pipelines and will be constructed in existing designated streets, alleys and dedicated rights-of-way. No acquisition of lands will be required.Proposed New ConstructionThe water system consists of upgrading from the existing 2-inch mains to 4-inch mains. The initial estimate includes 17,800 linear feet of 4-inch pipe, 65 re-connections, 9-gate valves, and miscellaneous items to complete the project.Since the proposed improvements will replace and upgrade existing pater consumption. Therefore, the system capacity should remain the same.Proposed RehabilitationThe water system proposes to have approximately 10,000 linear feet of the existing 2-inch water line mains removed.Nature and Level of ServiceThe District provides water service to approximately 400 residential and 40 commercial connections. The water system project will enhance the District=s water system within its boundaries.Coordination with Other Service ProvidersThe District is the only water system in the area. The 1-5 and Highway 46 commercial water connections are also serviced by the Districts water system. There may be a need to coordinate with Kern County for the drainage piping in the community.	20	С	The purpose of this proposed project is to replace and upgrade the existing old water pipelines in the Lost Hills community water distribution system. There are many 2- inch mains throughout the system, which do not meet current Kern County standards. The minimum diameter for a water main according to Kern County standards is 6-inches. Once these pipes are replaced, Lost Hills will have a system which meets current standards and should result in less maintenance problems in the water distribution system.	666,731	360	2,772 12	Kern	11	2009
1305 3610030	3610030-002	MARIANA RANCHOS CWD	Consolildation, Infrastruct re Repair and Replaceme	u Project will connect three systems with the Mariana M t system remaining. Failing portions (approx 24 miles)of its distribution system will be replaced along with properly sized hydrants to meet fire flow and eliminate water loss. The storage tank will be replaced and connections made to adjacent water systems in worse condition. LAFCO has encouraged this effort for some time.	20	c	While the system has an ample water source it cannot meet fire flow with undersized and failing distribution lines and standpipes. Storage needs repairs to stop reoccuring tot coliform violations. Adjacent systems are smaller and have similar issues. Systems are encouraged by LAFCO to consolidate and discussions are underway on how to end up with one reliable singularly managed system.	2,000,000	650	3,019 13	San Bernardino	V	2011

1306 1210012	1210012-003	City of Rio Dell	Undersized Water Distribution Pipeline Replacement Project - Various Locations	The City of Rio Dell proposes to replace approximately M 2,350 linear feet of 2-inch galvanized steel line with 6- inch PVC C-900 or HDPE pipeline. Waterlines on Ash Street, Birch Street, Monument Rd, Pacific Avenue and Elm Street are included in the project. The project also includes new hydrants, new valves, and new service laterals. The project will improve water pressure to residences served by these lines and reduce water losses thereby improving water use, energy efficiency, and water quality.	20	C	The water Coinciding with the California governor's goal of achieving a water use reduction of 20 percent per capita, the City of Rio Dell needs to upgrade approximately 2,350 linear feet of under-sized steel water distribution pipelines at several locations within the City limits. Inspection of the under-sized pipes, installed in the 1960's, revealed leakage and breakage at many locations. It is estimated that losses along these lines can be as high as 30 percent of the flow through these pipes. City residents served by the undersized and deteriorating pipelines, experience water outages during frequent required repairs and water quantity problems caused by insufficient water delivery capability necessary to supply current demand.Since the existing 2-inch steel pipelines were installed, the population of Rio Dell has grown significantly. Major portions of the existing water distribution system were designed to accommodate flows that would serve significantly less residents. The replacement of undersized water distribution pipelines is proposed to provide adequate water service to the residents on the west side of the City. The replacement of the undersized water mains is in support of the California Governor's Order No. S-06-08, which in part orders the Department of Public Health to mitigate impacts from delivery limitations. The project would also support Order No. S-06-08 as well as the California	425,000	1,134	3,174 01	Humboldt	I	2009
1307 1210012	1210012-005	City of Rio Dell	Waterline Replacement ( Monument Road	on The City of Rio Dell proposes to replace approximately M 1,500 linear feet of 2-inch galvanized steel line with 6- inch PVC C-900 or HDPE pipeline located on Monument Road. The project Also includes connections to the existing system, new valves, and new service laterals. The project will improve water pressure to residences served by these lines and reduce water losses thereby improving water use, energy efficiency, and water quality.	20	С	Coinciding with governor's goal of achieving a water use reduction of 20 percent per capita, the City of Rio Dell needs to upgrade approximately 1,500 linear feet of the under-sized water distribution pipeline that provides service to the residents living on Monument Road. Inspection of the existing under-sized steel distribution pipes, installed in 1960's, revealed leakage and breakage at many locations. It is estimated that losses along this line can be as high as 30 percent of the flow through this distribution pipeline. The City has repaired the steel pipeline is it times this year. Residents served by the undersized and deteriorating pipeline experience water outages during frequent required repairs and water quantity problems caused by insufficient water delivery capability necessary to supply current demand. The replacement of the California Governor's Order No. S-OF.	255,000	1,134	3,174 01	Humboldt	I	2009

08, which in part orders the Department of Public Health to mitigate impacts from delivery limitations. The project would also support Order No. S-06-08 as well as the California governor's stated goal of achieving a 20 percent reduction in per capita water use State wide by 2020, through reduction in water losses from the almost 50 year old pipeline.Replacement of the undersized pipeline will also improve water quality as there is a build up of iron and manganese in this pipe from the City's previous groundwater source, which was

1308 1210012	1210012-004	City of Rio Dell	Service Line Replacements on Riverside Drive	s The City of Rio Dell proposes to install 24 – 1-inch PVC C900 lateral service lines to residences on Riverside Drive in Rio Dell and tie the new waterline into the existing distribution system. Connecting water service laterals to residences also includes the installation of 24 meter boxes, corporation stops and service saddles.	M	20	C	The City of Rio Dell installed a new 8-inch and 6-inch water main distribution line on the West end of Riverside Drive to replace an existing deteriorated 4-inch steel waterline as part of a past waterline rehabilitation project, however, the City did not have the funds complete installation of the new service lines and tie the new line into the existing system. The 24 families living on the west end of Riverside Drive homes on this street are still served by a deteriorated, undersized waterline installed in the late 1960's and corroded service laterals. Pursuant to Title 17 of the California Code of Regulation and Section 116270-116293 (a) and (e) of the Health and Safety Code, every citizen of California has the right to pure and safe drinking water. Connecting the residents on Riverside Drive to the existing water distribution system will improve the water quality as there is a build up of iron and manganese in these pipes from the City's previous groundwater source, which was replaced in 2002. Iron and manganese re-dissolve and can contaminate the water and directly impact the consumers. Installing a new PVC distribution line will improve the quality of the water delivered to the consumers.	78,000	1,134	3,174 01	Humboldt	1	2009
1309 1610001	1610001-005	Armona Community Services Dist	Additional Water Storage Tank	Install new water storage tank at Well Site No. 2.	м	20	с	Currently, there is insufficient water supply to meet the peak demands of the community at appropriate water pressure.	500,000	1,179	3,239 12	Kings	Ш	2004
1310 0510003	0510003-003	Angels, City of	Angels, City of	Replace 3750 linear feet of 10" diameter steel main with 10" diameter C900 main.	М	20	С	Substandard 35 year old 10" diameter steel main serving City of Angel. Multiple leaks	298,375	1,773	3,441 10	Calaveras	ш	1999
1311 1310003	1310003-003	GSWC, Calipatria	GSWC-Calipatria System- Secondary Feed to Niland	Project Scope includes approximately 5400 feet of 12 inch pipeline, including all trenching, backfill, paving, valves, and appurtenances. The estimated completion date for the plans is June 2009 and the estimated construction start date will be in September of 2009.	Μ	20	с	Currently, the Niland Water System is supplied by a single, 3mile long pipeline from Calipatria to Niland. A secondary feed is needed to provide redundancy in the system and an extra supply line in case of emergency failure of the existing supply line. The secondary line will be a direct water supply line to the southern portion of the Niland System.	644,741	873	4,040 14	Imperial	v	2009
1312 2410002	2410002-005	DOS PALOS-CITY	Water distribution replacement project	City of Dos PalosWater Distribution system replacement projectThe replacement of large section of distributionpipeline will significantly reduce the present issue of laekage and break withint he existing sytem. The new main pipelines will be sized to have capacity to meet the flow and pressure requirements of the the system and to provide the minimum needed for health standards. The project will invlove the removal and replacement of pipelines in the the older areas of the communities to upgrade those pipelines to current standards. The contractor will need to execavate the existing street, provide dewatering, bypass piping for the continued distribution of the water to customers, place new pipeline, bedding and repave the street.	t M :	20	C	City of Dos PlaosWater distribution replacement projectThe water distribution system for the community has been installed over several years and has several areas of leaks through out the system. The aging pipeline material and high groundwater contributes to the failures in the pipelines, along with poor bedding when the pipeline was installed some 50 years ago in the older areas of the community. The water service connections atthe main distribution pipelines have breakage due to the leaks and high groundwater that causes the traffic load to place pressure onto the connection. These breaks or leaks allow for the potential contamination for the distribution system with the introduction of groundwater into the system at the break or leak point. The System operator needs to run high chlorine levels higher than normal due to thei high potential of leakage in the system.	10,560,000	2,566	4,417 11	Merced	11	2009
1313 1910072	1910072-002	GSWC - WILLOWBROOK		REPLACE WATER MAINS IN CRITICAL AREAS	м	20	с	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	100,000	1,398	4,514 15	Los Angeles	IV	1998
1314 3610009	3610009-001	BIGHORN - DESERT VIEW WATER AGENCY	Planning for BDV Water Agency	Prepare a water resource plan	М	20	С	Need to identify water quantity and quality information to serve potential development and establish needed capital projects to meet that need.	300,000	1,903	5,000 13	San Bernardino	v	2004

1315 3310048	3310048-001	Coachella VWD: I.D. NO. 8		Replace distribution pipelines to prevent contamination M caused by leaks or breaks in the pipelines. In addition, extend and loop distribution pipelines to eliminate dead end lines per CA Water Works Standards, Chapter 16.	1	20	с	Old deteriorating water mains installed in the 1950's are routinely leaking and or breaking.	1,000,000	1,555	5,132 20	Riverside	V	2001
1316 1710004	1710004-003	Lakeport, City of		Provide additional water production facilities and upsize M	1	20	С	Diminishing water production capacity, low water	5,300,000	2,196	5,200 03	Lake	П	1998
1317 1710004	1710004-005	Lakeport, City of	Water Distribution Syster Rehabilitation and Replacements	Martin Street between Russell and Bevin's;Wet well improvements at treatment plant;Replace water system Profibus telemetry system;Replace existing 6" main with 10" or parellel with 8" along Hartley from Boggs to 20th;Replace or parallel existing 8" and 6" mains along Lakeport Blvd with either 8" or 10" mains from Bevins to Forbes;Parallel 6" with 8" along Brush Street and replace existing 4" and 6" mains along 2nd street with 10" main from Brush to Main Street;Parallel existing 8" mains along 11th street with 8" main from Alden to Brush;Replace existing 6" mains along 11th street with 10" main from Brush to Main street;Parallel existing 4" main along 2nd Street with 10" main from Russel to Brush;Parallel and replace existing 4", 6", and 8" mains along Main Street with 8" and 10" mains from 2nd to 11th Street;Parallel existing 8" main along Main street with 8" main from 2nd street to Konocti Ave; andStorage tank interior recoating to prevent corrosion.	1	20	с	City water distribution system is in desperate need of rehabilitation and replacement. Existing water mains and appurtenances are as old as 80 years in some locations, made of pourous and decaying material. Potable water loss in the system is estimated to be over 15%, due to broken and deteriorating mains and laterals. Service lines are sized insufficiently for current and future demands. Water quality and delivery are at increased risk of further deterioration until improvements can be made.	2,550,000	2,196	5,200 03	Lake	Η	2009
1318 1710004	1710004-004	Lakeport, City of	SCADA Control and Communication System Replacement	The SCADA and telemetry systems will be replaced with M a modern and fully functional system. New hardware and software will be purchased and installed at the water plant and at locations within the water distribution system. Professional customization will also be performed, which will fit the new system with water plant and distribution operations and to meet operator needs.	1	20	C	The SCADA (Supervisory Control and Data Acquisation) is a large component in the operation of the surface water treatment plant. It is designed to automatically control water treatment and alarm notification functions. However, the system is antiquated and disfunctional. It is plagued with technical problems and prone to frequent malfunction. As a result, the water plant has become increasingly difficult to operate and burdens already overworked staff with additional responsibilities when processes, which are supposed to be automatic, fail or don't perform as expected.Additionally, the Profibus Telemetry System for the water system has become antiquated and unreliable. Third-party analysis of the problem, and review by the Department of Public Health, has suggested it be replaced with a radio telemetry system as soon as possible. The SCADA and Profibus Telemetry System are designed to work congruently. Therefore, the replacement of both with a unified control and communication system is the appropriate and preferred option for the City. However, current funding is unavailable to move the project forward.	500,000	2,196	5,200 03	Lake	Ι	2009
1319 4110010	4110010-020	Montara Water and Sanitary District		Alta Vista water treatment plant M	1	20	с	Alta Vista Water Treatment Plant requires improvements for system reliability.	250,000	1,640	5,412 17	San Mateo	Ш	1998

1320 4110010	4110010-047	Montara Water and Sanitary District	Consolidation of the Pillar Ridge Mobile Home Park Water System	This project will support consolidation of the Pillar Ridge M disadvantaged community water system with the MWSD public water system. Since there is an existing operational permanent connection between the two water systems, only minor improvements are required for this consolidation, as follows:1. Pillar Ridge Water Treatment Plant improvements to consolidate the controls and add the facilities to the MWSD's Supervisory Control and Data Acquisition System (SCADA). Other minor repairs and maintenance issues for the facilities are also included.2. Meter replacement: existing 228 meters will be replaced with new radio- read meters per the MWSD's standards.3. The 228 additional water accounts from Pillar Ridge community will be consolidated into the MWSD's billing and record keeping system.All these activities are expected to be exempt from CEQA. Categorical Exemption will be filed by MWSD as Lead Agency. All design and procurement documents and construction bid award and management will be carried out by MWSD,	20	C	Pillar Ridge Mobile Home Park (Pillar Ridge) is a small mobile home community located in Moss Beach, California, in the Montara Water and Sanitary District's (MWSD) service area. Pillar Ridges currently operates its own water system consisting of 3 groundwater wells, a storage tank, a water treatment plant, and raw water transmission lines, and a distribution system network. The system serves 228 mobile home residences in the community. In addition, MWSD currently provides water to Pillar Ridge through a permanent metered connection. The Pillar Ridge community is designated a low- to extremely-low-income disadvantaged community. Pillar Ridge community has been experiencing difficulties with maintaining and operating its various water facilities, including the wells and the water treatment plant, securing certified operators, and carrying the high cost of maintenance and operations of the water system. In 2006, Pillar Ridge through its owner, Millennium Housing, has approached MWSD willing to consolidate its water system with the MWSD water system and transfer the ownership to the District. MWSD, although willing to consolidate and assist Pillar Ridge, had no ability to do so due to lack of funds to accommodate 228 new metered connections into its water system. This project will consolidate the entire Pillar Ridge water system into the MWSD water system and greatly contribute to improving water quality and	450,000	1,640	5,412 17	San Mateo	Ι	2009
1321 1910084	1910084-010	MAYWOOD MUTUAL WATER CO. #1	Water Tank Replacement	Tearing down the old water tank and rebuild a new tank M will provide a secure source of clean water to our customers. The area is densely populated during the day time hours with 4 public schools serving over 8000 students, 2 shopping areas, 3 strip malls, 2 large markets, 1 large conversant hospital, 4 large churches and the central business area of the City of Maywood. CDPH has asked about updating the tanks. Our concern is to have adequate water in case of fire. Protection of all major structures has prevented us from taking this tank off line. Increasing the tank size will mean that we have to redesign and relocate our pumping station to accommodate the new water tank.	20	C	Here are some facts about our tank that needs repair and updating.a) Our 500,000 gallon tank (small tank) measures 36 feet diameter by 70 feet tall, built in 1965.b) All the anchors on the tank have been stretch or broken, due to past earthquakes. c) The tanks internal lining was done with tar as was the standards in 1965. d) Corrosion has been documented on the inside and outside of tank.e] This tank is inter-connected with a 2,000,000 gallon tank that's built next to it.f) The inter- connection from tank to tank is ductile iron pipe; Not flexible.g) Tank is located less than 50 feet from residential housing units.h) Engineering study suggested to tear down the water tank and rebuilt it because it is more cost efficient.i) Safety of the community.j) Be able to provide a minimum pressure of 20 psi in case of power loss.	2,500,000	1,161	5,500 16	Los Angeles	IV	2009
1322 1910084	1910084-005	MAYWOOD MUTUAL WATER CO. #1	dead end water main replacement	M on the west end of our water system; to eliminate the dead end areas. This project will improve circulation of the water supply and stop the constant need to be flushing the area to remove sedement in the water. Test have shown that manganese tends to build up every 4 to 6 weeks and this must be flush out. Approximately 4,000 feet is needed to connect this area to our system to create a loop and eleminate the dead ends. This project will help the save 100s of thousands of gallons of water by not having to flush the area so often and also imporve the quality of the water and build up of the secondary MCL for manganese. At the current time CDPH has issued a violation for secondary MCL for manganese. This project will be the must cost effect solution to this area and clean up the water that just sit there for a long time and accumulates sediement and discolors the water. This will help compliv with	20	C	Install new 8 inch water main along Maywood Avenue on the west end of our water system; to eliminate the dead end areas. This project will improve circulation of the water supply and stop the constant need to be flushing the area to remove sedement in the water. Test have shown that manganese tends to build up every 4 to 6 weeks and this must be flush out. Approximately 4,000 feet is needed to connect this area to our system to create a loop and eleminate the dead ends. This project will help the save water by not having to flush the area so often and also imporve the quality of the water and build up of the secondary MCL for manganese. At the current time CDPH has issued a violation for secondary MCL for manganese.	612,500	1,161	5,500 16	Los Angeles	IV	2009

CDPH voilation order.

1323 1910084	1910084-006	MAYWOOD MUTUAL WATER CO. #1	Cleaning Pigging and Reline water mains	Pigging the water mains of approximately 60,000 feet of M cast iron water pipeline throughout the water system. The pipeline seems to be in good shape expect for the tubercular corrosion that has formed in the pipeline. The tubercle knobs inside the pipeline have harbored iron and manganese and is released to the customers who complaint about yellowish, reddish water. Complaints have shown that the problem is throughout the water system. Our concern is that bacteria maybe growing in these pipelines because of the tubercle knobs inside the pipeline; and by cleaning and opening these water mains the increase in pressure and flow will be meet. Cleaning, pigging and reline the pipeline will protect our existing water mains for generations to come without need to replace them at a cost of about (½) half of what replace with new pipes. This will also help us comply with CDHS secondary manganese problem, meet fire flow requirements and help us from flushing so often and loosing water in this time of drought.	20	C	Pigging the pipeline of approximately 60,000 feet of cast iron water pipeline throughout the water system. The pipeline seems to be in good shape expect for the tubercular corrosion that has formed in the pipeline. The tubercle knobs inside the pipeline have harbored iron and manganese and is released to the customers who complaint about yellowish, reddish water. Complaints have shown that the problem is throughout the water system.Our concern is that bacteria maybe growing in these pipelines because of the tubercle knobs inside the pipeline; and by cleaning and opening these water mains the increase in pressure and flow will be meet. Cleaning, pigging and reline the pipeline will protect our existing water mains for generations to come without need to replace them.This will also help us from flushing so often and loosening water in this time of drought.	4,000,000	1,161	5,500 16	Los Angeles	IV	2009
1324 1910084	1910084-011	MAYWOOD MUTUAL WATER CO. #1	Remove 4" inch water mains and upgrade system on Slauson	These pipes need replacement because of the location M of the pipes and condition of the pipes. Cookies have been cut and they have heavy tubercle and manganese buildup within the pipes. Because of the size and location of these undersize pipes and fire protection that is needed in this area; replacement of the pipes will provide a safer, cleaner and more reliable water supply to our customers. If funding is available we will lay about 11,200 feet of pipeline on Slauson avenue. This will provide a outstanding fire flow protection to the city of Maywood and help the secondary problem of rusty water and poor pressure to our customers. This project will also afford us to upgrade our system with air relief valves since it is at the higher end of our system and safer for pedestrians when repairs are needed.	20	с	Slauson Avenue has old 4 inch cast iron pipes that were laid back in the 1920's and 30's these pipes run under the sidewalk of the major business district of the City of Maywood. These pipes have old lead chalking to prevent leakage are undersize and must be replaced with an 8" inch pipeline. These pipes need replacement because of the location of the pipes and condition of the pipes. Cookies have been cut and they have heavy tubercle and maganese buildup within these pipes. Because these pipes are undersize and provide poor water circulation and pressure and fire protection that is needed in this area; replacement of the pipes will provide a safer, cleaner and more reliable water supply to our customers.	2,000,000	1,161	5,500 16	Los Angeles	IV	2009
1325 2310006	2310006-005	Millview County Water District	N. State St. Pipeline Project	The project will replace approximately 4,800 feet of asbestos cement pipe with 16 inch C-900, replacement of the existing 3 and 4 inch warf type fire hydrants and service lines.	20	c	The Millview County Water District backbone main, routed along North State Street, Consists of pipelines that vary in diameter from 4 to 12 inchs. A large majority of the mainlines are of asbetos-cement construction. The inadequate size of the pipeline results in low pressures and flow for peak demands and fire flow events. This project is the first phase of solving the low pressure and flow rates by replacing approximately 4,800 feet of the undersized piping. This work is also necessitated at this time as the County is widening the existing roadway and requires all piping, etc. to be upgraded as a part of this effort. The plans and specifications for the pipeline are complete, and project bids are presently being obtained to construct the work. The work will commence in March/April and be completed by mid-summer of 2009	1,250,000	1,489	5,500 03	Mendocino	Ι	2009

1326 1910084	1910084-004	MAYWOOD MUTUAL WATER CO. #1	Updated plant and system electrical components	Maywood Mutual water Company is a small system with only 3 employees to work the system. We do maintenance and repairs when needed. We do not have no night shift to watch the water system after hours even doe we always have on call personnel for emergences. The updated plant and system electrical components is needed to put our remote location (well #3) on a SCADA system and generator.1.) A SCADA system will allow us to monitor the system for any problems that have occurred and to respond within minutes to correct the problem via computer. This system can save lives and property or avoid contamination problems or pressure problems before it can get out of hand.2.) A recent test of our electrical boosters we have (3) three 40HP motors have been documented to perform between 24% to 29% efficiency. This has cost the company thousands of dollars due to the performance of these motors. The motors do not move the water as they should and waste electricity. A more energy efficiency motors will reduce cost, save valuable energy. Boosters at the present time do not perform well during peak periods and 2 booster may need to be on when demand is high or we will lose pressure in the system. 3.) A generator is needed at our well #3 location to generate power when and if the power should go out. Our well #3 is now our principle well for production. This well has produce near sinced well for production. This well has produce near principle well for production. This well has produce near principle well for production.	M 5 5	20	c	Maywood Mutual water Company is a small system with only 3 employees to work the system. We do maintenance and repairs when needed. We do not have no night shift to watch the water system after hours even doe we always have on call personnel for emergences. The updated plant and system electrical components is needed to put our remote location (well #3) on a SCADA system and generator. 1.) A SCADA system will allow us to monitor the system for any problems that have occurred and to respond within minutes to correct the problem via computer. This system can save lives and property or avoid contamination problems before it can get out of hand. 2.) A recent test of our electrical boosters we have (3) three 40HP motors have been documented to perform between 24% to 29% efficiency. This has cost the company thousands of dollars due to the performance of these motors. The motors do not move the water as they should and waste electricity. A more energy efficiency motors will reduce cost, save valuable energy. Boosters at the present time do not perform well during peak periods and 2 booster may need to be on when demand is high or we will lose pressure in the system. 3.) A generator is needed at our well #3 location to generate power when and if the power should go out. Our well #3 is now our principle well for production. This well has produce near contaminate	210,000	1,161	5,500 16	Los Angeles	IV	2009
1327 1910084	1910084-008	MAYWOOD MUTUAL WATER CO. #1	Replacement of old and undersize gate valves	Replace all valves within our system to properly shut down any area that may need repairs without having to shut down several blocks to make these repairs. This will prevent any backflow problems that may occur and any low water pressure when hydrants or peak periods occur. These valve have been in use since the 1920's and 30's have seen their useful life.Many valves are undersize and connected to larger pipes restricting the water flow and effecting emergence fire hydrant with the water that is needed.Valves are missing in areas and need to be added to have a safe system of shutdowns due to emergence of any sort. These valves are also a source of corrosion and release of iron in our water supply that has effected the color and taste to our customers. Removal and replacement of these valves will help us comply with CDHS for secondary MCL problems we have in this area.	d	20	С	We have about 400 Valves that have been there since 1920's and 30's.Many of these valves do not shut down properly and many leak for weeks or months when they are exercised.We have found under size 4" inch valves connected to 6" inch pipeline giving us flow problems. Many intersection do not have valves or not enough to do a complete shut down within one block and we have to shut down and disinfect several block for any repairs.In case of fire very low pressure can occur and will produce backflow problems and possible contamination of the drinking water supply.New valves in our system will give us the tools to perform repairs in a safe and more efficient manner and help keep our system in compliance with CDPH.	1,500,000	1,161	5,500 16	Los Angeles	IV	2009
1328 1910084	1910084-007	MAYWOOD MUTUAL WATER CO. #1	Drill New Well #5	Hire a drilling company to find a clean source in the aquifer and engineer the well to meet the needs of the community.Drill well and put in operation on a rotating basis.If new well is iron and manganese free it will become are primary water well. If the well has manganese or iron or any other contaminates we can connect to a filtering system that can remove the containments before it is stored in our water tanks. Replacing these 60 and 70 year old wells will help the community and will be served with healthier and better drinking water and ensure that presure in our system will be always be meet.	м	20	С	Well #3 was drilled in 1943 and our well #4 was drilled in 1950 according to records in our office. Both wells are needed for redundancy and to supply water to our customers. These wells have past the useful life of a well and may fail soon. It is important to be prepared for such an event with a new well in place to supply water to our customers. It is only a matter of time when ant of these well will fail and there is not enough money to supply the community with outside water such as CBMWD or any of the neighboring water districts. Drilling a new well is a critical need for this community to avoid possable pressure problems if in the future.	1,250,000	1,161	5,500 16	Los Angeles	IV	2009
1329 4910004	4910004-006	Sweetwater Springs CWD - Guerneville	Project 3	Install and replace 6000 feet of distribution main.	М	20	с	Leaky, old undersized water mains.	1,121,000	2,497	6,000 18	Sonoma	Ш	2006
1330 4910004	4910004-008	Sweetwater Springs CWD - Guerneville	Project 5	Install and replace 5,000 feet of water main.	М	20	С	Leaky, old undersized water mains.	838,000	2,497	6,000 18	Sonoma	Ш	2006
1331 4910004	4910004-007	Sweetwater Springs CWD - Guerneville	Project 4	Install and replace distribution mains.	м	20	С	Old, leaky, undersized main	1,014,000	2,497	6,000 18	Sonoma		2006
1332 4910004	4910004-009	Sweetwater Springs CWD - Guerneville	Project 6	Install and replace 6,000 feet of distribution main.	М	20	С	Leaky, old, undersized distribution mains	1,121,000	2,497	6,000 18	Sonoma	Ш	2006

1333 4910004	4910004-005	Sweetwater Springs CWD - Guerneville	Project 2	Install redundant pumps, emergency generator, and SCADA; Install 1,700 feet of 6-inch water main.	М	20	С	No emergency power, limited storage, no telemetry; leaky, old, undersized mains.	565,000	2,497	6,000 18	Sonoma	II	2006
1334 4910004	4910004-004	Sweetwater Springs CWD - Guerneville	Project 1	Construct 120,000-gallon storage tank, hydropneumatic booster station with emergency power connection. Install 4,000 ft of 6-inch water main.	M	20	С	Water outage during power outages due to communication failure between sites. Leaky, old, undersized pipe	1,000,000	2,497	6,000 18	Sonoma	II	2006
1335 1510020	1510020-003	TEHACHAPI, CITY OF		REPLACEMENT OF FAILING SERVICE LINES	м	20	С	NUMEROUS SERVICE LINE FAILURES IN OLDER SECTIONS OF THE CITY	1,647,500	2,939	7,218 19	Kern	ш	1998
1336 1510020	1510020-002	TEHACHAPI, CITY OF		INSTALL EMERGENCY GENERATOR - PINION WELL	м	20	с	LACK OF EMERGENCY POWER	47,000	2,939	7,218 19	Kern	Ш	1998
1337 1510020	1510020-001	TEHACHAPI, CITY OF		INSTALL 250,000 GALLON HOLDING TANK. OTHER - DESIGN AND CONSTRUCTION	м	20	С	PRESSURE FLUCTUATION HIGH END OF THE SYSTEM	180,000	2,939	7,218 19	Kern	ш	1998
1338 1510020	1510020-005	TEHACHAPI, CITY OF		INSTALL 2,000' OF 10" PIPE FROM PINION WELL TO CURRY STREET STORAGE TANK. OTHER - DESIGN AND CONSTRUCTION.	М	20	с	INABILITY TO TRANSFER WATER FROM PINION WELL TO STORAGE TANKS	66,400	2,939	7,218 19	Kern	Ш	1998
1339 1510020	1510020-004	TEHACHAPI, CITY OF		INSTALL SECONDARY BOOSTER PUMP	М	20	С	LACK OF BACKUP BOOSTER CAPABILITIES FROM WELLS TO STORAGE	30,000	2,939	7,218 19	Kern	ш	1998
1340 1510045	1510045-009	GOLDEN HILLS CSD	Well Replacement Project	The project consists of the installation of a new 400 gpn production well to replace the Iriart Well. The propose well would be located on land owned by the Tehachapi Cummings County Water District (TCCWD). Based on existing hydrogeologic information the estimated depth of the proposed well is 500-550 feet. The casing size would be 12 inches with 200 feet of well screen. The pump would most likely be a submersible type pump. Other project components would include continuous chlorination equipment, as small building to house the well and equipment, and 300 linear feet of 6-inch diameter pipeline to connect to the existing water system. The well would be interconnected for emergency use to the TCCWD water system and the City of Tehachapi. By providing this interconnection, if water service was disrupted for either system, the District could provide a backup water supply.	n M d	20	C	The Golden Hills Community Services District (District) is located in the Tehachapi Mountains in Kern County, 40 miles east of Bakersfield. The District has a Median Household Income (MHI) of \$48,047 (which is 3 percent higher than the Disadvantaged Community MHI threshold). Currently the District's Maximum Day Demand (MDD) is approximately 1800 gpm during the peak summer months. The District's total source capacity is about 1900 gpm, excluding two wells that are currently not used due to poor water quality. The District's largest capacity source is the Iriart well which can pump a maximum of 700 gpm. Therefore, the District's largest capacity source offline. The Iriart well which can pump a maximum of 700 gpm. Studiard which states "systems shall be capable of meeting MDD with the highest-capacity source offline. The Iriart well is the oldest well in the District and was constructed in the early 1940s. It does not have a sanitary seal, and it is subject to potential surface water contamination. Because the well is over 60 years old a casing failure could occur, thereby reducing the available water supply. The Iriart Well also has the poorest water quality when compared to the District's other operational wells. Nitrate is of concern, because it has been sampled as high as 30 to 37 mg/L edging close to the 45 mg/L Maximum Contaminant Level (MCL). Because it is above the "trigger" level for nitrate, the well requires	240,000	2,796	7,434 19	Kern	Π	2009
1341 3610031	3610031-001	MUSCOY MWC NO. 1		Replace transmission lines	М	20	с	Old transmission lines	637,715	1,550	7,500 13	San Bernardino	V	1998
1342 1910160	1910160-006	TRACT 349 MUTUAL WATER CO.	Install Emergency Water Intertie Connection	Install an 8" diameter pipeline from and to existing water lines at both water system, fitted with valves and and two way water meter. The water meter shall be located inside a vault located in a secured area.	M	20	С	Tract 349 Mutual Water Company have no emergency water intertie connection to the City of South Gate.	220,000	908	7,500 07	Los Angeles	IV	2009
1343 3610031	3610031-002	MUSCOY MWC NO. 1		Rehabilitate well and block wall	М	20	С	Well 1 does not meet state standards, structure subject to vandalism	90,000	1,550	7,500 13	San Bernardino	v	1998
1344 1910160	1910160-003	TRACT 349 MUTUAL WATER CO.	Emergency Generator and Controls for Emergency Power	Procure diesel fueled Emergency Generator and necessary controls and install it on site at 4630 Santa Ana Street facility. The Emergency Generator shall be housed in a secured enclosure to protect it from theft, vandalism and sheltered it from the weather.	М	20	С	Tract 349 Mutual Water Company water system has no back up power in the event of power loss in the area. There will be loss of water pressure in the distribution system that may affect water quality, firefighting capability and customer complaint. It will also affect the Well pump that supply water to the distribution system.	160,000	908	7,500 07	Los Angeles	IV	2009

1345 1910160	1910160-004	TRACT 349 MUTUAL WATER CO.	Repair and or Rehabilitate Leaking Distribution System Valves.	In order to repair the leaking valves, the street where the valves are located are to be excavated to exposed the valves. Special stainless steel T-bolts shall be fabricated to replace the existing deteriorated T-bolts. Any cracked and deteriorated follower plates and bent stems must be replaced. All valves shall be repacked. Some valves may have to be completely replaced. After the valves are repaired the hole shall be backfilled and repaved in accordance with the city requirements.	M	20	с	All gate valves with conventional packing in the distribution system are leaking due to old age, broken packing or missing stuffing box bolts and nuts, cracked and deteriorated follower plates and bent stems. These problems with the gate valves prevent us from exercising the valves for the scheduled periodic maintenance because it almost impossible to stop the leaks once it developed causing the water to create possible sinkhole in the street. Leaking valves can also cause water quality problem by back siphonage.	270,000	908	7,500 07	Los Angeles	IV	2009
1346 5410020	5410020-007	Woodlake, City of	Woodlake Water Tank	The City's contract Engineering firm has determined that enough surface area at the project site (a hill) will allow for the construction of a 500,000 gallon tank adjacent to the existing tank. Preliminary design has concluded that a retaining wall must be installed to fortify the new tank and an access road must also be constructed for heavy equipment to access the project site. The project will consist of the installation of the raod way for access; the placement of the retaining wall; the construction of a new water tank and the removal of the exiting facility. Another phase of the project is the removal and replacement of a 150 ft communications tower that has serves the City's franchise cable company. The guide wires supporting this structure will not allow access to the site and there are no other possible access points.	M s	20	С	Our 500,000 gallon water storage tank (city has only one) has been determined (by an outside engineering firm) to be in danger of collapse. Portion of their report states "It is this engineer's preliminary assessment that the steel tank is in a state of potential perimeter wall buckling which could be triggered by an increased movement (settlement) of the sub-grade soil or a minor seismic event. Buckling of the side wall could be a trigger for the tank to collapse causing a potntial complete failure and collapse of the tank". It is our opinion, based on the report, that the tank needs to be taken down and replaced by a newer structure.	1,500,000	1,784	7,524 12	Tulare	Π	2007
1347 1510038	1510038-001	BEAR VALLEY CSD	Well CV #6	This agricultural well that we own is also rated for drinking water applications but is not connected to our system. It is powered by a diesel pump out in a leased ag, fiel and needs to be repowered to an electric pump Well pump needs to be pulled, the well inspected by video, pump will be changed and power will be supplie by a 150 hp electric 480v. 3 phase motor, with appropriate motor control center, lighting SCADA controls, disinfection systems amnd controls. Electrical supply will have to be developed and installed to the site. Proper all weather enclosures will have to be built and pipelines constructed to connect to our system, about 1/4 mile away.	M d	20	С	water availability is in becomming questionable and will be in serious condition if a critical well is lost. We have an additional high production well available but it must be developed to drinking water status,(it is currently an unused agricultural well) re-powered (diesel to electric), and connected to the system. We believe that developement of this alternative source is critical, especially in view of current drought conditions.	300,000	2,887	7,534 19	Kern	Ш	2009
1348 4510016	4510016-001	Clear Creek CSD-Anderson		Drill new well and loop deadend lines to provide the reliability required by the Waterworks Standards.	Μ	20	C	No alternate source of water for emergency. Deadend lines need to be looped to fulfill Section 64560(a)(6) (minimize the effects of equipment failure) and Section 64626 (layout of water mains) of the Waterworks Standards.	850,000	2,645	8,000 02	Shasta	I	1998
1349 1010026	1010026-001	PINEDALE COUNTY WATER DISTRICT	Water Main Replacment	Install new water mains and water meters.	м	20	С	Some of the District's water mains are old and	4,650,000	3,370	8,495 11	Fresno	ш	2007
1350 2410010	2410010-002	WINTON WATER & SANITARY DIST	Well 17 Improvements	A well casing has already been constructed. This projet will include a new block wall building, site improvements, pumping and electrical equipment, standby diesel generator, connection to an existing water main, etc. Also included is a cellular based SCAD system that will be used to monitor and control the existing well and two of the three existing wells.	ct M	20	С	The District has three wells. When the highest capacity well is offline the other two wells are not capable of providing maximum day demand as required by CCR Title 22, Chapter 16, Section 64554(c), and water pressures drop significantly, especially in the summer months.	800,000	3,113	8,500 11	Merced	III	2009

1351 2010001	2010001-008	CHOWCHILLA CITY WATER DEPT	Complete Well #14, Pipin and Improvements	g Drill and develope a production well (#14) on City owned property, install pumps, motors, motor control center, standby generator, automatic transfer switches, SCADA, pipe and appurtances.	Μ	20	c	Recent agricultural development surrounding the City and the drought has caused a drop in the water table. Many of the older wells in the City are producing less water and are in danger of contamination. During the recent growth the City did collect development fees to provide for the drilling of new wells. In an attempt to do so the City drilled two dry holes. On the third attempt we were able to drill a test well that indicates that we have located a reliable source of clean water. Due to the cost of the previous dry wells the City does not have sufficient funds to drill the production well and install the facilities needed to operate it.	1,200,000	3,073	10,682 11	Madera		2009
1352 2010001	2010001-007	CHOWCHILLA CITY WATER DEPT	Installation of a 1 million Gallon Storage Tank and Main Lines	Install a one million gallon storage tank, 1.5 miles of 12 inch pipeline, three booster pumps, standby generator, pump control equipment security fencing and other site improvements.	M	20	c	Much of the growth in the community has occured on the east side of town. The City acquired development fees to drill a new well in this area to provide a more reliable water supply. Testing of the area indicated that a good supply was available in this area. We acquired the land and drilled a test well where recommended. We were unable to find sufficient clean water to make the well viable. The testing leaves us to believe that attemting to drill in another location, in this area, would not be successful. In order to provide a reliable supply to this area, avoid low pressure issues that can result in the issuance of boil orders and line fluxhing, the City has determined that it will need to construct a water storage facility, additional piping and booster pumps. These facilities would also allow the City to reduce the pumping of its wells during peak electrical demands. This would result in cost savings to City and a benifit to the State power grid.	1,500,000	3,073	10,682 11	Madera	Ш	2009
1353 2010001	2010001-002	CHOWCHILLA CITY WATER DEPT		CONCRETE SEAL EXISTING OPEN-BOTTOM WELL #5 THAT WAS ABANDONED DUE TO FAILURE IN 1995 AND DRILLED NEW WELL TO LARGER SIZE AND DEPTH TO PROVIDE REQUIRED DOMESTIC AND FIRE FLOWS TO SERVE EXISTING DEVELOPED AREA. OTHER - DESIGN AND CONSTRUCTION	М	20	С	DETERIORATED AND COLLAPSED CASING IN OPEN BOTTOM WELL, SHUT DOWN IN 1995.	400,000	3,073	10,682 11	Madera	Ш	1998
1354 2010001	2010001-001	CHOWCHILLA CITY WATER DEPT		INSTALL 8" AND 12" PVC PIPE. LOOP THE SYSTEM WITH 12" MAIN CONNECTING TO THE WATER WELL. OTHER - DESIGN AND CONSTRUCTION	М	20	с	UNDERSIZED AND OLD DETERIORATED 4" STL WATER PIPE THAT IS OVER 55 YRS OLD. SYSTEM FAILS TO MEET CURRENT STANDARD DOMESTIC AND FIREFLOW PRESSURES.	335,000	3,073	10,682 11	Madera	Ш	1998
1355 2010001	2010001-003	CHOWCHILLA CITY WATER DEPT		REPLACE WITH 8" PVC PIPE. OTHER - DESIGN AND	М	20	С	UNDERSIZED MAINS. SYSTEM FAILS CURRENT	200,000	3,073	10,682 11	Madera	ш	1998
1356 2010001	2010001-005	CHOWCHILLA CITY WATER DEPT		REPLACE PIPE WITH NEW 12" PVC MASTER LOOP SYSTEM FROM WELL #10. OTHER - DESIGN AND CONSTRUCTION	М	20	с	UNDERSIZED AND DETERIORATED 6" AND 8" PIPE. SYSTEM FAILS DOMESTIC AND FIREFLOW REQUIREMENTS	557,000	3,073	10,682 11	Madera	Ш	1998
1357 2010001	2010001-009	CHOWCHILLA CITY WATER DEPT	Replace Water Mains in the Presidential Streets	This project would consist of the installation of approximately 2600 linear feet of 8 inch water mains, valves and appurtenances, and 110 meter services including lines, valves, meters, and meter boxes.	Μ	20	С	The mains in this area were installed during world war II and are constructed of steel. Over time they have deteriorated. We are experiencing frequent leaks and service interruptions. Due to our sandy soil conditions these leaks often go undetected for extended periods of time thus resulting in significant water losses at a time when we can least afford to waste this valuable resource.	800,000	3,073	10,682 11	Madera	111	2009

1358 2010001	2010001-010	CHOWCHILLA CITY WATER DEPT	Well 6 improvements	This project consists of installing a smaller pump, throttling valve, chlorination equipment, piping and a flow meter.	м	20	C	This well produced high levels of sand that destroyed the pumps. The City invested in an "Aqua Stream" device designed to create a water calming effect thus, eliminating the sanding issues. Although somewhat successful we are still unable to use the well. At normal flows the "Aqua Stream" device will plug off in a few hours and the well must be shutdown for an extended period before it can be placed back in service. Through some experimentation the City has been able to run the well for extended periods by reducing the flows. The equipment used to accomplish the flow reduction is not reliable for extended periods. New equipment needs to be installed so that this well can be used reliably during peak demand periods.	20,500	3,073	10,682 11	Madera	Ш	2009
1359 2010001	2010001-004	CHOWCHILLA CITY WATER DEPT		INSTALL NEW 8" WATER PIPE LOOP AND REPLACE PIPE WITH 8" AND 10" PVC. OTHER - DESIGN AND CONSTRUCTION	м	20	с	UNDERSIZED AND DETERIORATED PIPE. SYSTEM FAILS DOMESTIC AND FIREFLOW PRESSURES.	506,000	3,073	10,682 11	Madera	ш	1998
1360 2010001	2010001-006	CHOWCHILLA CITY WATER DEPT	Truman Drive/15street Water Main	Install approximately 1200 linear feet of 12 inch diameter pipe, valves and appurtenances in Truman Drive from well 5a to 15th street and proceed southeast on 15th to the point of connection . Restore trench paving.	м	20	С	When the City attempted to drill a new well on Chowchila Blvd to provide water to the industrial area of the City, that well was dry. We chose to attempt to drill a new well on City owned property that was futher away from the area needed but, was thought to be in an area where water might be found. The attempt was much more successful than anticipated and the existing piping that was intended to service this well is undersized. Due to the cost of drilling the first dry well the City lacks the funds to underake this project at this time. Providing this water to the industrial area is vital to the City's ability to attract job creating industry.	270,000	3,073	10,682 11	Madera	Ш	2009
1361 0410011	0410011-002	Del Oro Water CoParadise Pines		Construction of 1.5 MG storage tank, and interior sandblasting and recoating plus exterior painting of Tanks #1 and #2.	М	20	С	Storage shortfall and Tanks #1 and #2 need rehabilitation.	1,017,500	4,752	11,405 21	Butte	I	1998
1362 0410011 1363 1210006	0410011-001 1210006-004	Del Oro Water CoParadise Pines City of Fortuna	12th Street Undersized Water Main Replacement Project	Well exploration and development. The City of Fortuna proposes to replace approximately t 8,500 linear feet of AC pipe with 12-inch PVC C-900 or HDPE pipeline located on 12th Street in the City of Fortuna. The project also includes new hydrants, new valves, and new service laterals. The project will improve water pressure to residences served by these lines and reduce water losses thereby improving water use, energy efficiency, and water quality.	M	20 20	c c	Water shortage of 1,000 gpm. Coinciding with the California governor's goal of achieving a water use reduction of 20 percent per capita, the City of Fortuna needs to upgrade approximately 8,500 linear feet of under-sized water distribution pipeline at 12th Street in the City of Fortuna. Inspection of the under-sized pipe revealed leakage and breakage at many locations. It is estimated that losses along these lines can be as high as 30 percent of the flow through these pipes. City residents served by the undersized and deteriorating pipelines, experience water outages during frequent required repairs and water quantity problems caused by insufficient water delivery capability necessary to supply current demand.Since the existing water distribution system were designed to accommodate flows that would serve significantly less residents. The replacement of undersized water distribution pipelines is proposed to provide adequate water service to the residents of the City of Fortuna. The replacement of the undersized water mains is in support of the California Governor's Order No. 5-06-08, which in part orders the Department of Public Health to mitigate impacts from delivery limitations. The project would also support Order No. 5-06-08 as well as the California governor's stated goal of achieving a 20 percent reduction in per	500,000 2,000,000	4,752 4,312	11,405 21 11,649 01	Butte Humboldt		1998 2009

1364 1210006	1210006-006	City of Fortuna	Holman Tank Replacemen Project	t This project is to resolve the current problems with lack M of fire flow in Zones 3 and 5 and the need to replace the Holman Tank which is undersized and in poor condition. Several alternatives to correct the problems were evaluated. The proposed solution is to connect the two zones with an 8-inch pipeline and construct an at-grade storage tank. There would be approximately 1,800 feet of 8-inch pipe running cross-country in a new easement, 3,500 feet of 8-inch pipe in existing roads and a new 220,000 gallon steel tank.	20	с	The City has fire flow issues due to insufficient pressure supply from the Holman water tank. The tank has sustained serious structural damage due to earthquakes, and the tank is leaning off its base.	1,600,000	4,312	11,649 01	Humboldt	I	2009
1365 1210006	1210006-005	City of Fortuna	Wellhead Improvement Project	This project is to resolve the current problem that, in M the event of a major flood, only one of the City's five water supply wells would be operational. The motors of the other four would be flooded and they would be out of service for an extended period of time. Each well pump can supply approximately 900 gpm. The typical demand is 2,000 to 2,200 gpm so at least three pumps are required to meet the demand. The proposed solution is to raise the well heads on two of the pumps to an elevation that will be above the 100 year flood level. This will involve extending the pump casing, pump shaft and column on each well approximately 5 feet, extending the replacing the existing pump houses on the extended foundation or constructing new well houses. Piping and electrical wiring modifications will also be required to connect to the pump discharge head and motor that will be elevated by about 5 feet.	20	c	Four of the City's wells are not protected again the 100- year flood. In the event of a flood water supply would be severely limited as the City needs at least 3 wells to supply the average day water demand.	200,000	4,312	11,649 01	Humboldt	I	2009
1366 2410004	2410004-004	LIVINGSTON-CITY	Waterline Improvements Phase II	The project involves replacing approximately 13,600 M feet of 6" water lines, 2,930 feet of 8" water lines, 287 water meters, and paving of 15,000 feet of alleyways. The project will also include installation of gate valves, house services, fire hydrant assemblies, water meters, air release valves, bacterialogical sampling stations etc. The old and failing waterlines that have been identified as needed to be replaced will be replaced with PVC pipes with sizes that have been determined in the 2008 Water Distribution Master Plan prepared by Carollo Engineers. The sizes of the water lines were determined using the water distribution model developed for the Master Plan. This will ensure that along with the water quality issues being addressed with the elimination of leaking pipes, adequate hydraulic presures in the project area are assured. Currently majority of the alleyways are not paved. The alleyways where water lines are being replaced will be paved to limit damage to the pipelines due to the garbage trucks and heavy maintenance truck traffic accessing the alleyways. City of Livingston has an exceptional record of successful and timely completion of projects using Federal and State grants. During the past four years, City has received and completed the following projects using Federal and Intersection Mdifications at "B" Street and Winton ParkwayProjects	20	c	Majority of the older parts of the City's water distribution system were installed as early as the 1920s. These sections of pipelines have been historically prone to leaks and breaks, as well as source of frequent problems of poor water quality. In 2005, City obtained Proposition 13 Grant funding in the amount of \$1,906,700 from Department of Water Resources for Water System Infrastructure Rehabilitation Project. City recently completed construction of the project and replaced a total of 19,000 feet of pipelines. The pipelines completed as part of the Prop 13 Grant projects represent less than half of the pipeline that are old and failing. The proposed project is the next phase of the pipeline replacement program aimed at addressing water quality and pressure issues faced by the City due to the failing pipelines. The audit performed in 2003 in support of the Grant application for the Proposition 13 funding revealed that approximately 35% of the water being produced was anaccounted for (this figure preresents the difference between the amount of water produced and the amount of metered water]. Although the magnitude of the anaccounted water may have reduced due to the recently completed water line replacements, it is assumed that substantial losses occur in the failing pipelines that have not been replaced. City will provide supporting data with the detailed application.City staff continues to deal with a	3,780,000	2,905	13,795 11	Merced	11	2009

1367 2410004	2410004-003	LIVINGSTON-CITY	Well #9 and Well #13 Conversion to Water Lubrication System	Converting the two wells to water lubrication consists of pulling the pumps, convert to water lube, video well, air lift/blow well, bail oil from well, install new bowl assembly, 240' of new water lube column and shaft assembly etc.	Μ	20	с	Both the well systems were installed more than 15 years ago. City's maintenance division is proposing to convert from oil lubrication to water lubrication in view of the age of the existing well. City of Livingston relies fully on the water wells for water supply and emergency storage. The proposed project is intended as a preventive maintenance upgrade to ensure the wells are functional.	95,160	2,905	13,795 11	Merced	111	2009
1368 1910159	1910159-001	TRACT 180 MUTUAL WATER CO.		Replace water mains/transmission lines.	М	20	С	Transmission lines were installed in the late 1940's and early 1950's. They are deteriorating. Experience 3 - 4 main leaks per day at times	1,500,000	1,093	14,000 07	Los Angeles	IV	1999
1369 5210004	5210004-016	City of Red Bluff		Install 1MG storage reservoir and well. Loop two major service areas with appropriate size mains.	М	20	с	Low pressure in areas of the city. Inadequate main line size in areas. Absence of looping in parts of the system.	3,000,000	4,336	14,005 21	Tehama	I	1998
1370 5210004	5210004-008	City of Red Bluff		Construct new 1MG reservoir.	М	20	С	Lack of storage capacity in zone north of Hwy 36E/99E.	1,305,000	4,336	14,005 21	Tehama	I	1998
1371 3310032	3310032-001	San Jacinto, City of		The City plans to drill two more wells, build one or two Fe/Mn treatment plants, upgrade and replace the old distribution mains. Add additional surface storage.	М	20	С	Shortage of well capacity, water quality problems due to iron and manganese. Also, the City's distribution system is very old and under sized creating low- pressure problems.	1,500,000	4,030	14,098 20	Riverside	V	1998
1372 3310032	3310032-002	San Jacinto, City of	City of San Jacinto Masterplan Waterline Upgrade Project	In 2005, the City updated its water system master plan and identified all pipelines within its network that require upgrading. The highest priority was given to facilities that are grossly undersized (i.e. 2" diameter) or facilities that are a combination of undersized plus out of compliance with current standards (i.e. 4" diameter steel or ACP pipe). The proposed project will address the highest priority pipeline upgrades within the 2005 master plan update. It will install approximately 10,000 feet of new 8" PVC pipeline along various city streets to replace the aging infrastructure. Appropriate blowoffs, fire hydrants, av/ar valves, and other appertunances will be installed to ensure the locations in question are brought into full compliance with the state's water works standards. The design of the proposed project is already underway and environmental studies are essentially complete. The project will easily be ready for construction by the summer of 2009.	Μ	20	c	The City of San Jacinto Water System serves the urban core of the City (newer areas of the City are served by Eastern Municipal Water District). Throughout the City's downtown area, the existing water distribution system is made up of pipelines that are undersized, aged, out of compliance with current water works standards, and subject to sudden failure. These waterlines pose a significant threat to the performance of the City's public water system. Their small size (lines are typically 2"-4" diameter) compromises the City's ability to adequately supply demands throughout its service area. Their age and potential for failure increases the possibility that the water system will be compromised with introduction of pollutants. In some facilities (namely those made of asbestos-cement pipe) any maintenance activities are subject to special environmental procedures and as such regular operation and maintenance is cumbersome.	1,500,000	4,030	14,098 20	Riverside	v	2009
1373 1210016	1210016-001	McKinleyville C.S.D.		Construct new wells and retrofit existing facilities.	м	20	с	Need backup supply; vulnerability to seismic disruption.	946,790	5,042	15,132 01	Humboldt	I	1998
1374 1510019	1510019-008	Shafter, City of	Arsenic Treatment System at City Well 12	The City is proposing to reroute the wells discharge piping from directly connecting to the distribution system to a more accessible site across State Route 43 where the water can either be blended with other other well water at a central storage and mixing tank or through the typical treatment vessel assembly offered by one of the accepted removal technologies. Treated or blended water can then be pumped back to the distribution system. The blending option is preferred because there will not be a need to address disposal of wastewater and on-going costs of purchasing treatment media. With either option, the well will need pump and motor upgrades to address the increased hydraulic demands of having to route water to a new tank and through numerous new stretches of piping and valves. The construction schedule is being pushed back to the Fall of 2009 because it is generally less risky to take a well offline for maintenance and improvements during the low demand periods.	М	20	с	City Well #12 (Source PS Code 285/25E-10N01 M) has seen its Arsenic levels sharply increase over the past five years. The levels have reached as high as 12 parts per billion but has remained in compliance with the maximum contaminant level of 10 ppb with quarterly averaging of the results. The well site is in a confined area where the addition of treatment vessels and other new infrastructure needed to address the Arsenic issue are probaby not feasible.	2,250,000	3,863	15,609 12	Kern	III	2009

1375 1510019	1510019-001	Shafter, City of		DRILL A NEW WELL IN THIS AREA AND ADDING A STORAGE TANK. OTHER - DESIGN AND CONSTRUCTION	М	20	С	A LOW-INCOME AREA WAS ADDED TO SYSTEM AND IN PUTTING A BURDEN ON THE SYSTEM. THE NEW AREA IS	475,000	3,863	15,609 12	Kern	Ш	1998
1376 2310003	2310003-005	Ukiah, City of	Distribution System Reliability Project	This project would replace approximately 235,000 linear feet of transite pipeline within the City's water distribution system enhancing system reliability, protecting public health, and avoiding future system failures.	м	20	с	ISOLATED FROM THE SYSTEM The City of Ukiah's water distribution system includes older transite pipe which poses a high risk of catastrophic failure. These types of failures pose a risk in terms of both water supply reliability and water quality. Catastrophic failures interrupt service and also pose a threat to water quality because contaminants can enter the system through the failed pipeline. The City has already experienced such failures in the existing water distribution system.	10,800,000	5,486	15,955 03	Mendocino	Ι	2009
1377 1510022	1510022-002	West Kern CWD		Construction of 900,000 gallon water storage tank.	М	20	с	Residents experience lower than normal water pressure and minimum flow for fire hydrants cannot be maintained by the District	898,754	7,589	16,630 12	Kern	Ш	2004
1378 1510022	1510022-001	West Kern CWD		REPLACE 30" PIPELINE WITH 36" PIPELINE	М	20	С	WELLFIELD CONNETED BY 30 YEAR OL 30" PIPELINE 7.5	5,925,397	7,589	16,630 12	Kern	ш	1998
1379 3510003	3510003-004	Sunnyslope County Water Dist	SunnySlope CWD Well #11 Construction	The projects consists of the construction of drilling of well 11 and the connection of well 11 to the distribution sytem. The pipeline connecting well 11 to the distribution system is 2800 feet of 16" and 18" diameter main. The well consists of a 16" diameter casing to a depth of 580 feet. The well also includes a electrical and chlorine building and a standby generator. The well will be connected to PGE power.	M	20	С	The construciton of well 11 will allow Sunnyslope County Water District to meet the existing demand for both Sunnyslope County Water District and Venture Estates Mutual Water Company. Sunnyslope County Water District currently has significant water quantity problems caused by source water capacity that is insufficient to supply current demand. Sunnsylope currently meets current demand by borrowing water in the summertime from the City of Hollister. The construction of well 11 will allow Sunnyslope to service its exisitng customers and will also allow Sunnyslope to consolidate with Venture Estates Mutual Water Company which also had significant water quantity and quality problems. The construction of well 11 will allow Sunnyslope County Water District to consolidate with Venture Estates Mutual Water Company.	450,000	5,241	16,713 05	San Benito	Ι	2009
1380 3510003	3510003-006	Sunnyslope County Water Dist	Sunnyslope Well 12 & Associated Pipeline Construction	Currently the Sunnyslope County Water District has a water quantity deficiency in its existing system with exisiting customers and is consolidating with the Venture Estates Mutual Water Company which has deficiencies in both water quantity and water quality. The construction of well 12 and the associated intertie into the existing Sunnyslope distribution system will allow Sunnyslope County Water District to resolve its existing water quantity deficiency and also serve the Venture Estates Mutual Water Company. Well 12 will also be a future supply well for a proposed groundwater treatment plant which will remove hardness, sodium, and choride from the potable water supply. The current potable water supply exceeds secondary standards for hardness and total dissolved solids. Consequently, water customers install brine discharging water softeners to reduce hardness in the personal residences, but then discharge salt to the wastewater treatment system. The improvement of the drinking water supply to meet secondary standards for hardness and total dissolved solids will allow drinking water customer to discontinue the use of brine discharging water softeners and improve wastewater quality. Sunnyslope is in violation of its waste discharge requrements for sodium and chloride and total dissolved solids. Well 12 will supply the proposed groundwater treatment plant which will allow	M	20	c	Currently the Sunnyslope County Water District has a water quantity deficiency in its existing system with exisiting customers and is consolidating with the Venture Estates Mutual Water Company which has deficiencies in both water quantity and water quality. The construction of well 12 and the associated intertie into the existing Sunnyslope distribution system will allow Sunnyslope County Water District to resolve its existing water quantity deficiency and also serve the Venture Estates Mutual Water Company. Well 12 will also be a future supply well for a proposed groundwater treatment plant which will remove hardness, sodium, and choride from the potable water supply. The current potable water supply exceeds secondary standards for hardness and total dissolved solids. Consequently, water customers install brine discharging water softeners to reduce hardness in the personal residences, but then discharge salt to the wastewater treatment system. The improvement of the drinking waster supply to meet secondary standards for hardness and total dissolved solids will allow drinking water customer to discontinue the use of brine discharging water softeners and improve wastewater quality. Sunnyslope is in violation of its waste discharge requrements for sodium and chloride and total dissolved solids. Well 12 will supply the proposed groundwater treatment plant which will allow	2,100,000	5,241	16,713 05	San Benito	Ι	2009
1381 1610002	1610002-002	Avenal, City of		INSTALL EMERGENCY GENERATOR. OTHER - DESIGN AND CONSTRUCTION	М	20	С	POWER OUTAGES IN SWTR DUE TO LACK OF BACK-UP GENERATOR	390,000	1,892	16,737 12	Kings	Ш	1998

1382 3610049	3610049-002	TWENTYNINE PALMS WATER DIST		Replace 46 miles of mainline	м	20	с	Old mainline	5,000,000	7,704	17,500 13	San Bernardino	V	1998
1383 3610049	3610049-001	TWENTYNINE PALMS WATER DIST		Construct 2 MG reservoir	м	20	С	Need additional storage	1,200,000	7,704	17,500 13	San Bernardino	V	1998
1384 1510021	1510021-002	Wasco, City of	Water Tank #1	PROJECT DESCRIPTION: The City of Wasco requests	M	20	С	PROBLEM DESCRIPTION: Wasco's water distribution	4,979,600	4,588	19,448 12	Kern	III	2008
			Construction	funding to construct a tank, groundwater well and				system has no emergency storage capacity. During						
				booster station for water storage and to procure				peak demand conditions, water pressure can be						
				monitoring equipment. These improvements are				hazardously low. The City of Wasco provides domestic						
				needed to meet peak-demand and emergency supply				water service and fire flow needs for local residents and						
				needs and to maintain adequate water pressure. A pro	e-			businesses. The system is stressed by heat, service						
				construction feasibility study was completed in May				disruptions and growing demand. Summers in Wasco						
				2007 on Wasco's water supply and pressure				are hot and very dry. May through September,						
				deficiencies. An above-ground water storage facility				temperatures will peak over 100° F; today's forecast						
				was recommended as the most feasible solution for				high, for example, is 108° F! The last two water years						
				emergency water storage requirements and for				have yielded less than half the 6.5-inch average annual						
				providing adequate pressures at hydrants for fire-				precipitation rate. Leaks and disruptions in power or						
				fighting purposes, especially during periods of peak				water pressure frequently take the system off-line. The						
				demand. In response to the Infrastructure				community's population has grown 22% since 1998 and,						
				Rehabilitation Feasibility Study and the Water Master				since 2003, the number of service connections						
				Plan, the City of Wasco procured an engineer's estimat	te			increased from 3,681 to 4,270. Groundwater from the						
				for the engineering design and construction of a water	r			Kern County Subbasin aquifer is the sole water source.						
				storage facility. The project will construct a new 2,000	)			The City's groundwater management needs are covered						
				gpm groundwater extraction well with a 250-hp pump,	,			by the Poso Creek Integrated Regional Water						
				a two-million gallon at-grade welded steel water				Management Plan. A 2007 Department of Water						
				storage reservoir, and a 4,000 gpm booster station.				Resources Intrastructure Renabilitation Feasibility Study						
				Equipment for monitoring compliance with drinking				examined wasco's water distribution system and round						
				water standards will be purchased and installed. The				from six of sight groundwater wells. Under average						
				totale \$4,070,600. The facility will be located on City				conditions, the system has an estimated neak hour						
				owned land. The project will begin lune 2009 and be				demand of 6.1 MGD. The numps have the capacity to						
				completed by January 2011 The Water Tank #1				produce 9.6 MGD, but because only three bave back-up						
4205 4540024	4540024 004	Manage City of		Describe the facilities to be constructed as installed Th		20	<u> </u>	Describe the wester meters matching (a) to be	442.020	4 500	40 440 42	K		2000
1385 1510021	1510021-004	wasco, City of	12" water Line to Loop	Describe the facilities to be constructed or installed: In	ie ivi	20	L	Describe the water system problem(s) to be	412,830	4,588	19,448 12	Kern		2009
			Water Main at Filburn &	City of Wasco is requesting \$412,830 from the Safe				addressed:Water delivery in Wasco is hampered by						
			Central	Drinking water State Revolving Fund to Install 2,850				unstable water pressure and inadequate fire flows (City						
				linear feet of 12-inch water line. The new water line w	VIII			of wasco water Master Plan, 2007). Wells pump water						
				Connect two termination points in southwest wasco.	-			directly into the distribution system, but water now is discussed by dead onds in the main line. Wasse is a						
				Avenue and Elever Street, the water line will trevel	di			dischusteged eensmusituuith e medies household						
				couth along Control Avenue to Filburn Avenue. At				income (MHI) of \$28 525 in 2007 (City Data com). This						
				Filburg Avenue, the line will turp east and travel along				income (Will) of \$56,555 in 2007 (City-Data.com). This						
				Fiburn Avenue, the line will turn east and traver along				operates the water utility. It supplies water to 18 702						
				Avenue and Beckes Street This will complete the wate	or			residents (Calif. Dent. of Finance, 2008) and 4,630						
				main and create a continuous loop around the	ci -			service connections: note the DWP data provided in						
				periphery of the city. Besides the 12-inch water line.				Part 1 B. Applicant Water System needs to be changed.						
				the project will install nine 12-inch gate valves two 12-				Water for domestic service and fire flow is supplied by						
				inch stub-outs, and three 12-inch tees. The				six groundwater wells and a distribution system. Pipes						
				construction costs total \$305.800 and the Contingency	/			in the distribution system range in size from 4 inches in						
				and Engineering costs combined total \$107.030.This				diameter to the 12-inch diameter water mains. There						
				water line project is ready to proceed. Environmental				are no above-ground water storage facilities. Wasco's						
				documentation, including CEQA, will be completed in				population has grown 22% since 2000 (Calif. Dept. of						
				March 2009. Final plans and specifications will be				Finance, 2008). Demands on the local water system are						
				completed in April 2009. Using a bid process,				expected to increase by 1,137 people per year through						
				construction will begin as soon as June 2009. The City				2026 (City of Wasco Water Master Plan, 2007). The						
				of Wasco has managed similar water infrastructure				southern and western portions of the community are						
				projects and is experienced providing the financial				experiencing much of this growth. In the southwest						
				oversight and reporting required by State and Federal				corner of the city, the water mains travel west along						
				contract agreements. The project will be managed by				Filburn Avenue and south along Central Avenue. One						
				the City's Public Works Director. As the water utility				quarter mile before these roads bisect, the lines dead						
1386 3310016	3310016-004	Hemet, City of		To build 5 MG reservoir.	М	20	с	Based on 1997 annual inspection, the City does not beet	1,500,000	8,667	20,047 20	Riverside	V	1998
								the minimum storage requirements.						
1387 1010024	1010024-001	CWS - Selma		CONSTRUCT A ONE MILLION GALLON STORAGE TANK	М	20	С	PEAK FLOW DEMAND IS EXPECTED TO EXCEED	805,000	6,315	24,307 23	Fresno	Ш	1998
				AND BOOSTER PUMP FACILITY.				PRODUCTION CAPACITY OF EXISTING WELLS DURING						
								THE SUMMER MONTHS.						
1388 1910011	1910011-006	GSWC - BELL, BELL GARDENS		CEMENT LINING WATER MAINS IN CRITICAL AREAS.	М	20	С	OLD CAST IRON PIPES WITH BIO-GROWTH AND	320,000	7,488	24,311 15	Los Angeles	IV	1998
								POTENTIAL NITRIFICATION PROBLEM.						
1389 1910011	1910011-007	GSWC - BELL, BELL GARDENS		REPLACE WATER MAINS IN CRITICAL AREAS	М	20	С	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	700,000	7,488	24,311 15	Los Angeles	IV	1998

1390 1310001	1310001-006	Brawley, City of	City of Brawley Elevated Tank Rehabilitation	The City of Brawley has a 250,000 gallon steel elevated M tank at a public park (Hinojosa Park) located in the proximity of South Cesar Chavez Avenue and H Street. The 250,000 gallon elevated water storage reservoir has been removed from the City's water distribution system and requires a structural analysis, extensive work and lead paint removal to be placed back into service. This elevated water storage reservoir provides uniform water pressure and fire protection to residential and commercial water distribution accounts in the south eastern quadrant of the City. This elevated water storage reservoir services approximately 2,000 households.After a structural analysis is completed, the City will pursue one of the following two options with these funds:1. Remove lead paint from existing reservir, rehabilitate it, and place into service.2. Demolish tank and install a new ground storage reservoir with a pumping system.	20	c	The City of Brawley has a 250,000 gallon steel elevated tank at a public park (Hinojosa Park) located in the proximity of South Cesar Chavez Avenue and H Street. The 250,000 gallon elevated water storage reservoir has been removed from the City's water distribution system and requires a structural analysis, extensive work and lead paint removal to be placed back into service. This elevated water storage reservoir provides uniform water pressure and fire protection to residential and commercial water distribution accounts in the south eastern quadrant of the City. This elevated water storage reservoir services approximately 2,000 households.After a structural analysis is completed, the City will pursue one of the following two options with these funds:1. Remove lead paint from existing resevoir, rehabilitate it, and place into service.2. Demolish tank and install a new ground storage reservoir with a pumping system.	3,000,000	5,530	26,513 14	Imperial	v	2009
1391 1310001	1310001-004	Brawley, City of	Brawley, City of	City wide replacement of aged distribution system. M Redesign of the system to provide better system with less possibility of interruption.	20	с	Water line distribution system is inadequate and aging causing inadequate water supply to existing residents. In addition, the age of the distributions system results in an inordiante amount of breakage causing interruptions of water service to City.	12,500,000	5,530	26,513 14	Imperial	v	1998
1392 3310006	3310006-002	Banning, City of		Construct additional storage of approximately 4 million M gallons.	20	С	No storage in the Northend of the Water system. Need storage to meet the peak demands.	5,000,000	10,381	28,500 20	Riverside	v	1999
1393 3310006	3310006-004	Banning, City of	Downtown Water Main Relacement Project	Project Justification: The existing water system for the M downtown area is located in alleys, is in need of replacement due to age, leaks, and improvement of fire and water service. Description of the Project: Replace the existing downtown water system to improve service, reliability, reading water meters, and fire availability. Project consists of ±2,000 lineal feet of 12" and ±3,800 lineal feet of 8" pipelines, and appurtenances.	20	с	Project Justification: The existing water system for the downtown area is located in alleys, is in need of replacement due to age, leaks, and improvement of fire and water service. Description of the Project: Replace the existing downtown water system to improve service, reliability, reading water meters, and fire availability. Project consists of ±2,000 lineal feet of 12" and ±3,800 lineal feet of 8" pipelines, and appurtenances.	1,200,000	10,381	28,500 20	Riverside	v	2009
1394 3310006	3310006-001	Banning, City of		Replace the entire 16,000 L.F. of 18" and 20" with a new M 20" C.M.L.C. pine.	20	С	System has 16,000 L.F. of low head transmission main.	2,000,000	10,381	28,500 20	Riverside	V	1998
1395 0710004	0710004-009	City of Brentwood		Replace the lines to these homes with 6" lines. Replace M meters and hydrants for more efficient and healthier system.	20	С	Replace water main (4-in) that has low flow with 6-in. pipe.	430,000	15,776	45,892 04	Contra Costa	II	1998
1396 0710004	0710004-011	City of Brentwood		replace 255 of the 3000 valves with new valves and M dresser couplers.	20	С	Replace aging/failing valves in the distribution system with new ones.	850,000	15,776	45,892 04	Contra Costa	Ш	1998

1397 5110002	5110002-035	City of Yuba City	Orange to Scott Waterline Replacement	Replace approximately 6,650 linear feet of 80+ year old N 2-inch, 3-inch, and 4-inch galvanized iron pipe with 8- inch diameter distribution mains on Orange Street, Olive Street, Chestnut Street, Almond Street, Walnut Avenue, and Scott Street, south of Highway 20, in order to provide clean, dependable water to our customers in this area.	и	20	с	Lack of adequate water supply in this area adjoining the historic old town business district discourages development that would provide jobs for the residents. The distribution lines in this older section of Yuba City consist of 2-inch, 3-inch, and 4-inch diameter galvanized iron pipes that are over 80 years old and now in poor condition. This area has experienced water quality issues including high turbidity, pipeline failures and corrosion requiring higher levels of chlorine use and resulting in higher chlorine residues than would be necessary with the new pipe. Due to the size and condition of these existing pipes the City could not meet fire flow demands in an emergency. Replacing the lines with 8-inch diameter distribution mains will provide dependable, clean water service to the citizens, improve fire flows to the area and encourage commercial development. Replacement of these old pipes would also decrease the City's expenses for maintenance of the system.	1,529,500	13,550	51,504 21	Sutter	I	2009
1398 5110002	5110002-030	City of Yuba City	Feather River Intake System & Fish Screen	Construction of a new intake system that would increase capacity to 48 mgd (74 cfs) and provide a more reliable supply of surface water. Installaion of a fish screen that will meet the State and Federal fry criteria of 1.75 mm slot size opening and 0.33 fps approach velocity. The screen will protect multiple species of anadromous juveniles that migrate past the Yuba City Feather River diversion year around.	vi	20	С	Yuba City has a multi-facited need for constructing a new water intake system on the Feather River. For the reasons listed below this project is the City's top priority: 1) The Yuba City intake system is the largest unscreened such system on the Feather River. Part of the 2008 CalFed Eco-system Restoration Program Implementation Plan calls for fish screens along the Feather River to improve the survival rate of juvenile anadromous fish. 2) The current intake system is designed to mitigate the adverse impact of flooding to the water supply. 3) Yuba City is currently in the process of transferring ground water users to surface water. That together with the growth of the City has resulted in the current expansion of the water treatment facility. The current intake system is too small to adequately serve our current and future customers.	6,200,000	13,550	51,504 21	Sutter	I	2009
1399 5110002	5110002-034	City of Yuba City	Underground Electrical to Low Lift Station	Construct an underground electrical system to the N lowlift pumping station in the Feather River.	м	20	С	The current low lift station is located at the Feather River in the Flood Plain. Approximately every two years the river flows outside the normal channel for several weeks. During this time there is no access to the station and the electrical supply is subject to failure due to floating debris damaging an electrical pole. It is common for entire trees to be floating in the river during this time. Without electrical power to the low lift the City's generator operate for 24 hours and then the City will be without water. This station cannot be accessed via boat or helicopter during high water events.	250,000	13,550	51,504 21	Sutter	I	2009

1400 5110002	5110002-028	City of Yuba City	Caustic or Zinc Orthophosphate System	Construction of a Caustic or Zink Orthophosphate M system including tank, pumps, and associated plumbing.	20	C	Corrosion control study indicated that the Calcium Hydroxide lime slurry that the WTP currently uses is not the most reliable system. The current 45% Calcium Hydroxide slurry contains grit that plugs up the feed lines and deposits grit in our clearwell and distribution system. Construction of a Caustic or Zinc Orthophosphate System including tank, pumps, and associated plumbing is a more reliable and maintenance free system. Caustic and Zinc Orthophosphate are available in a liquid form that requires minimal maintenance.	450,000	13,550	51,504 21	Sutter	I	2009
1401 5110002	5110002-037	City of Yuba City	Louise-Woodward 12-inch Waterline Replacement	Replace approximately 1,395 linear feet of 12-inch M diameter Techite distribution main with ductile iron and install related appurtenances from the intersection of Louise Avenue and Rocca Way, across State Route 99, to Woodward Street.	20	с	This pipeline is one of only three crossings of Hwy 99 and provides a vital loop for the distribution system. The existing Techite (fiberglass) water main was installed in 1970 and is at the point of failure where it crosses Hwy 99. Techite pipe is no longer manufactured due to the high number of structural failures. Several leaks have developed over recent months and a temporary service main has been installed to serve customers. The original water main cannot be placed back in to permanent service due to the deteriorated condition of the pipeline.	390,000	13,550	51,504 21	Sutter	I	2009
1402 1510005	1510005-004	Delano, City of	Deteriorated waterline replacement project	M outside diameter (OD) steel water distribution pipelines and leaking valves. The pipes were previously installed between 1930 and 1940. The 4" OD pipes will be replace with 8" PVC pipe. The main line valves will be replace to allow isolation of areas effectively. The existing galvanized water services will be replaced with plastic tubing. By replacing the pipes and valves, the city will be able to address the Disinfection Byproducts Rule (high levels of Trihalomethanes and Haloacetic Acids). It will also address the change for bacterial increase. Chlorine is absorbed into the buildup of corrosion on the inside of the pipes. By replacing the pipes, the amount of chlorine that used is reduced. The city receives numerous customer compaints on their water quality. The water has a rust color with sand. At this time, the City of Delano is not able to address the safety needs of the community. The project will reduce the amount of shut-downs to the system. The city will also be able to address the substanial water loss for the leaking pipes. During this time of drought, the city and the state need to work together to ensure that water loss is addressed and repaired immediately.	20	C	The City of Delano needs to immediately replace 12,450 lineal feet of deteriorated 4" to 8" OD steel water distribution pipelines and leaking valves. There are over 100 water breaks per year that require emergency excavation and repair in the proposed area. There is substantial water loss due to the leaks. The drinking water regulations that will be addressed through the replacement of the pipelines and valves is the Disinfection By Products Rule. Due to the leaks, there is a reaction causing Trihalomethanes and Haloacetic Acids. The leaking pipe are also causing an interruption of water services and impeding the City's ability through the system to meet fire protection capacity as determined by Kern County Fire Department to various locations within the City because of substandard water pressure. The City is bisected by State Highway 99. Higher ground within the city is the eastern portion of the community thereby creating a gravity flow from east to west. The central core of the community of Delano is serviced by OD Steel water distribution pipe. The downtown areas of the city is situated in a location that effects the ability to move of water to the easten portion of the community. It was discovered through flow tests that several highly populated east side areas of the city do not meet the fire flow requirements of 1000 gallons per minute. Turning off valves to push the water uphill to the easten portion of the city requires	2,400,000	8,670	53,855 12	Kern	II	2009

1403 0910002	0910002-018	South Tahoe PUD - Main	STPUD Consolidation with Lukins Water Company	STPUD and LBWC seek State Revolving Loan funds to consolidate the two systems in order to provide sufficient water delivery capability and storage capacity, allowing the LBWC supply wells with PCE issues to be retired. However, the two systems cannot be consolidated without full upgrades to the 57000 feet of water main to match current STPUD pipe standards. The project is the proposed installation of 5200 linear feet of 8" and 12" pipe, installation of 929 residential water meters, and the installation of 105 fire hydrants. The project will be completed in five phases with construction beginning in 2013 and completion and full consolidation expected by 2017. The phases have been reconfigured from the original LBWC 2009 Master Plan design to allow for continued water supply by the existing LBWC well to the customers in the unimproved areas of the system. As each phase is completed, STPUD will begin providing services to the residents in that area. After reviewing the existing cost estimates prepared for LBWC by Haen Engineering in 2009, the proposed new well construction and storage tank with booster pump (totaling \$7 Million) were removed as STPUD can provide the necessary water supply utilizing current infrastructure. Revised cost estimates for the five phase resulted in a total project cost of	M	20	C	Lukins Brothers Water Company (LBWC), located in South Lake Tahoe, CA, was formed in 1946 and serves 951 customers. The system includes 57000 feet of water main and three production wells. Originally the LBWC had five production wells, but two were abandoned due to the presence of Synthetic Organic Chemicals (SOC's). Currently, of the three operating wells, 2 wells have historically shown traces of Perchloroethylene (PCE's) in samplings. LBWC primarily relies on the one remaining well for its main water supply. South Tahoe Public Utility District (STPUD) is the largest water supplier in South Lake Tahoe with approximately 14,000 water connections. STPUD and LBWC maintain emergency interties and the most recent use of this intertie occurred on September 4, 2011 when a power generation failure caused the LBWC well to stop functioning and STPUD provided water supply from their system. LBWC does not have any storage capacity and must rely on the intertie for emergency situations. In addition to recent insufficient water delivery capability, the entire system is comprised of non- metered residential service connections. In order to correct these insufficiencies and bring the system current to existing codes, LBWC would need system wide upgrades totaling \$29,79,79.39 according to the	28,150,967	13,635	60,000 09	El Dorado		2012
				\$28,150,967.				Master Plan developed in May 2009. (This cost estimate is based on the engineering estimates performed by						
1404 3310021	3310021-004	Jurupa Community SD		Construct a 12" CML/CMC from the District's Bain St. pipeline along Mission Blvd. To Avon St. (Figure 1).	М	20	С	Lack of a pipeline to consolidate the Company's service area with Jurupa CSD to increase system reliabilty (See attached documents).	650,000	24,684	68,297 20	Riverside	V	1998
1405 3310021	3310021-008	Jurupa Community SD		Distribution system improvements to pump safe water to system to reduce nitrate levels.	М	20	С	Nitrate levels in wells. Reranked to M from F (Dist let 9/20/01)	721,000	24,684	68,297 20	Riverside	v	2000
1406 3310021	3310021-007	Jurupa Community SD		Construct the Riverside North Groundwater Basin Project (see attached report).	М	20	С	System has insufficient water supply to reliably meet demands.	5,400,000	24,684	68,297 20	Riverside	V	1998
1407 3310021	3310021-003	Jurupa Community SD		Replace piplines as shown on Figure 1 (see attached documents).	Μ	20	С	Replace water line that have 3 or more leaks per year.	458,000	24,684	68,297 20	Riverside	V	1998
1408 3310021	3310021-005	Jurupa Community SD		Ion exchange treatment of groundwater supplies. (see attached report)	м	20	С	Insufficient water supply due to increasing nitrate levels of welss along van Buren Blvd. T25/R6W - Section 9 SBBM	2,000,000	24,684	68,297 20	Riverside	v	1998
1409 3310021	3310021-006	Jurupa Community SD		Convert two wells used by Space Center Mira Loma, Inc. to municpal purposes.	М	20	С	System has insufficient water supply to reliably meet demands.	600,000	24,684	68,297 20	Riverside	V	1998
1410 3310021	3310021-001	Jurupa Community SD		Construct 2 MG welded steel water storage facilities at Jurupa Community Services District's 980' PZ storage tank site.	м	20	С	Insufficient water storage facilities ( see attached documents).	940,000	24,684	68,297 20	Riverside	v	1998
1411 1910026	1910026-002	COMPTON-CITY, WATER DEPT.		Replace mains with 8" D.I. Project involves: Design, and Construction	Μ	20	С	Low pressure, undersized mains in area bounded by San Vicente, Bullis, Compton Blvd. and Holly.	1,400,000	14,055	71,000 22	Los Angeles	IV	2006
1412 1910026	1910026-004	COMPTON-CITY, WATER DEPT.		Design and construct 12 inch D.I., 10,000 feet, replacement pipeline in Long Beach Blvd.	м	20	С	WW standards defects. Low pressure in NE section of system; leaks, outages in major pipeline.	1,600,000	14,055	71,000 22	Los Angeles	IV	2006
1413 1910026	1910026-007	COMPTON-CITY, WATER DEPT.		Replace mains with 8" D.I. Project involves: Design and Construction	Μ	20	с	Low pressure, undersized mains in area bounded by Oaks. McDevitt. Rosecrans & Van Ness.	1,800,000	14,055	71,000 22	Los Angeles	IV	2006
1414 1910026	1910026-009	COMPTON-CITY, WATER DEPT.	Two water Storage Tanks & Seismic Valve Controller System	Construction of two 2.5 MG Bolted Steel Storage Tank, each one 24' high and 125' in diametr is optimum use of invesment to meet the minimum storage standards. Compton' avg. Daily water consumption is recorded at 8.3MG and Maximum Daily usage of 12.1MG. Existing storage capacity of 12MG fails every standard and provides great liability for Compton.Instalation of Seismic Valve Controllre System is an essential part of our systm improvement.	Μ	20	c	Compton is not in compliance with Water Storage capacity requirements of LA county Fire Department as well as Standard Maximum Daily demand. Addition of SMG storage capacity to the current 12 MG storage capacity will be an essncial investment in reducing major public liability.Instalation of 6 seismid valve controller system will prevent water loss due to seismic activity.	2,559,740	14,055	71,000 22	Los Angeles	IV	2009
1415 1910026	1910026-001	COMPTON-CITY, WATER DEPT.		Replace mains with 8" D.I. and relocate to streets. Project involves: Design, and Construction	М	20	С	Low pressure, undersized mains, mains located in easements in area bounded by Acacia, Douglas, Willowbrook, and Winnona.	700,000	14,055	71,000 22	Los Angeles	IV	2006

1416 1910026	1910026-005	COMPTON-CITY, WATER DEPT.		Replace mains with 8" D.I. Project involves: Design and Construction	М	20	C	Low pressure, undersized Mains, in the area bounded by Alondra, Long Beach Blvd., Marcelle and Panness.	1,000,000	14,055	71,000 22	Los Angeles	IV	2006
1417 2410009	2410009-004	MERCED, CITY OF	City of Merced - Arsenic Removal - Wellhead Treatment at Well Site 13	The City proposes to treat Well 13 for arsenic removal using either a coagulation/filtration treatment process or an adsorptive media treatment process. The project would be executed in two phases. • Phase 1 would consist of a pilot study evaluating the performance of both coagulation/filtration and adsorptive media technologies. The study would develop sufficient information to establish treatment feasibility, equipment configuration, capital and operating cost estimates, and the need for pH adjustment before and after arsenic removal. The final treatment system selection would be made after the pilot study was completed. • Phase 2 of the project would consist of design and construction of the selected treatment process. The following treatment system description and the "Total Project Costs" identified earlier in this application are based on the assumption that coagulation/filtration treatment will ultimately be selected. The project cost for an adsorptive treatment system would most likely be lower than for a coagulation/filtration system. It is anticipated that the components for a coagulation/filtration system would include a static mixer, three 7' diameter by 14' long filter vessels, actuated control valves, a filter system control panel, a 20' diameter by 32' tall washwater holding tank and supernatant reclaim pump, ferric chloride chemical feed system with approximately 1,00	М	20	c	Well 13 produces water with arsenic levels that approach the regulatory limit of 10 µg/L. Recorded arsenic levels at Well 13 have been as high as 9 µg/L and the running annual average value routinely exceeds 8 µg/L.	2,635,250	20,262	80,608 11	Merced	11	2009
1418 2410009	2410009-005	MERCED, CITY OF	City of Merced - Nitrate Removal - Wellhead Treatment at Well Site 7	The City proposes to install ion exchange wellhead treatment at Well Site 7 for nitrate removal. The treatment system will utilize a strong-base anion exchange resin and will have an initial capacity sufficient to treat wells 7A and 7B with provisions for expansion to treat Well 7C. Approximately 37% of the water produced by wells 7A and 7B will be treated through the IX system and then blended with the untreated water to provide a target nitrate level of 34 mg/L in the finished water. The low sulfate and chloride levels in the water will results in high ion exchange efficiencies. The brine wates stream produced during resin regeneration will be buffered in a waste holding tank and then slowly discharged into a nearby sewer. The treatment equipment is anticipated to include three 12' diameter ion exchange vessels (two active and one in regeneration), a brine storage tank, brine waste storage tank, brine makeup and resin rinsing, nitrate analyzer, and a system control panel. The existing site has sufficient available area for the proposed treatment equipment.	M t	20	c	Well Site 7 includes three potable water wells that pump into a common elevated water storage tank. The three wells (7A, 7B, and 7C) have capacities of 2,500, 2,500, and 2,800 gpm, respectively. The water produced by two of the three wells (Wells 7A and 7B) contains nitrate at levels that exceed the regulatory limit of 45 mg/L (as nitrate). Recent nitrate measurements at Well 7A and 7B have reached 46 mg/L and 57 mg/L, respectively. There is a clear upward trend in the nitrate levels at both of these wells with the levels having doubled over the last six years. The third well (7C) contains nitrate levels as high as 18 mg/L and is experiencing an upward trend in nitrate levels. The City currently blends the three well sources in the water storage tank. However, if nitrate levels continue to rise or if well 7C is removed from service; the City will be forced to shut down all three wells. The 7,800 gpm produced by the three wells accounts for approximately 15% of the City's production capacity.	3,108,250	20,262	80,608 11	Merced	Ш	2009
## 1419 2410009 2410009-006 MERCED, CITY OF

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3610039-033 SAN BERNARDINO CITY

City of Merced - Arsenic The City proposes to treat Well 2C for arsenic removal M Removal - Wellhead using either a coagulation/filtration treatment process Treatment at Well Site 2C or an adsorptive media treatment process. The project would be executed in two phases: 

Phase 1 would consist of a pilot study evaluating the performance of both coagulation/filtration and adsorptive media technologies. The study would develop sufficient information to establish treatment feasibility. equipment configuration, capital and operating cost estimates, and the need for pH adjustment before and after arsenic removal. The final treatment system selection would be made after the pilot study was completed. 
Phase 2 of the project would consist of design and construction of the selected treatment process. The following treatment system description and the "Total Project Costs" identified earlier in this application are based on the assumption that coagulation/filtration treatment will ultimately be selected. The project cost for an adsorptive treatment system would most likely be lower than for a coagulation/filtration system. It is anticipated that the components for a coagulation/filtration system would include a static mixer; three 7' diameter by 14' long filter vessels, actuated control valves, a filter system control panel, a 30' diameter by 16' tall washwater holding tank and supernatant reclaim pump, ferric chloride chemical feed system with approximately 1,000-Water Distribution Pipelines Replacement will replace approximately 40,000 linear feet (approximately 7 ½ miles) of drinking water distribution lines that are antiquated and/or undersized to meet "maximum day" and fire flow demands in the service the criteria for "economically disadvantaged." This project will replace approximately 75% of Priority 1

City of Merced Well 2C produces water with arsenic levels that exceed the arsenic rule maximum contaminant level of 10 µg/L Arsenic levels measured at Well 2C from 2001 to the present have been as high as 12 µg/L, and the running annual average value routinely exceeds the 10 µg/L MCL. The City currently blends Well 2C with two other nearby wells (2A and 2B) in order to meet the arsenic standard. The need to blend the water produced by Well 2C limits the City's flexibility in operating this high-production (2,500-gpm) well. Since blending does not allow for the three wells

to operate simultaneously, it reduces available capacity.

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2,635,250 20,262 80,608 11 Merced ш 2009

The Water Distribution Pipeline Replacement Project M area. Priority areas were identified in the 2007 SBMWD Master Plan. All of the areas served by this project meet pipelines in the Mountain Pressure Zone and Upper Pressure Zone. Each of the pipelines will include valves and fire hydrants. In the Mountain Pressure Zone the following pipelines will be replaced: Mountain Pump Station Transmission Line Sierra Way between 40th Street and Sepulveda 40th Street between Sierra Way and Waterman Miscellaneous Distribution Lines will be upgraded from 4" to 8"In the Upper Pressure Zone, these pipelines will be replaced in the Mallory and 16th Street areas: California Avenue. 26th Street. Pennsylvania Street, 23rd street; 19th Street; Lincoln Street; 16th Street; Magnolia Street; Pennsylavania Street. Construction is expected to last approximately 2 years and will generate approximately 75 full and part time jobs during that duration. The plans and specifications will be complete by June 2009. Approval of the CEQA determination is scheduled for April 2009.

City of San Bernardino Municipal Water Department Pipeline Replacement ProjectSetting: The City of San Bernardino Municipal Water Department's (SBMWD) service area is located at the crossroads of the Interstate 215 and Interstate 10 freeways. The City of San Bernardino is the county seat of San Bernardino County and has an estimated population of 205,010, making it the 18th largest city in California and the 101st largest city in the United States. In addition, San Bernardino is part of the Riverside-Ontario-San Bernardino Metropolitan area, the 14th largest in the nation, commonly referred to as the "Inland Empire." According to 2007 census information, the average San Bernardino family household is 3.83, with a median family income of \$41,010, which is \$19,364 below the 2007 national average. Approximately 25% of City residents are considered to be at or below the poverty level. SBMWD's service area encompasses approximately 45 square miles. The SBMWD serves most of the City of San Bernardino, portions of Loma Linda and Redlands as well as unincorporated areas of the County. SBMWD produces its water supply from 57 groundwater production wells located throughout its service area. The wells range from 50 to 1,300 feet deep and have production capacities of 50 to 3,500 gallons per minute (gpm). Water is delivered to SBMWD customers with a series of pump stations,

4,500,000 42,301 173,359 13 San Bernardino V 2009

1421 1010007	1010007-022	FRESNO, CITY OF	NE Surface Water Treatment Facility Overflow Spill Basin	The project will consist of the construction of a large ponding basin at the Northeast Surface Water Treatment Facility to collect water in case of emergency shutdown or extreme flooding.	Μ	20	с	The City's 30 Million Gallon daily Surface Water Treatment Facility (SWTF) was completed in June 2004 and has been in full operation since that time. This facility can be susceptible to power outages and treatment upsets. Raw water supplied to this facility is conveyed in Fresno Irrigation District's Enterprise Canal and has limited conveyance capacities downstream of the SWTF, especially during periods of rain when storm waters are also diverted to the conveyance system. To prevent downstream flooding during emergency shutdowns it is necessary to divert deliveries several miles upstream to another canal and then capture the flows between this diversion point and the SWTF in an onsite spill basin.	500,000	128,152	457,511 11	Fresno	Ш	2009
1422 1010007	1010007-021	FRESNO, CITY OF	Water Main Replacement at Shaw/Barstow- Fruit/Tielman Avenues	This project will construct 3 miles of 8" water main that will service 300 customers along Shaw/Barstow and Fruit/Tielman. This new system will replace 50 year old steel water main.	Μ	20	C	Water mains in many older parts of the City have aged and deteriorated and are in need of replacement. Leaks in aging mains can be expensive to repair. For example, many obsolete mains, particularly in acquired old County Water Works Districts, are located along easements at the rear of lot lines. Repairs in these areas require hand digging under fences and landscaping, which results in some very difficult working conditions and is disruptive to customers. Relocation of those mains to a public street eliminates the problems associated with this inaccessibility. Also replacement of aging water mains with modern materials will help ensure safe and reliable delivery of drinking water both now and in the future.	1,448,000	128,152	457,511 11	Fresno	111	2009
1423 1010007	1010007-023	FRESNO, CITY OF	NE Surface Water Treatment Facility Telemetry Tower Construction	The City will construct a 100 feet tall telemetry tower to be used for data collection and repeating to coordinate surface water and production water facilities.	М	20	с	The City's 30 Million Gallon Daily Surface Water Treatment Facility (SWTF) was completed in June 2004 and has been in full operation since that time. A 100 foot tall telemetry tower was permitted for this project but has not been constructed. This tower is now needed to receive readings from a fixed network automatic meter reading system.	100,000	128,152	457,511 11	Fresno	Ш	2009
1424 1010007	1010007-024	FRESNO, CITY OF	Emergency Power Generators for Pump Stations 132 and 318	This project will fund the installation of two back-up power generators including modification to the electrical panels, switchgear, breaker panels and the telemetry system. This project will help ensure a safe and reliable water supply during a prolonged power outage.	м	20	С	The City of Fresno needs to achieve security and reliability of the water delivery system to ensure a safe and reliable water supply during a prolonged power outage, especially for delivery to critical care facilities and for fire suppression. The City is seeking funding to install two back-up generators to pump stations 132 and 318 to increment the security and reliability of its water delivery system.	264,000	128,152	457,511 11	Fresno	III	2009
1425 1400068	1400068-001	Deep Springs College		Construct new tank	м	20	Р	Inadequate storage capacity	30,000	13	40 13	Inyo	v	1998
1426 1400068	1400068-002	Deep Springs College		Replace distribution system piping	М	20	Р	Inadequate distribution system piping	60,000	13	40 13	Inyo	V	1998
1427 2210900	2210900-001	Cedar Lodge Resort		INSTALL ADDITIONAL WELLS OR A SURFACE WATER TREATMENT PLANT TO TREAT WATER FROM THE MERCED RIVER.	М	20	Ρ	THE SOURCE CAPACITY IS UNRELIABLE.	200,000	10	64 11	Mariposa	Ш	1998
1428 0202501	0202501-001	DIAMOND VALLEY SCHOOL		Increase depth and capacity of wells and holding tanks for fire and pressure problem.	М	20	Р	Only one well source and pressure is very low.	35,000	3	100 09	Alpine	I	1998
1429 2510800	2510800-001	Devil's Garden Conserv. Camp		Drill a new well, install new tank and install new disinfection system, including building.	М	20	Ρ	Deterioating storage tank, no disinfection; one well (no back-up system).	250,000	1	120 01	Modoc	I	1999
1430 1100527	1100527-001	Capay Joint Union Elem. School		Improve waterline and install another 525 gallon tank in- line with the other one.	М	20	Ρ	The main waterline from the well has a restriction in it allowing only 15 gpm of water usage.	10,000	1	172 21	Glenn	I	1998

1431 1000194	1000194-002	PACIFIC UNION ELEMENTARY SCHOOL	Pacific Union Repipe	Replacement of water suppy lines that have deteriorated. Addition of anti-siphon valves at drinking fountains and faucetts. Replacement of kitchen dishwasher and kitchen water supply lines and installation of anti-siphon valves. Detection and capping of abandoned water supply lines that are still connected to the water supply system.	м	20	Ρ	Our water system and had to notify users of Collform bacteria contamination in the last several years. The presence of bacteria has caused us to chlorinate the water supply system. The school plant is fifty years old and much of the plumbing and kitchen equipment is just as old. We would like to address the bacteria problem by replacing old kitchen appliances with newer equipment and add anti-siphon safeguards throughout the school.	115,000	1	490 23	Fresno	ш	2009
1432 3900511	3900511-001	SJC MICKE GROVE PARK	Connection of Water Supply From The City of Lodi's Domestic Water System	This project includes supplying domestic water to the Park from the City of Lodi's domestic water system. The point of connection would be located near the intersection of Harney and West Lane in Lodi. Domestic water would be conveyed through pipeline to the park and stored in a storage tank. Onsite demand would be met using a booster pump station with a hydro- pneumatic tank. The offsite improvements include connecting to the City's existing domestic water distribution system, installing a water meter, backflow prevention device and conveyance pipeline. The City will also require that the County pay an impact fee to 'buy-into" the existing domestic water system, which has been categorized as an offsite improvement for the purposes of this application. The impact fee represents the monetary value of the production and distribution capacity of the existing to bable water system that the City will use to supply Micke Grove Park. The impact fee compensates the City for that capacity. The magnitude of the impact fee is dependent on the usage at Micke Grove Park. The estimated values provided by the City of Lodi are as follows: 43,700 gpd would be approximately \$63,654 and 81,020 gpd would amount to approximately \$118,016. These charges are subject ot change depending on the City of Lodi's fee schedule. Point of Connection at the City's A for 8 inch stub	Μ	20	Ρ	The Micke Grove Regional Park is located approximately 2 miles south of City of Lodi. The Park includes picnic areas, a zoo, museum, a small amusement park, and public golf course. There are three permanent residences onsite for caretakers and maintenance personnel. Historically, domestic water has been supplied throughout the Park from two onsite domestic water wells. The water is provided to drinking fountains, public restrooms, the golf course, zoo, museum, the Treetop Cafe, amusement park and permanent residences. By 1991, levels of dibromochloropropane (DBCP) were detected which exceeded the Department of Health Services (DOHS) maximum concentration limit of 0.2 parts per billion (ppb) in drinking water. The are no other detectable organic compounds present. The County had installed small carbon systems to treat water for use within the three on site residences, the Tree Top Cafe, amusement park and the golf course clubhouse. Reportedly, these units have been very effective in removing DBCP. In June 2000, the San Joaquin County Public Health Services-Environmental Division, the regulatory agency responsible for overseeing the domestic water at the Park, issued Compliance Order no. 00-02 which required the Parks water system be brought into compliance by either developing a new groundwater source which meets the water quality and quantity requirements, treatment of	3,701,500	8	1,000 10	San Joaquin		2011
1433 1000217	1000217-001	CENTRAL HIGH SCHOOL WEST	Central High School West Tank and Well Addition	The project will begin with a preliminary design report that will analyze the feasibility of the proposed well site and water storage tank. The goal of the project is to provide clean drinking water as well as the necessary water storage for both domestic and fire supply. The report will address issues such as well pump size, tank size, preferred location, and alternative solutions. Once the report is complete, the construction documents will be prepared and the project will be put out to bid. The preferred solution will consists of a new well site and water storage tank. A test well will be drilled, zone tested, and analysed for water quality prior to construction of the production well. Additional system improvements will provide the facility with the precessary water quality out the bressing.	Μ	20	Ρ	The Central High School West Campus water system consists of a facility with a single well that serves approximately 2,000 users (students and staff). The school is located at 2045 North Dickenson Avenue, Fresno, CA (Northwest corner of McKinley and Dickenson Avenues). The site consists of approximately 50 acres and is comprised of buildings, sports fields, parking lots and other typical high school facilities. The site is approximately 4 miles west of the City of Fresno. Recent tests have indicated the presence of hydrocarbon, lead, and copper contaminations in the water. Additionally, the aging well is not meeting the current supply and fire flow requirements due to its shallow depth.	1,160,000	10	1,127 23	Fresno	Ш	2011

1434 3400259	3400259-001	GRANT HIGH SCHOOL (SWS)	Grant High Water project	The project will consisit of tying (consolodating) with a large water system. Trenching 800 ft. to city tie in. Installing six inch water main to school. installing backflow device at city tie in. Re-routing of existing water line to new six inch main. Removing old water storage tank. Capping off old well. Removing old motor and associated electrical connections.	Μ	20	Ρ	The site well and associated motor and storage tank are deteriorating and have reached the end of their life cycle. These were installed when the school was built in the early forty's. The well water has often times tested positive for Coliform. The project will allow the students and staff to have a safe and dependable drinking water system.	185,000	12	1,400 09	Sacramento	I	2007
1435 4300608	4300608-001	Gavilan Jr. College	Replacement - Water	Replace the entire water system by connecting to the	м	20	Ρ	Old water system installed in 1966 and needs	20,472,948	22	4,987 17	Santa Clara	Ш	2009
1436 4200872	4200872-005	VENTUCOPA WATER SUPPLY	Supply System Water Supply Project	City of Gilroy water system. The project is to integrate an existing Well #2 into the water system and make the necessary upgrades to meet the state standards. This would include waterlines, storage tank, hydropneumatic tank, booste pump station, and fire hydrants.	M	20	Ν	replacement. The Ventucopa community water system is now classified as a community water system by the Santa Barbara County Environmental Health Services Division, which is the local primacy agency. The water system has historically had nitrate levels exceeding the MCL due to adjacent agriculture crop fertilizing. However during drought periods such as now when the water table is below the contaminated ground level the nitrate level is below the Contaminated ground level the nitrate level is below the MCL. However the water system only has one well at only 170 feet deep and there is a serious risk of loosing the water supply if the drought continues or if agricultural pumping during the summer periods continues to drop the water table. The water system needs another well to meet the water works standards and to prevent water outages.Additionally the water system experiences low pressures in the summer because the system can not meet the water demands. The antiquated water system was constructed in the 1940s and needs to be replaced to provide adequate quantity of water and to deliver water quality meeting the drinking water standards. In the past, building permits have been restricted in the Community becasue of the water system inadequacies.	380,000	9	25 06	Santa Barbara	IV	2009

1437 3600452	3600452-001	Lucerne Valley Parks & Rec (CSA 29)	Consolidation of County Service Area 29 with Lucerne Valley Unified School District	Sources of water in the Lucerne Valley area are individual systems (parcel-by-parcel, well-by-well) operated by property owners and small mutual water companies, some of which currently cannot meet service requirements and will not likely be able to accommodate new hookups. There are numerous independent small water systems within the area that are overseen by the County of San Bernardino.	Μ	20	Ν	Source Reliability	3,700,000	6	26 13	San Bernardino	V	2007
				Some wells in the higher groundwater levels upgradient of the Helendale Fault have shown evidence of somewhat higher Nitrate levels, although not to levels exceeding standards. Nitrate levels from tested wells west of the Fault averaged approximately 5 mg/l. Samples for Nitrates were taken at the Lucerne Valley Elementary School in April of 2005 and levels were observed to be 12 mg/l at this location. Higher Nitrate levels could be detected where wells and septic tank systems are in proximity to each other.	:									
				Improvements to consolidate up to six water systems in the Lucerne Valley area were studied and evaluated in the Lucerne Valley Water & Sewer Preliminary Study, completed in 2006 by Nolte Associates. The project was conceived to take place in two phases. This project is part of a bigger water system consolidation effort among the Lucerne Vista Water Mutual Water	5									
1438 3600541 1439 5301103	3600541-001 5301103-002	Association of Well Owners Covington Mill - A		Replace mainline and meters Develop a second deep well site to augment the existing well, and provide addditional source reliability.	M g M	20 20	N N	Multiple mainline leaks System has only one approved source of supply.	15,000 30,000	9 42	30 13 55 01	San Bernardino Trinity	V I	1998 1998
1440 5400708	5400708-001	ALPINE VILLAGE WATER CO.		INSTALL NEW STORAGE TANKS, LOOP THE WATER SYSTEM, ADD VALVE TO ISOLATE THE SYSTEM, INSTALL A CENTRAL PUMP CONTROL SYSTEM. OTHER - DESIGN AND CONSTRUCTION	М	20	Ν	EXISTING STORAGE TANK LEAKS DUE TO RUSTED FLOOR. INABILITY TO ISOLATE PORTION OF SYSTEM TO REPAIR LEAKS. INABILITY TO MEET PEAK DAILY DEMAND DURING DRY SEASONS.	68,300	45	90 12	Tulare	III	1998
1441 4700517	4700517-004	Sawyers Bar County Water District	SBCWD holding tank demolition and replacement	Sawyers Bar County Water District proposes demolition of the small, failing holding tank and construction of an 80,000 gallon tank, bearing on an engineered concrete footing. The new tank would double the capacity of our water system, and allow for extended water service in a drought, fire, or other natural or man-made disaster. In addition to water volume, a new holding tank would help us improve water quality and the security of our water supply. Sawyers Bar County Water District has contracted with B&H Tank, Fresno, California to provide footing engineering, tank construction and installation. Engineering documents could be completed within two weeks, and tank fabrication could begin immediately, with installation complete by the end of August.	M	20	Ν	Sawyers Bar County Water Districts' 20,000 gallon holding tank for domestic water needs immediate replacement. The tank has been in service for an unknown number of years and sets directly on bare soil. The bottom is badly rusted, and the inside of the tank is in very poor condition. The tank is too small to allow adequate water supply should our volume of surface water decrease. The tank is also too small to provide enough water in a fire emergency.	120,000	1	100 01	Siskiyou	I	2009
1442 4700517	4700517-003	Sawyers Bar County Water District	SBCWD well pump replacement	Sawyers Bar County Water District proposes the replacement of a 4" submersible pump, 6500 watt gas generator, and miscellaneous plumbing and electrical components needed to fix our water district well. We have contracted with Scott River Pump, Fort Jones, California, to perform the needed repairs in the spring of 2009. This will allow us to provide emergency water supply for the community by utilizing the existing well, which at present, does not function. This is critical not only for a reliable, secure drinking water source, but for sustained fire suppression capability.	м	20	Ν	Sawyers Bar uses surface water to supply our treatment plant. There is an existing well plumbed into our water system, but the pump and generator for the well are non-operational. In the event of a natural or man-made disaster, we have no alternative water source.	10,000	1	100 01	Siskiyou	I	2009

1443 4910306 1444 3200155	4910306-001 3200155-003	CSP-Armstrong Redwoods State Reserve FRCCSD - HOT SPRINGS CSD	Bring Hot Springs Water System Into Compliance With State Standards	Develop new well at north end of park to serve north day use area. On October 26, 2006, Jerry Sipe directorof the Plumas County Environmental Health Department cited the System for the following deficiencies.1. Quantity of water available is reported as insufficient to meet summer demands. Water Works standards require minimun of this size well to be 15 gpm. This wellis 30% under that.correct all deficiencies	M	20	N C	Existing AC transmission lines separating two areas of park are failing. On October 26, 2006, Jerry Sipe directorof the Plumas County Environmental Health Department cited the System for the following deficiencies. 1. Quantity of water available is reported as insufficient to meet summer demands. Water Works standards require minimun of this size well to be 15 gpm. This wellis 30% under that.2. Well head not adequately protected from potential insect contamination.3. Each tank has a mechanical water level guage installed tat may allow entrance of rain and snow melt, insects & dirt into the tank through the roof.4. Tank access hatches are not secured with locks to deter tampering and portable access ladder is non compliant.5. Overglow lines and treatment plant backwash and drain line are not protected from contamination.6.Plumbing from water well lacks hose bib necessary to obtain the required analysis samples.7. Plumbing from water well has open stand pipe that could allow system contamination.8. Tratment plant building lacks sufficient venilation that causes pipe sweating and mold buildup inside, as well as numerous areas of corrosion on pipes and filter tank.9.Building in extremely deteriorated condition and needing repair.Health & Safety violations routinely noted durine inspections.	85,000	8	600 18	Sonoma Plumas	1	1998
1445 1400109 1446 0300053	1400109-001 0300053-003	Sierra North Community Services District Rancho Del Oro MHP	Rancho Del Oro Mobile Home Community Water Storage Tank Replacement Project	Construct new well and tank In summer 2010, the owner of the Rancho Del Oro water system spent over \$25,000 to drill and construct at the wesource well. This was a very costly project. The owner states that he does not have the necessary funding to replace the storage tank and is seeking financial assistance for this project. Specifically, the water system is requesting funding assistance for a new 32,000 gallon (minimum) water storage tank. This new tank will replace the existing 10,000-gallon storage tank which is more than 30 years old and appears to be a source coliform contamination. A new 32,000-gallon storage tank will not only accomodate current maximum day demand, but will also provide adequate storage for future park expansion. Funding, if awarded, will be used to purchase the tank, as well as cover engineering and other associated costs (e.g. plumbing, permits, possible environmental documents, foundation, and labor). A survey of the property line near the tank may also be needed. The new tank will comply with applicable sections of the California Waterworks Standards.	M M a	15 15	C C	Inadequate source and storage capacity The water system exceeded the Total Coliform Maximum Contaminant Level (Section 64426.1) during the months of August 2011 and September 2011. Public notification is in effect at this time. The sampling results to date indicate the source of the coliform contamination is the existing steel storage tank. The existing steel 10,000-gallon tank is at least 30 years old; Amador LPA records document that the tank has been in use by the water system since at least 1982. There is evidence, however, that the tank itself may be much older. In a 1982 engineering report for the water system, it was noted that the tank was actually a reconditioned gas or oil tank. Other anecdotal information indicates that the tank may have been previously used by a nearby municipality as a filter housing before it was installed at Rancho Del Oro. In its report following a November 21, 2008 sanitary survey, the Amador LPA acknowledged that the water system should begin planning for replacing the tank. Both the recent coliform contamination, as well as the tank's current physical condition indicate the tank is nearing the end of its life expectancy. There is evidence that the liner in the tank is degraded (or gone completely) and corrosion has taken place on the interior of the tank. The existing tanks needs to be replaced for other reasons as well. First, the tank is undersized. The tank's	25,000	16 24	28 13 34 10	Inyo Amador	V III	1998 2012
1447 1400034 1448 1500398	1400034-001 1500398-003	Keough s Hot Springs FRONTIER TRAIL HOMEOWNERS ASSOC, IN	IC Frontier trails to CWS intertie	Construct new distribution system Intertie to Calwater systems would create a viable emergency and standby connection to a treated potable water source. Currently we have to post warnings about the clarity and drink ability of our water , this would eliminate this process and provide clean, clear water	M M t	15 15	c c	capacity is only 10,000-gallons. This is less than the Old, substandard distribution system Our current drinking water system is supplied by two wells, one of which, our standby system is too shallow and too close to the Kern River thus creating a system impacted by direct influence of surface water	75,000 40,000	24 36	40 13 40 19	lnyo Kern	V III	1998 2009
1449 1400034 1450 1400034	1400034-003 1400034-002	Keough s Hot Springs Keough s Hot Springs		Construct new well and tank Construct new well and tank	M M	15 15	c c	Inadequate source and storage capacity Single well supplies system	50,000 41,500	24 24	40 13 40 13	Inyo Inyo	v v	1998 1998

1451 2300668	2300668-001	Point Cabrillo Highlands	Cabrillo Rejuvenation and Maintenance (CRAM) Project	All supply distribution lines would be replaced with state of the art components. This will entail a study to determine the most efficient and practical routing of supply lines to service each and every user. The new system will be sized to provide proper water pressure and volume to each residence. A system of control and safety valves and water meters will be included. A 10,000 gallon water tank will be installed. Documentation of the system will be prepared to assist the Watermaster in the course of the water system maintenance process.	Μ	15	C	The existing water system is very old and consists of World War II components. It is susceptable to frequent ruptures and outages. The exact location of much of the distribution system is unknown making repairs extremely difficult and of long duration. A recent rupture caused a loss of about 7000 gallons per day for several days as the source of the leakage was not apparent. It was found to be in a leach field. This water system dates back to about the 1940's and services a small community of low cost housing residents. There are no water meters. A new distribution system is necessary to service the residents so that frequent and long interuptions of water supply may be avoided. The source of water is adaequate but the loss of large amounts of water from the aquafer should be stopped.	52,500	21	42 03	Mendocino	11	2009
1452 3400401	3400401-001	PLANTATION MOBILE HOME PARK	Redundant Source	Intertie with a large water system with appropriate	м	15	С	Provide a redundant source to a single source water	10,000	45	44 09	Sacramento	I	2008
1453 1700536	1700536-001	Sunrise Shore Mutual Water Company		Install conventional filtration. Replace distribution	м	15	С	Well source influenced by surface water. Aging	150,000	37	45 03	Lake	Ш	1998
1454 2600621	2600621-001	WHITE MOUNTAIN ESTATES	Tank Lining Rehabilitation and System Redundancy Project	system. White Mountain Mutual Water Company is seeking support from the Economic Recovery funding program to correct tank facility's deteriation and source of supply redundancy issues within the system. Without this necessary funding, the water system cannot afford to address these critical concerns within it's community. The proposed project will consist of the following improvements: 1.In order to facilitate the tank lining rehabilitation a back-up potable water supply tank will be put into service. The entire existing tank coating will be removed, including tank inspection and repair to correct all cracks, organic growth concerns and repair to correct all cracks, organic growth concerns and water seepage conditions. The facility's existing rubber based coating will then be replaced with an approved gunite type coating. This new coating will permanently seal the tank interior from root intrusion, contamination and leakage.2. A new source water submersible pumping system will be installed to facilitate meeting source water redundancy requeirments. This project will add an additional pump system in the existing groundwater supply well. Professional review and pump tests have indicated the source capacity ability to support this two pump system. This project will include a submersible pump and motor assembly, piping and electrical system. This critical improvement will facilitate the systems compliance with Water Works Standards.	M	15	C	distribution system. White Mountain Mutual Water Company a California Corporation was established in 1980, and operates as a non-profit community water system. The system supplies 43 connections and approximately 87 customers within it's service area. The water company's 70,000 gallon in-ground, concrete, cinder block water storage reservoir is in severe need of lining rehabilitation. The storage facilities existing coating is in the advanced stages of deteriation including blistering and delamination, due to this coating failure, tank seepage and organic root growth intrusion has developed. This organic growth as created high potential for bacteriological contamination within the system. The tank floor, shell walls, and interior roof structure also have various cracks that need structural correction to prevent exterior water and debris from contaminating the water supply. This is the water company's only water supply storage facility, and is a critical component to the function of the system's operations. The Water Company in addition to the tank facilities deterioration issue, does not meet Water Works Standards for source water redundancy. The water system's source of supply is currently supplied by one groundwater well. State Waterworks Standards require that systems meet requirements for source of supply redundancy. White Mountain Mutual seeks to achieve this requirement through the pronsoed project.	110,000	25	50 13	Mono	v	2009
1455 4500063	4500063-001	CEDAR CREEK MOBILEHOME PARK		Drill two wells and install pressure tanks and distribution lines to proivde the reliaiblity required by the Waterworks Standards.	М	15	С	The spring source and storage tank are shared with a a school, making it difficult to fulfill Section 64560(a)(2) (protect the quality of the water) of the Waterworks Standard	15,000	20	52 02	Shasta	I	1998
1456 2000589	2000589-001	MAMMOTH POOL MOBILE HOME PARK		INSTALL A NEW PUMP AND STORAGE TANK, AND A	М	15	С	INADEQUATE SUPPLY RESULTS IN LOW PRESSURES.	15,000	30	60 11	Madera	Ш	1998
1457 2000589	2000589-002	MAMMOTH POOL MOBILE HOME PARK		Construct a new well and install storage.	М	15	С	Well is in close proximity to a surface water source. However, sampling results have not shown that it is under the direct influence of surface water. System has no storage.	17,500	30	60 11	Madera	Ш	1999
1458 1500421	1500421-001	Longview Mobile Estates, Rosamond	Logview Mobile Estates- Second Well or Consolidation with the Rosamond CSD	As part of this project, Longview Mobile Estates will either drill a second well or develop an intertie with Rosamond CSD	М	15	С	Longview Mobile Estates has only well. Therefore, the water system is not reliable.	500,000	21	69 19	Kern	Ш	2008

1459 2300506	2300506-004	Meadow Estates Mutual	Increased Storage Capacil Project	ty The goal of this project is to upgrade an aging water system to meet the expanded demand, and to ensure that we are able to provide continuous safe drinking water to a small rural community without interruption because of lack of water due to seasonal dry periods. To accomplish this goal, we will construct a set of above ground holding tanks to provide a minimum of 100,000 gallons of holding capacity. We intend to install ten (10, 10,000 gallon polyethylene tanks, each placed on a concrete slab each with related plumbing, pumps and controls included.	M )	15	с	Meadow Estates Mutual Water Company is an aged, small rural water system. There is inadequate holding capacity or storage for present demand. Below ground water sources are adversely effected by seasonal dry periods. Any growth in our community will increase the stress on our current facility. Additional holding capacity will allow the system to function efficiently and allow for anticipated growth	80,000	35	85 03	Mendocino	Ι	2009
1460 5500096	5500096-001	SIERRA TWAIN HARTE MOBILE PARK		CONSTRUCT AN ADDITIONAL WELL.	М	15	С	SYSTEM'S TWO WELLS CAN NOT SUPPLY ENOUGH WATER IN THE SUMMER MONTHS.	25,000	45	85 11	Tuolumne	ш	1998
1461 5500353	5500353-004	SIERRA VILLAGE MOBILE HOME PARK	Sierra Village Mobile Home Park - Source Reliability	Need to establish viability of getting dry well into operation or drill for a new well to provide back up for existing system in case of emergency. Two 5,000 gallon holding tanks need to be epoxy coated on the inside or replaced. The distribution pump needs to be replaced and the distribution piping that is galvanized steel needs to be replaced with schedule 80 pvc. The new piping wil require excavation throughout the park to lay the new pipe and connect to existing customers.	M s I	15	с	No emergency water system back up available at this time. One of two existing wells is dry and not in use. Storage tanks need upgrading as well as the distribution system.	500,000	16	90 11	Tuolumne	Ш	2009
1462 1000254	1000254-001	SANDY POINT MOBILE HOME PARK	New well to augment	Drill a new well or interconnection if possible.	М	15	с	Single well, if the well fails, the systme will be out of water	200,000	36	90 23	Fresno	ш	2008
1463 0400016	0400016-001	BERRY CREEK COMMUNITY SER DIST		Replace distribution system main piping.	м	15	С	Water system has a number of leaky distribution system mains.	50,000	36	99 21	Butte	I	1998
1464 0500068	0500068-003	DUNROVIN MOBILE HOME VILLAGE	Well/System Treatement	Investigate and determine source of coliform; repair system as necessary and/or install chlorinator.	М	15	С	Well, storage and distribution system test positive for coliform 3-4 months per year.	60,000	42	99 10	Calaveras	Ш	2009
1465 0500068	0500068-002	DUNROVIN MOBILE HOME VILLAGE	System Upgrade	Upgrade and retrofit of system coponents for Dunrovin Village Mobile Home Park to meet CDPH guidelines	М	15	с	Storage tank deterioration, replace pump house structure for security and sanitation, build fencing for security, no sample tapes, replace leaky pump and tank valves and replace some piping.	150,000	42	99 10	Calaveras	Ш	2009
1466 5500041	5500041-001	ALPINE ACRES MUTUAL WATER CO	Alpine Acres Infrastructur Replacement Project	e This project is in addition to a separate application for an intertie with Tuolumme Utilities District'S Crystal Falls system. This project upgrades virtually all mains and laterals in the Company's system to current water works standards. It includes:3,200 l.f. of 8-inch water line2,300 l.f. of 6-inch water lineInstallation of a new 250,000 gallon storage tank, with telemetry & electrical controlsMiscellaneous costs including paving repairs, engineering, inspections etc.	M	15	C	Alpine Acres MWC seeks to consolidate its operations with Tuolumne Utilities District to improve the reliability of water supply and delivery operations. The Company currently relies on two wells to serve its customers. This groundwater supply fails to meet secondary standards for Manganese and/or Iron content. The system includes no treatment facilities. Currently, untreated water is served to all customers. Further, the ground water supply has been unpredictable leading to service interruptions. This intertie project will convert the system's supply to more reliable treated surface water. Alpine Acres MWC's small size presents operational challenges. Maintenance of the delivery systems using primarily volunteer labor from the company's membership has led to service interruptions. Consolidation with TUD will provide access to TUD's maintenance staff and will reduce duration of future service interruptions. Alpine Acres facilities were installed approximately 45 years ago and do not meet current water works standards. For example, the main line from the wells to the storage facilities is 3-inch steel pipe which is vulnerable to failures due to its age; Other mains range from 1-inch to 3-inch PVC. These lines do not provide adequate fire flows and do not meet current minimum standards of 4 inches. As a condition of consolidation, we believe that TUD will require that the Company's infrastructure be brought	1,331,238	61	100 11	Tuolumne		2009

1467 0900217	0900217-001	BEAR STATE WATER WORKS		Add new well, storage, and treatment facilities. Involves study, design and construction.	М	15	С	Needs second source and storage tank.	200,000	33	100 09	El Dorado	I	1998
1468 2000724	2000724-001	SA#14 CHUK CHANSE SUBDIVISION	New Well	Construct a new well and replace portions of the distribution system.	м	15	с	The system has experienced several total coliform MCL violations, however, none since September 2005. The well also produces an adequate source of supply.	850,000	30	100 11	Madera	Ш	2007
1469 1400037	1400037-001	Foothill Lone Pine Mobile Home Park, LLC		Construct new well and tank	м	15	С	Single well, inadequate storage capacity	48,000	49	100 13	Inyo	v	1998
1470 2000527	2000527-001	YOSEMITE FORKS ESTATES MUTUAL WTR		REPLACEMENT OF PIPELINES. THIS PROJECT WILL ALSO BENEFIT THE ADJACENT CEDAR VALLEY SYSTEM WHICH IS INTERCONNECTED.	М	15	с	DISTRIBUTION INSTALLED IN 1958; IRON PIPES ARE CONSTANTLY ERODING; VALVES ARE CLOGGING WITH IRON SLOUGHING OFF; CEMENT TANKS ARE CRACKING	483,000	114	110 11	Madera	Ш	1998
1471 1000023	1000023-001	FCSA #14/BELMONT MANOR	Replace 10,000 gallon hydropneumatic tank	The 10,000 gallon hydropneumatic tank shall be replaced. The existing tank shall be hauled to a recycler. The cost estimate to destroy the existing tank and install a new hydro tank is \$80,000. The electronic control board for the hydro tank shall be upgraded. Th cost estinate to upgrade the electronic control panel is \$10,000.	M e	15	С	CSA No. 14 must be able to provide water to 41 residential parcels. The 10,000 gallon hydropneumatic tank was originally installed in 1965. The tank is deteriorating and has exceeded its life span. The hydro tank represents a potential health hazard due to corrosion of the tank leaching into the water supply. The electronic control panel for the hydro tank is outdated. The electronic control board needs to be updated in order to operate the system more efficiently.	80,000	41	110 23	Fresno	111	2009
1472 0500019	0500019-002	MINERAL MOUNTAIN MUTUAL WATER		REPLACE THIN WALL PVC LINES WITH SCHEDULE 40 PVG	СМ	15	с	UNSATISFACTORY DISTRIBUTION LINES	10,000	24	125 10	Calaveras	Ш	1998
1473 4900787	4900787-002	Plaza Mobile Home Park		Activate second existing non-operating well by installin new pump, chlorination system, and enclosure.	g M	15	с	low water pressure because one well can't handle system demand	10,000	71	125 18	Sonoma	II	1999
1474 4900787	4900787-001	Plaza Mobile Home Park		Activate 2nd existing nonoperational well by installing new pumps and chlorination system and enclose.	М	15	с	Low water pressure because well can't handle the demand.	10,000	71	125 18	Sonoma	Ш	1998
1475 1500374	1500374-001	CWS-GRAND OAKS WATER SYSTEM		DRILL AND EQUIP NEW WELL AND INSTALL ADDITIONA STORAGE TANK. OTHER - DESIGN AND CONSTRUCTION	L M	15	с	INADEQUATE DISTRIBUTION SYSTEM AND STORAGE RESULTING IN PERIODIC LOW PRESSURE DURING PERIODS OF HIGH DEMAND	200,000	42	126 19	Kern	Ш	1998
1476 2600501	2600501-001	BIRCHIM COMMUNITY SERVICE DIST		Replace mainline	М	15	С	Old mainline	250,000	55	130 13	Mono	V	1998
1477 4700542	4700542-002	Abrams Lake Mobile Estates	Pump Replacement	Replace spring house pump and booster pump.	М	15	С	One spring house pump and the booster pump have broken down and are inoperable.	10,000	86	135 01	Siskiyou	I	2007
1478 5500042	5500042-002	BELLEVIEW OAKS MUTUAL WATER CO		REPAIR AND/OR REPLACE AGING STORAGE TANK AND INSTALL NEW 100,000 GALLON TANK.	М	15	С	NEED LARGER STORAGE IN CASE OF PUMPING FAILURE AND/OR DISINFECTION CONTACT TIME IS REQUIRED.	238,000	100	140 11	Tuolumne	Ш	1998
1479 5500149	5500149-001	COLUMBIA MOBILE HOME PARK	Columbia MHP Potable Water Distribution System	The existing potable water distribution system will be dug up and replaced with materials and components that meet current codes and standards. The system will be designed by a registered professional engineer, go through the proper approval channels and installed by competent contractor. Once the distribution system is in place the surface streets will be paved.	M a n	15	с	Potable water is distributed throughout a 65 space mobile home park. The water is ditributed throuh an old poly ethylene piping system that has deteriorated with age. The system breaks down on a continual basis requiring repair work. The constant shut down and restart of the potable water system poses a potential health hazard to the residents as well as the inconvenience of having their water shut off for periods of time.	165,000	59	150 11	Tuolumne	III	2009

1480 1000041	1000041-001	FCWWD #38/SKY HARBOUR	Construct a surface water treatment facility and water line to lake pump	The cost estimate to build a surface water treatment plant is approximately \$500,000 for the water treatment facility and \$300,000 to dredge the existing pump, rehabilitate it, anchor it properly to the lake floor, and install water pipelines to the treatment facility.	Μ	15	C	This District, which was formed in 1964, has a water system that has one 121,000 gallon storage tank which uses gravity feed to provide water to the dstribution system. The existing well is 810 feet deep and the pump is set at 750 feet. It uses a 15 horse power pump and pumps approximately 50 GPM. The original developer and the successor were required to provide a minimum flow of 164 gallons per minute and 155 feet of annual storage of water to the subdivision for full build out. Although the original source of this water was supposed to be from wells, the developers were not able to secure this amount of water from the existing source. A submersible pump was then placed in Millerton Lake and an agreement was secured with the right to use up to 155 are feet per year of water directly from Millerton Lake through the Cross Valley Canal program. The existing Lake Pump was tied to barrelis and sunk into the lake. It does not meet current regulatory requirments for operation. A surface water treatment plant was not developed. On November 3, 2008, the CDPH issued conditions with the water system permit. One of the couriditions is that another well be develop in case the current operating well fails. Rather than trying to seek a backup water source by drilling another well which may not provide sufficient supply or may impact surrounding well production, it would be more prudent to develop a surface water treatment	800,000	30	150 23	Fresno	11	2009
1481 4900552	4900552-001	Michele Mutual Water Company		Replace mains and upgrade hardware in the process: 40,000 gal redwood tank, approx. 7,400 feet of mains, wells and pumps as required.	м	15	С	Aging system, steel pipes circa 1956, mains: 4 & 6 inch.	190,000	62	170 18	Sonoma	II	1998
1482 3600185	3600185-001	Oak Glen Domestic Water		Replace mainline	м	15	С	Old substandard mainline	200,000	35	175 13	San Bernardino	V	1998
1483 5400504	5400504-003	A & A MHP	A&A MHP Water System	Install new well with pump.	М	15	С	We only have one source of water	100,000	60	200 12	Tulare	ш	2009
1484 1000426	1000426-001	RIVERBEND MOBILE HOME & RV PARK	New well to augment single well	Drill a new well or interconnection if possible.	м	15	с	Single well, if it fails, the system is out of water	200,000	46	200 23	Fresno	Ш	2008
1485 2600538	2600538-001	LOWER ROCK CREEK MUTUAL WATER CO.	Siorrovillo Dublic Utility	Construct new 100k gal tank	M	15	c	Inadequate storage capacity	80,000	75	200 13	Mono	V	1998
1400 4000018	4000018-005	Sierraville P.U.D.	District East End Loop Project	Highway 49/89 at the east end of Main Street, Sierraville.	NI.	15	C	because there are two beau-end nines and some inadequately sized piping on east Main Street in Sierraville, water quality and pressure are poor at that end of town and service to the area must be shut down when maintenance is required. Pressure also is not adequate for fire protection.	45,700	102	200 02	Siella	I	2009
1487 3301428	3301428-002	Blythe - Mesa Ranch	Palo Verde College Reservoir Rehabilitation and Lining Project	The project entails preparing and rehabilitating the reservoir's interior surface by application of a 100% solids polyurethane lining system (24bron or approved equal). This will basically revive the life of the existing tank avoiding potential health hazards and future reservoir replacement costs.	Μ	15	с	This is a 500,000-gallon bolted steel reservoir that has been in service for over ten years. Recent issues are corrosion of interior panels and seems which will lead to water quality issues, water loss, and potential failure of the tank leaving the community without adequate water storage capacity and serious health issues. The reservoir is currently experiencing several leaking seams resulting in panel corrosion and pending loss of structural integrity.	105,316	199	200 20	Riverside	V	2009
1488 2600538 1489 4000512	2600538-002 4000512-004	LOWER ROCK CREEK MUTUAL WATER CO. BELLA VISTA MOBILE LODGE	Tank repair and pipe replscement	Construct 900 ft of 6inch to loop upper zone Repair and reline the existing water tank. This proses should give the tank an additional 40 years. (cost, \$35,000.00]Replace the 6" steel pipe with 3" PVC, life	M M	15 15	c c	Inadequate pressure in upper zone This system has a 33,000 gallon bolted steel water tank that developed a leak on June 26, 2009. The supply line from the well to the tank is 6" welded steel, it currently here tracing language on support a lower 2 14 (best	95,000 74,000	75 84	200 13 200 06	Mono San Luis Obispo	V IV	1998 2009
1490 4200870	4200870-004	CASMALIA COMM. SERVICE DIST.	New Water Source	The proposed project is to construct a new well within the community. The system has negotiated access to several land easements for a well. They will drill a test well, and if successful, will construct a new well at that closer location. No other water systems are within more than 5 miles, so a new well is the best option.	M	15	с	This is a sole source water system. The source is ~ 4 miles from the community and is owned by a large corporation. The community pays enormous fees to the corporation for water. This disadvantaged community cannot afford to continue paying the fees, and needs its own source of water within the community.	300,000	55	234 06	Santa Barbara	IV	2009

1491 3100038	3100038-001	HEATHER GLEN COMMUNITY SERVICE DIST	Heather Glen Community Services District Water Storage and System Reliability Project	Storage in the existing system is limited to one 100,000 M gallon redwood tank. The tank is more than 50 years old and is critical for proper operation of the system. The proposed project includes a new 150,000 gallon steel tank located at the existing site. The new tank will provide operational redundancy and additional emergency storage. The current treatment plant is a package system over 50 years old. The facility produces treated water which meets current standards; however, the existing electrical and control system is unreliable and requires upgrades. The proposed improvements include replacing and upgrading existing plant controls and electrical service. The estimated project cost is \$400,000.	15	с	Heather Glen Community Services DistrictTreated water storage in the existing system is limited to one 100,000 gallon redwood tank. The tank is more than 50 years old and is critical for proper system operation.The proposed project includes a new 150,000 gallon steel tank located at the existing site. The new tank will provide operational redundancy and additional emergency storage. The current treatment plant is a package system over 50 years old. The facility produces treated water which meets current standards; however, the existing electrical and control system is unreliable and requires upgrades. The proposed improvements include replacing and upgrading existing plant controls and electrical service. The estimated project cost is \$400,000. No drinking water standard, regulation or CDPH directive are violated.	400,000	86	250 02	Placer	I	2009
1492 0910007	0910007-001	Lukins Brothers Water Company		Drill new well at property of Well 4 and replace Well 3 M on new property.	15	с	Two wells must be replaced to provide reliable source capacity.	250,000	905	250 09	El Dorado	I	1998
1493 0910007	0910007-003	Lukins Brothers Water Company		Install storage tanks with pump and generator station. M	15	С	Inadequate storage capacity.	800,000	905	250 09	El Dorado	I	1998
1494 0310015	0310015-002	Rabb Park Community Ser. Dist.		INSTALL 750' OF C-900 PIPELINE. OTHER = DESIGN AND M CONSTRUCTION.	15	с	SECTION OF MAIN LINE EXPERIENCING NUMEROUS BREAKS.	38,000	107	268 10	Amador	Ш	2006
1495 5500193	5500193-002	TAMARRON MOBILE HOME PARK	Tamarron MHP Potable Water Storage	Funds are requested for the purpose of designing and building a water storage system to be integrated with an existing distribution system. The storage system will be designed by a registered, prfessional engineer and constructed by a competent contractor. The system will in corporate appropriate controls, valves, and distribution pumps.	15	с	Tamarron Mobile Home Park is a 90 space mobile home community in Sonora, Ca (Tuolumne Co).Potable water is distributed through the park from a well.The existing distribution system has mimimal storage capacity which leads to loss of pressure problems when there is an outage.Loss of pressure is a potential health problem.Funds are requested to design and build a storage tank system which significantly mitigate the potential health problems we incur when we have a problem in the system that requires shutting off the well.	45,000	85	273 11	Tuolumne	111	2009
1496 2000509	2000509-007	CASCADEL MUTUAL WATER SYSTEM	Water Storage Replacement And Supplementation ER	The project would entail removing three existing 15,000 M gallon tanks and constructing 100,000 gallons of storage. All costs of deconstruction, site prep, construction, controls and engineering are included. This additional storage, and other planned storage, will help to alleviate the risk to public health, welfare and safety in Cascadel Woods.	15	с	The project proposes to replace three, leaking 15,000 gallon storage tanks with a new storage tank. The existing tanks were inspected in 2007 and found to be deficient. These tanks tanks hold approximately 1/3 of the system's storage. Additionally, the project proposes to add 55,000 gallons of storage to meet minimum flows for domestic and fire needs. Cascadel Woods is at extreme risk of catastrophic wildfire and currently has insufficient water storage, hydrants and access.	250,000	137	300 11	Madera	Ш	2009

1497 2000509	2000509-010	CASCADEL MUTUAL WATER SYSTEM	Cascadel Road Water System and Hydrants Completion CMWC ER	Approximately 3000 feet of 10 inch water main and 6 hydrants to be installed in two incomplete areas of the original planned system. Local Tribal monitors will be hired.	Μ	15	C	When the Cascadel Mutual Water Company upgraded to a new system in 1996 with both federal grant funds and a 40-year low interest USDA loan portions of the system were not completed. Due to fiscal difficulties and the challenge of serving a very small community with limited funds the Water Company has not yet completed these planned sections of system.Cascadel Woods is in hilly terrain surrounding a central meadow area essentially bisected by a year round creek that reaches flood proportions some very wet winters. Roughly half of our customers are on the East side of Cascadel, the other half on the West.Cascadel Woods is at very high risk for catastrophic wildfire due to steep terrain, heavily wooded areas, unacceptably high fuel loads and inadequate access. Cascadel Woods is named as the #1 top priority in the Community Wildfire Protection Plan of Madera County, for good reason.The incomplete portions of the system involve two sections of Cascadel Road, one area East of Whiskey Creek, one on the West side. This involves another crossing of Whiskey Creek. Cascadel Road is a fuel break mentioned in the Community Wildfire Protection Plan. Ultimately consolidating all areas into the system so hydrants will be available in areas currently not served is the bigger long range goal. This project addresses two areas that can later be extended to help reach this goal. The developed are is 480 acres of former Cascadel	250,000	137	300 11	Madera		2009
1498 2000509	2000509-008	CASCADEL MUTUAL WATER SYSTEM	Groundwater Source Development	Drill an additional 8" inch water well at the Well #3 location with controls and tie-in to existing infrastructure.	Μ	15	C	The Cascadel Mutual Water Company Inc. relies on two groundwater wells and a spring as its primary water sources. A third pair of closely communicating wells exceed EPA regs for uranium. The two wells can provide approximately 20gpm combined continuously. The 40 gpm freshwater spring traditionally made up two-thirds or more of our usage because it is gravity feed and we'd minimize our pumping costs and wear on the wells by relying on the spring. Recently, Cal DHS tentatively classified the spring as being under the direct influence of surface water (GWUI) evidently because the ntu rises slightly in winter and bacT has been present some of these times. The spring was redeveloped and is currently being monitored for ntu and bacT.On advice of Cal DHS's Eugene Reade the CMWC constructed a new well to offset this source, but the well only produces 10gpm at this time. The spring produces 40gpm. Our needs can reach 50gpm in the summer, the time of greatest risk of fire. Our tanks are hard hit at these times of year leaving insufficient fire suppression water when needed most. We are addressing the storage and hydrant issues in other projects but need more sources of water.Rather than install a costly treatment plant with associated high operation and maintenance costs we propose to develop sufficient groundwater wells to meet our needs as Eugene Reade recommended. We are also looking at consolidating	125,000	137	300 11	Madera	111	2009
1499 2000509	2000509-011	CASCADEL MUTUAL WATER SYSTEM	Water System Control An Monitoring	d This project would install automatic controls and monitoring systems at all groundwater sources and storage locations. Currently there are five water source and two storage locations. Additional storage locations are planned.	M 25	15	с	The project proposes install monitoring equipment and automatic controls at all storage and pumping facilities. Currently only the primary storage location has monitoring equipment w/ alarms. Pumps are operated manually with the use of timers. Current regulations require automatic controls, per the latest inspection	20,000	137	300 11	Madera	III	2009

1500 2000509	2000509-012	CASCADEL MUTUAL WATER SYSTEM	Cascadel Woods Fire Protection Water Storage ER	At the Well #3 site there is sufficient level ground to install two water storage tanks of minimum size of 100,000 gallons each. Tank pairs are advantageous for smaller footprints and servicing one tank while leaving another online. A single large tank is in design consideration.Associated automatic controls, monitoring and tie-in to the existing 4 inch main will be included.	Μ	15	C	Cascadel Woods in a State Responsibility Area in a remote heavily wooded area on steep terrain with unacceptably high fuel loads, inadequate access and high density housing on typical third acre lots. Cascadel Woods is too remote from the North Fork Water System to afford physical consolidation, and at a much higher elevation. In a partnership with the Eastern Madera County Fire Safe Council Inc. the local community is addressing these issues. The Cascadel Fire of 2008 illustrated the dangers we face here in Cascadel, and highlighted how inadequate are our water supplies and storage. Cascadel narrowly escaped what could have been a catastrophic fire event. Recently, the Cascadel Mutual Water Company built a new groundwater source at an old tank location ideally located for additional storage. Planned additional storage at this location of 200,000+ gallons will be addressed through this project. This additional water storage (and planned eventual system extension adding additional through system extension adding additional storage the public health, welfare and safety of our area through immediate and readily available fire suppression water of more sufficient quantity. This project specifically addresses building additional storage tanks at the existing well #3 location.	500,000	137	300 11	Madera	Π	2009
1501 3700922	3700922-003	LIVE OAK SPRINGS WATER COMPANY	Well replacement, storage shut off valves.	b. This water system is over 70 years old. One of the wells put in only gives us 5 gallons per minute. We need a new well because the old well is contaniminated and we cannot replace it as we spent our money putting in this well. The water system requires a new storage tank. The old tanks were purchased from Lake Morena water district used, they need to be replaced as they are not adaquate for the service connections. The tanks must be chlorinated because of their old condition. The pipes are so old that the DEH orderded chloration. The water system needs shut off valves every 1,000 feet we only have three shut off valves in the system. All of these items need to be adressed to be in compliance with the State Drinking Water Standards. The system was under boil notice for over thirty days in 2006. One well out of two was shut down by DEH services. The owners spent over 100,000 dollars and any more money spent will cause a rate increase of over seven hundred and fifty percent rate increase already. The water company was fined by DEH for non compliance and it was the first such fine imposed on a small water company for non compliance.	M 2	15	c	This water system is over 70 years old. One of the wells put in only gives us 5 gallons per minute. We need a new well because the old well is contaniminated and we cannot replace it as we spent our money putting in this well. The water system requires a new storage tank. The old tanks were purchased from take Morena water district used, they need to be replaced as they are not adaquate for the service connections. The tanks must be chlorinated becaues of their old condition. The pipes are so old that the DEH orderded chloration. The water system needs shut off valves every 1,000 feet we only have three shut off valves in the system. All of these items need to be adressed to be in compliance with the State Drinking Water Standards. The system was under boil notice for over thirty days in 2006. One well out of two was shut down by DEH services. The owners spent over 100,000 dollars and any more money spent will cause a rate increase of over seven hundred percent. The customers went through a three hundred and fifty percent rate increase already. The water company was fined by DEH for non compliance and it was the first such fine imposed on a small water company for non compliance.	200,000	138	300 14	San Diego	v	2009
1502 1400005	1400005-001	Owens Valley Water Company		Determine problem for lack of water pressure and repair	М	15	С	Lack of water pressure in residences	25,000	111	300 13	Inyo	V	2000

1503 2000509	2000509-009	CASCADEL MUTUAL WATER SYSTEM	Well #3 Deepening	Improve Well #3 by removing or drilling out the lining and deepening the well for substantially higher yields. This is the most cost effective first attempt at developing wells further.	Μ	15	C	On advice of Cal DHS's Eugene Reade the Cascadel Mutual Water Company Inc. drilled an additional water well, dubbed Well #3.At the time of drilling, the air lift indicated a potential production of 120 gpm reached at the very bottom of its 858 feet. As is typical, actual production proved to be less, however, much much less. We can only get about 10 gpm continuously from this well.The main aquifer producing the water was hit at the very bottom of the 858 feet of well. After consulting with the well driller and pump company a determination was made that removing the lining and drilling deeper will produce a reasonable likelihood of getting additional water, either by clearing any blockages that developed at the main aquifer, or by deepening, or both.This project proposes to improve Well #3 with the aim of increasing its output substantially.	35,000	137	300 11	Madera		2009
1504 2400167	2400167-002	BALLICO COMMUNITY SERV. DIST.	Additional Well for Ballico CSD	b Locate and purchase property for new well site. Design well construction, wellhead features, connection to existing distribution system, and wellhead protection/security. Drill test well, conduct test well monitoring. Construct well, wellhead. Purchase and install pressure tank. Connect new well to existing distribution system. Purchase and install emergency electrical generator. Install wellhead protection and security.	Μ	15	С	Water system lacks adequate and reliable water supply because it has only one well as its total water source. System does not have any storage capacity. Loss of this well or pump will result in loss of all water to the entier community until correction is made.Title 22, Section 116555. Operational requirements.(a) Any person who owns a public water system shall ensure that the system does all of the following:(3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.Title 22, Section 64554. New and Existing Source Capacity.(a) At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). MDD shall be determined pursuant to subsection (b).	700,000	53	309 11	Merced	III	2009
1505 2300591	2300591-005	Pine Mountain Mutual Water Co.		Replace water main with 6 inch PVC as well as lateral	м	15	с	Aging water main starting to have more leaks.	775,500	130	310 03	Mendocino	Ш	1998
1506 1800534	1800534-001	Spaulding/Eagle Lake MWC		services. Replace 2-inch pipes with 6-inch pipes throughout the water system	м	15	С	Low water pressure.	125,000	77	325 02	Lassen	I	1998
1507 5100107	5100107-003	Sutter Co. WWD#1 (Robbins)	Robbins Water Main Replacement Project	The project will replace 7600 lineal feet of aging galvanized pipe with PVC C900 to current adopted County standards. The distribution pipe size will be increased to allow better fire flow capacity. The improvements will also include the addition of thrust blocks, gate valves and fire hydrants at 500 foot spacing.	Μ	15	С	A portion of the Robbins water distribution system is nearly 60 years old. The main distribution lines were constructed with galvanized iron pipe and is deteriorating leading to many failures and costly repairs. Many portions of the system have dead end lines leading to secondary water quality issues. Public safety is also a concern due to a lack of fire hydrants in some sections of the community.	330,000	94	336 21	Sutter	I	2007
1508 3900831	3900831-001	ARBOR MOBILE HOME PARK		RENOVATE BACK-UP WELL. OTHER = DESIGN AND CONSTRUCTION	Μ	15	С	SYSTEM HAS SINGLE WELL	10,000	173	340 10	San Joaquin	ш	2006
1509 1400006	1400006-002	Rovana Village		Drill backup well	М	15	С	Single source of supply	381,300	90	350 13	Inyo	V	1998
1510 1400006	1400006-004	Rovana Village		Construct new tank	М	15	С	Storage facilities in poor structural condition	107,400	90	350 13	Inyo	V	1998
1511 1400006	1400006-003	Rovana Village		Replace lines	M	15	С	Old, undersized transmission and distribution lines	611,500	90	350 13	Inyo	V	1998

1512 1000021	1000021-001	FCSA #5/WILDWOOD ISLAND	Replace two 10,000 gallon hydropneumatic tanks and electronic control panels.	The cost estimate to replace both hydro tanks and d remove the existing tanks is \$160,000. The existing tanks shall be hauled to a recycler. The cost estimate to upgrade both electronic control panels is \$20,000.	Μ ,	15	С	CSA No. 5 must be able to provide water service for 151 single family residential parcels. The original water system was constructed in 1966. The two original 10,000 gallon hydropneumatic tanks are rusted and seeping. The tanks have deteriorated beyong their life expectancy. The potential for corrosion from the tank itself to leach into the water distribution system represents a health hazard. The existing tanks shall be destroyed. The electronic control panels regulating the amount of pressure within the hydro tanks are of the original design. They are badly in need of upgrade.	170,000	126	360 23	Fresno	III	2009
1513 1800512	1800512-003	Clear Creek CSD-Westwood		Construct 250,000 gallon storage tank. Install 8" and 6" water lines to replace existing 4" and 2" lines.	м	15	с	Need additional 250,000 gallons of storage capacity. Need to replace existing watermains.	250,000	160	400 02	Lassen	I	1998
1514 3600226	3600226-003	CSA 70F, Morongo Valley		Replace pipe and booster stastion	М	15	С	Distribution system does not meet waterworks	580,000	90	450 13	San Bernardino	v	2000
1515 3600226	3600226-004	CSA 70F, Morongo Valley		Develop new master plan	м	15	с	Master Plan does not provide for reliable water system	50,000	90	450 13	San Bernardino	v	2000
1516 2310013	2310013-008	Point Arena Water Works	Water Mains	Upgrade a 60 year old 540 foot section of the existing main line to a 12" main line. This upgrade will increase the Fire Flow protection of the City of Point Arena as well as secure the integrity of the infrastructure of the distribution pipes in that part of the water system.	м	15	с	operation Installation of approximately 540 feet of 12" main line on Mill Street, Point Arena to replace a deteriorated section of 6" main line, which is over 60 years old.	75,900	210	465 03	Mendocino	II	2009
1517 2310013	2310013-009	Point Arena Water Works	Security Gate and Fences	Install an electric gate and security fence at the Main water storage tanks located at 135 Riverside Drive, Point Arena. Install security fence around the Garcia River Well located on Windy Hollow Road, Point Arena, California.	М	15	с	Lack of security around Main Water Storage tanks and well.	41,300	210	465 03	Mendocino	II	2009
1518 4000568	4000568-002	SAN SIMEON CSD		Construct an upgraded parallel line to the reservoir.	м	15	С	Single source of supply from reservoir to distribution system.Low flow/pressure to customers.	100,000	206	499 06	San Luis Obispo	IV	2002
1519 5000005	5000005-003	CROWS LANDING COMM SVC DISTRICT	Replacement of water mains	The propose project consists of installation of 14,900 linear feet of eight (8) inch PVC pipe and 3000 linear feet of twelve (12) inch PVC pips 4600 linear feet of sixteen inch PVC. This will include 66 eight-inch gate valves and 30 twelve-inch butterfly valves plus 21 sixteen inch butterfly valves. There will be 42 fire hydrants and one 60 KW standby generator with automatic transfer switch. The distribution will be design to be a grid system to eliminate deadends. The standby generator will provide water to the community during power outages. The project will improve the health and safety of the community by providing proper fire flows and the quality of the water will also improve with the new piping.	r	15	c	The existing land uses in the Crows Landing community consist of residential, commercial, and industrial developments, in addition to a public school. The Community of Crows Landing currently receives its potable water supply from two groundwater wells. One of the wells is located on the northwestern portion of the community and the other well is on the east side. The wells have potentials of 400-500 gallons per minute (ggm). The wells were constructed in 1993 and have not been maintained as required for lack of funding. One of the wells stopped pumping in 2007. This well required repairs that totaled \$37,000. The community is currently paying \$35.00 per month for water service which covers the operation but no funds for preventive maintenance. The following list explains the District's other concern:1. Undersized distribution network - 1-inch to 3-inch galvanized mains.2. Old galvanized piping throughout the community - many water leak.3. Shutoff valves are inoperable requiring the shut down of water wells for repairs.4. Lack of fire protection - Wharf - 3-inch fire hydrants throughout the community.5. Many deadends on the system.6. No back up power supply.7.	2,276,000	138	500 10	Stanislaus	111	2009

water fixtures throughout the community.

1520 4600009	4600009-004	Sierra Brooks PSD	Sierra Brook Water Syste Improvment	m The project scope includes the following improvement to the water system:1. Installation of 2,500 feet of 10" pipeline.2. Installation of 4900 feet of 8" pipeline.4. Construct inter-ties between upper pressure zone and lower pressure zone.5. Install 20 new isolation gate valves6. Install 21 new fire hydrants (includes replacement of nine standpipe hydrants.)7. Install new water meters.8. Install standby generators for uninterrupted water service during a time of power supply failure.	ts M I	15	C	Sierra Brooks water system was developed to support the Sierra Brooks residential subdivision. This community encompasses approximately 400 acres originally consisting of 398 single family residential parcels along with open space areas. The subdivision also includes a community center, firehouse, and campground. The Sierra Brooks water system is owned and operated by Sierra County. The system is comprised of two wells, two storage tanks and a distribution pipeline system. One tank is for residential distribution while the second tank is used exclusively for fire suppression storage through a single hydrant. Through a number of parcel mergers the subdivision currently without water service from the water system, and eleven of those have private domestic wells.Currently Sierra Brooks Water system is has an inadequate water source capacity. Using the past 5 years records the current maximum daily demand (MDD) is 721 gpm and the current water conservation plans the MDD can be reduced to 655 gpm. The water storage capacity is another significant problem for this water system. The current system Minimum Storage Volume(mg) is 0.521 while the required build out Minimum Storage Volume (mg) is 0.620. In order to reach this objective the system needs an additional	1,500,000	210	515 02	Sierra	I	2009
1521 1800511	1800511-001	Lake Forest Mutual W.C.		Recoat largest storage tank. Build new tank. Replace	М	15	С	Storage tank needs rehabilitation. Storage capacity is	100,000	271	568 02	Lassen	I	2006
1522 1410002	1410002-002	LADWP - INDEPENDENCE		Replace mainline	м	15	с	Old, substandard mainline	350,000	1,000	586 13	Inyo	v	1998
1523 1410002	1410002-006	LADWP - INDEPENDENCE		Construct new tank	М	15	С	Inadequate storage capacity	100,000	1,000	586 13	Inyo	v	1998
1524 3110023	3110023-004	North Tahoe PUD - Carnelian Woods		Replace 2,400 ft of pipe. Involves design and	М	15	С	Ineffcient water line.	409,600	273	600 02	Placer	I.	2006
1525 3110048	3110048-002	Placer CSA - Sheridan	Sheridan Water Supply and Distribution Project	Sheridan, a small, rural community located in the western portion of Placer County is an area of relative level topography spanning approximately 200-acres, a grid of approximately 5 by 6 city blocks. Sheridan's water system was originally built in 1969 and is comprised of approximately 15,700 lineal feet of 2 to 0 inch distribution piping, two (2) public water wells, and appurtenances. Each water well is approximately 200-feet deep. Well 1 has a generator for standby power and Well 2 does not. The water system serves 200 residential and 6 commercial connections for a total or 210 EDUs. As with many rural communities, Sheridan faces the problems of poverty, aged housing and infrastructure. A Household Income Survey was performed by Mercy Housing California which determined that the MHI for Sheridan was \$29,800. Th County reviewed the existing water system to reliably meet the maximum daily water demand.a. Upsize the well pump at existing Well 2 to maximize th output of the well and install a backup generator to reduce the risk of system pressure loss – Well 1 is currently the greatest water producing well for the water system. Well 1 is 25-ho and the ourne motor at Well 2 have approximately	M ly 6- d f f	15	C	Placer County Community Service Area 28, Zone 6 (CSA), owns and operates the Sheridan Public Water System (water system) in the community of Sheridan, California. The water system consists of two (2) public water supply wells and a network of distribution piping and appurtenances. Water is disinfected at the wells via liquid chlorine injection, and water pressure is maintained by pump-controlling pressure switches at each well site. Only one (1) well has a backup power generator. The water system serves a population of approximately 600 residents. The water system and the CSA's associated wastewater treatment and conveyance system lack capacity for additional connections. The CSA has operated under a self-imposed connection moratorium since approximately 1985. 1. Why the facility is needed: The moratorium on new connections has prevented infill development within the community, limiting economic growth and school enrollment. Community stagnation is a likely cause of the aging housing inventory, lack of property upkeep and increased criminal activity. On October 27, 2008, the County received an inspection report letter from the California Department of Public Health (CDPH) stating that the water system has "insufficient source and storage capacity to meet current Waterworks Standards" (22 CCR 64551 et seq.). These new standards require the water system to be able to sunnly	950,000	232	600 02	Placer	I	2009
1526 3110023	3110023-001	North Tahoe PUD - Carnelian Woods		Construct an 8,330 ft, 12" diameter intertie to District main water system. Involves design and construction.	's M	15	с	Unreliable system supply.	1,082,500	273	600 02	Placer	I	2006
1527 3110023	3110023-002	North Tahoe PUD - Carnelian Woods		Construct a new well. Involves design and constructio	n. M	15	с	Well is unreliable and is at risk for outages and reduced water pressure.	280,000	273	600 02	Placer	I	2006
1528 3600301	3600301-001	Strawberry Lodge MWC		Replace mainline	М	15	С	Old, substandard mainline	750,000	128	640 13	San Bernardino	v	1998

1529 3610023	3610023-004	GREEN VALLEY MWC	Angeles main replacement	t This is a pipeline replacement project. The pipeline will replace a substandard asbestos Cement - 4 inch diameter water transmission main with metered servici connections. The new pipeline will be of PVC C-900 and 6 inch diameter to meet current supply and fire flow standards. Included in the project will be replacement of fire suppression facilities such as hydrants and appurtenances. Included is the installation of water quality blow offs for a dead end.	M e	15	C	Replacement of 50 year old water main and fire hydrants and service connections. Pipe is composed of AC Pipe.	275,000	1,135	700 13	San Bernardino	V	2009
1530 2010009	2010009-001	MADERA CO SA NO 19-ROLLING HILLS		INSTALL A NEW WELL AND A STANDBY GENERATOR.	М	15	С	THE SYSTEM HAS TWO WELLS, THE MAIN WELL (NO. 1) HAS EXPERIENCED SANDING PROBLEMS WHICH HAS RESULTED IN ITS REDUCED CAPACITY. THE SYSTEM HAS HAD LOW PRESSURE PROBLEMS DURING THE SUMMER MONTHS.	500,000	333	727 11	Madera	ш	1998
1531 1410005	1410005-001	INDIAN CREEK COMMUNITY SERVICE DIST	RICT	Construct a 500,000 gallon storage tank	м	15	С	Inadequate storage results in low pressure problems in higher pressure zone during summer	600,000	213	785 13	Inyo	V	1998
1532 3110036	3110036-003	North Tahoe PUD - Dollar Cove		Replace 4,510 ft of water mains. Involves design and construction.	м	15	С	Water mains leak; lines are deteriorated and do not provide proper circulation of water.	419,000	273	800 02	Placer	I	2006
1533 1510051	1510051-013	LEBEC COUNTY WATER DISTRICT	Up-size Water Main for Phillips Pressure zone	Approximately 3,200 lineal feet of 3-inch pipeline would be replaced with 6-inch diameter water main.	d M	15	С	The existing 3-inch diameter pipeline that serves the Phillips Pressure Zone is inadequate for fire flows, high water demands and future demands. In addition the pipe size does not meet current standards for a water main as allowed by the California Waterworks Standards.	110,000	243	830 19	Kern	III	2009
1534 1510051	1510051-003	LEBEC COUNTY WATER DISTRICT	Starter Booster for State Well	The project would modify the existing electrical system to provide a separate starter for the booster pump	м	15	с	The State Well pump and State Well tank booster use the same electrical system and motor starter. If the State Well pump is out of service then the booster pump is off line.	25,000	243	830 19	Kern	Ш	2009
1535 1510051	1510051-008	LEBEC COUNTY WATER DISTRICT	New Tank Lebec Zone	The project would provide additional storage capacity a the Lebec Tank site. It would consist of the addition of a 100,000 gallon tank at the existing Lebec Tank site.	at M	15	с	Not enough storage in the Lebec Zone to handle current and future maximum daily demand.	260,000	243	830 19	Kern	111	2009
1536 1510051	1510051-012	LEBEC COUNTY WATER DISTRICT	Portable Emergency Generator	The project would consist of retrofitting important well sites or booster pump stations with generator receptacles and a portable generator mounted on a trailer.	М	15	С	The District does not have a portable emergency generator to allow pumping during electrical outages. The problem is made worse because the nearest rental agency is about an hour drives away from the District. Additionally, the well sites are not equipped with generator receptacles to quickly connect the generator to the system.	40,000	243	830 19	Kern	III	2009
1537 1510051	1510051-011	LEBEC COUNTY WATER DISTRICT	Lebec - New Tank Chimney Canyon Zone	y Demolish the current 40,000 gallon tank and replace it with a 250,000 gallon tank. Because the tank has the highest elevation of the system it could also feed the lower elevation zones.	Μ	15	с	This zone has the highest demand and there is not enough capacity with existing tank.	500,000	243	830 19	Kern	Ш	2009
1538 1510051	1510051-010	LEBEC COUNTY WATER DISTRICT	Alarm and SCADA systems	<ul> <li>the installation of a Supervisory Control and Data Acquisition (SCADA) system would allow operators to monitor on a computer selected parameters including tank levels, pumping flow rates, pressure, well pump status, etc. This will reduce the time operators have to check on the status of the distribution system and alert the operator to a potential emergency.</li> </ul>	м	15	С	Currently, well pumps are turned on automatically by a timer system or by manual operation. Timer can be adjusted as needed to account for seasonal variations in demand. If a high demand occurs, the tank levels could drop to a critical level, or a well could go out and there would be no immediate notification.	450,000	243	830 19	Kern	Ш	2009
1539 1510051	1510051-002	LEBEC COUNTY WATER DISTRICT	Flow Meters at Wells	The installation of three flow meters at each of the Districts source wells.	Μ	15	с	No flow meters at well sites. With the addition of flow meters the District will be able to account for water losses and keep track of pump performance and efficiency.	40,000	243	830 19	Kern	Ш	2009
1540 1510051	1510051-006	LEBEC COUNTY WATER DISTRICT	Lebec - New Tank/Booster system	The project would provide additional storage capacity for the system. It would consist of a 250,000 gallon storage tank that would be connect to the distribution system by $6,000$ Lineal feet of 8-inch diameter water main. In addition a booster pump would be installed to deliver water.	М	15	С	There is not enough storage capacity to meet current and future demand for the system.	750,000	243	830 19	Kern	Ш	2009
1541 1510051	1510051-009	LEBEC COUNTY WATER DISTRICT	Booster pump from State to Chimney Zone	The project would consist of adding a booster pump to add additional MDD capacity.	М	15	С	Currently a large portion of the district has insufficient source capacity.	80,000	243	830 19	Kern	ш	2009

1542 1510051	1510051-005	LEBEC COUNTY WATER DISTRICT	State and Lebec Zone Interconnections	The Project would be an interconnection of approximately 1,600 feet of 6 inch water main and a pressure reducer valve assembly.	м	15	С	System is divided by the 5-freeway with only one connection. If the connection were to break, only available water is storage tank with limited capacity and this line also crosses the 5-fraeway.	65,000	243	830 19	Kern	Ш	2009
1543 1610006	1610006-003	Stratford PUD	System Pressure and Source Capacity Enhancement	The project consists of purchasing additional property adjacent to Well 6, construction of a 600,000 gallon ground level storage tank, installing booster pumps, electrical, controls, hydropneumatic tank, piping Well 7 to the site, distribution system modification to distribute the flow from the tank and a stand-by generator. The improvements will allow the District to pump out of storage to meet peak demands. Storage will also be provided in the tank for fire flow. Well 5 wi also be equipped with a VFD. The water distribution system improvements will improve the distribution of water from the tank and booster pump site into the distribution system. These improvements will improve water source reliability and pressure within the system	M 7 111	15	с	The Stratford Public Utility District (District) provides both water and sewer service to the unincorporated community of Stratford. The District's water supply consists of three wells. The wells pump directly into the distribution system with an elevated storage tank. Well 6 is currently not in operation due to sanding problems. Well 7 which was completed in 2004 to improve the water system reliability is shut down because of methane gas. The level of gas in the well has resulted in the District not being able to use the well except for a short time during critical periods. The District has low pressure and inadequate source of supply. The system will not meet Title 22 Waterworks Standards. The residents within the community are low income with the median house income of \$29,205 based on the 2000 census. There are 380 service connections in the District with a population of approximately 1,500.	1,700,000	294	837 12	Kings	11	2009
1544 0610003	0610003-001	Maxwell Public Utility District	Research/Develop Well#6 with Security & Montoring System	Due to what was described above the Maxwell Public Utility District has no other option but to put in a new well but do not have the funds to follow through with the project. Project would consist of a well house, well casing, well, pump, pipeline from facilities to the distribution system. Also with the ability to operate as a backup in outages. The project would require a scada system to interface with the existing system and operate during power outages. There will be no destruction of an old facility, only a construction of a new facility.	M	15	с	Maxwell Utilities is unable to deliver an adequate amount of water to supply the needs for the residents and businesses in the town of Maxwell, due to one of two wells not able to provide significant water quantity or quality due to the age and shape of the well. Maxwell Utilities also has a backup well used incase of emergency only. This well is high in maganeese and high in minerals therefore is undesireable to the public of Maxwell. The current well system does not allow for poweroutages due to having no backup faculty to run the system. In the summer of 2009 Maxwell Public Utility has no recourse but to instrumentate mandatory water rationing.	700,000	395	850 21	Colusa	I	2009
1545 5510026	5510026-001	PHOENIX LAKE ESTATES CC MWC	Service Connection Replacement, Phase 1	This project will replace approximately 175 2-inch galvanized service lines with flexible poly-type plastic. Trenching, plumbing, and asphalt replacement will be required. No concrete sidewalks are involved. This project is labor intensive. Materials are estimated at only 20% of the total cost.	Μ	15	С	Our water system is 40+ years o ld and service lines are galvanized steel. There are many leaks in these service lines, and many of the curb stops are leaking or non- functional as well. All need to be replaced to ensure system sanitation and to save wasted water. This project will replace the oldest of our service lines. No public notification, other than common sense courtesy, is required. No special permits or environmental documents are required.	350,000	350	870 11	Tuolumne	Ш	2009
1546 5510026	5510026-002	PHOENIX LAKE ESTATES CC MWC	Upgrade Lateral Pipelines	This project will replace approximately 240 feet of 2- inch pipe with 4-inch pipe in order to increase water flow rate to a critical fire hydrant. The project will also replace approximately 120 feet of 1-inch pipe with 2- inch pipe in order to more adequately serve four residences. Trenching, plumbing, and asphalt replacement will be required. This project is labor intensive. Materials are estimated at only 20% of the total cost.	М	15	C	We have one fire hydrant in our system that is connected to the water main through only a 2" pipe. This pipe is too small for a sufficient flow of water to the hydrant, and the hydrant is located in an area where access by fire tanker trucks is extremely difficult if not impossible. In the same area we have four homes that are served by a common 1" pipeline from the mainline. Again, this pipe is too small for application.	18,000	350	870 11	Tuolumne	Ш	2009

1547 5510026	5510026-003	PHOENIX LAKE ESTATES CC MWC	Service Connection Replacement, Phase 2	This project will replace approximately 175 2-inch galvanized service lines with flexible poly-type plastic. Trenching, plumbing, and asphalt replacement will be required. No Concrete sidewalks are involved. This project is labor intensive. Materials are estimated at only 20% of the total cost.	м	15	с	Our water system is 40+ years o ld and service lines are galvanized steel. There are many leaks in these service lines, and many of the curb stops are leaking or non- functional as well. All need to be replaced to ensure system sanitation and to save wasted water. This project will replace old service lines. No public notification, other than common sense courtesy, is required. No special permits or environmental documents are required.	350,000	350	870 11	Tuolumne	III	2009
1548 5510026	5510026-004	PHOENIX LAKE ESTATES CC MWC	Fire Hydrant Replacement	Replace approximately 50 fire hydrants and install shut off gate valves between mainline and hydrant. Work includes trenching, plumbing, and asphalt replacement No concrete sidewalks are involved.	t M	15	с	Our water system is 40+ years old. Many of our dry barrel type fire hydrants are failing. The oldest of our hydrants need to be replaced and most also need shut off gate valves installed. At the present time we are replacing hydrants as they fail either because of leaks or a failure in the operating mechanism. No public notification, other than common sense courtesy, is required. No special permits or environmental documents are required.	300,000	350	870 11	Tuolumne	111	2009
1549 5400631	5400631-003	LINNELL FARM LABOR CENTER	Linnell Farm Labor Center new water system	The drinking water system needs to be replaced startin at the well, and ending at the last of the 191 home site There are two existing wells. The South well has the original pump, and the North well's pump was replaced in 1999. The watertower was also replaced with a pressurized system in 1999. The project in addition to requiring a new pump, needs to replace all of the old orginal water lines with new lines, and the addition of street located shut-off valves. Please remember that the original lines are now 72 years old. To currently perform any water line repairs requires turning of the entire system. Above ground shut off valves would eliminate that problem. Last but not least would be th addition of on site generators. The loss of electricity also means the loss of drinking water. Also the loss of electricity, and no water means no Fire protection. A generator would help protect against the threat of any fire. large or small. Waiting until the lines collapse before addressing the problem is not a wise decision. methodical plan designed to replace the old system no is a much better approach to the problem, verus waitir for major problems to start occuring at inconvient times. A project of this size would require a large crew from start to finis. Plumbers, electricians, carpenterss and approximately 5 other trades would be needed at some point in time during the construction phase of th project. It would be safe to say that 20-30 skilled	ng M is. d ne A w w ng s e	15	C	The Linnell Farm Labor Center (FLC) was built in 1937. It was known then simply as the Linnell Labor Camp. Since its inception, the center has been through remodels, and modernization projects large and small. Plus over the years, additional housing has been added to meet the continued need for expansion and growth. Linnell now seerves 191 families year around. All of the tenants work in farm related employment. Rents are determined by the tenants income. The rental income from the FLC covers the basic maintenance and repair of all the home sites. However, there is never enough cash reserves to cover the cost of major improvements to the site. The original water system that was used in 1937 is still in place and fully operational today. As the center continued to grow, new lines were added, however the original system was never replaced. Simple math says that we have a 72 year old system that is in serious need of total replacement. The existing sewer system and wastewater treatment plant duplicates the fresh water story. It is also 70+ years old. Rental income generated at the FLC will never be enough to cover the cost of purchasing a new water system. The diverse number of crops grown in Tulare County and the manpower needed to harvest the crops each year means that the FLC will be here for another 70 years, and the water system must continue to meet the needs of the families living in this community.In	1,500,000	190	896 12	Tulare	II	2009
1550 1410004	1410004-001	BIG PINE CSD		Construct new well	М	15	С	Lack of production capacity due to deterioration of well	140,000	315	999 13	Inyo	v	1998
1551 3610021 1552 1410003 1553 1410003	3610021-001 1410003-002 1410003-003	FALLSVALE SERVICE COMPANY LADWP - LONE PINE LADWP - LONE PINE		Repair or replace mainlines and tanks Replace mainline Construct new tank	M M M	15 15 15	C C C	Leaking mainlines and tanks Old, substandard mainline Inadequate storage capacity	90,000 200,000 310,000	484 1,000 1,000	1,100 13 1,118 13 1,118 13	San Bernardino Inyo Inyo	v v v	1998 1998 1998

1554 4510004	4510004-003	Shasta Co. Service Area #6	CSA #6 Silverthorn Distribution Replacement	The current water system consists of three inch galvanized steel water mains, gate valves, and wharf hydrants. The small pipes limit fire fighting capacity. The system cannot meet the required flow of 1000 gpm. In a fire emergency the existing system will not maintain a 20 psi residual pressure. Modeling indicates that the pressure in most of the system will drop to near zero. California Waterworks Standard Section 64602 indicates that a 20 psi residual pressure should be maintained at all time. The low system pressures and flows make it difficult to flush the system properly. Currently, sand has settled in much of the system further reducing flow capacityThe proposed project will replace the existing distribution system with new pipes, valves, and fire hydrants meeting all current standards. The steel pipes will be replaced with larger PVC pipes. Approximately one mile of pipe will be replaced. Fire hydrants will meet current standards. Because the distribution system is failing, the only viable alternative is full replacement.	м	15	c	The current system consist of aging (25 year old) 3 inch galvanized water mains, gate valves, and wharf hydrants. The galvanized pipes are prone to leak and are in generally poor condition. The water system has been modeled for fire fighting capacity. It fails to meet fire flow standards. During a fire pressures in the system do not meet California Water Works Standards section 64002. The system cannot maintain a 20 psi residual pressure during a fire event.	1,000,000	377	1,119 02	Shasta	I	2009
1555 2010006	2010006-001	MADERA CSA NO 3 PARKSDALE		INSTALL A NEW WELL AND A STANDBY GENERATOR.	М	15	с	THE WATER SYSTEM DOES NOT HAVE ADEQUATE RELIABILITY FACILITIES AND ITS CUSTOMERS HAVE EXPERIENCED WATER OUTAGES DURING PG&E POWER FAILURES.	400,000	530	1,188 11	Madera	Ш	1998
1556 5410033	5410033-002	Pratt Mutual Water Co		REPLACE NEW MAIN	м	15	с	REPLACEMENT OF MAIN TRANSMISSION LINES	200,000	277	1,500 12	Tulare	Ш	1998
1557 2410018	2410018-002	SANTA NELLA COUNTY WATER DISTRICT	Water Supply Project	The project would construct a potable water well and necessary pipelines and interconnections to facilitate blending and provide efficient uninterrupted water delivery. Needed water storage capacity would also be provided.	Μ	15	c	Additional water supply is needed to serve the areas of the District not elgible for treated aqueduct water, to provide blending water for treated surface water containing TTHMS, and for a backup supply during treatment plant emergencies, or periods when the aqueduct surface water may not be available due to drought, environmental, or regulatory conditions limiting water delivery. In the spring of 2009 there was a preliminary notice of restricted CVP water deliveries the would have severly impacted SNCWD if it had materilized. California Aqueduct flows have been and may be further reduced to protect fish species and their habitat. As a result the reliability of the California Aqueduct as a source of water for SNCWD may decline significantly. Also the water system lacks adequate storage capacity, transmission pipelines, and interconnections to adequately utilize new water sources for blending and water supply purposes.	1,900,000	494	1,500 11	Merced		2009

1558 4010010	4010010-003	San Miguel Community Services District	0.65 MG Water Supply Tank II	The District's Water Master Plan, adopted in March 2002, listed new water storage facilities to reduce this deficit as a first priority project. Subsequently, the District has implemented the first phase of this master plan recommendation by constructing a 650,000 gallon welded steel storage tank. This first project will only achieve a portion of the current water storage deficit in the community, and the second 650,000 gallon water tank is much needed to ensure adequate water supply to meet today's demands. The District owns the property on which this new tank will reside, thus no property acquisition is required. This new tank will meet all current California Department of Public Health Standards for design of new potable water tanks.	Μ	15	C	The San Miguel Community Services District (SMCSD) provides water service for about 1,850 people as well as recreational, public, commercial, and industrial uses. Currently the District has a total potable water storage capacity of 700,000 gallons, with a new 650,000 gallon tank under construction on the west side of the service area, and an existing 50,000 gallon tank on the east side of the service area, and an existing 50,000 gallon tank on the east side of the service area. To meet current emergency short term outage, fire, and operational storage requirements, the SMCSD requires 1.4 million gallons of storage (1.8 MG at build out). Thus, the SMCSD currently provides only half of the needed storage to ensure adequate water supply during extended outages and fires. This deficiency is a significant threat to health, sanitation, and safety of this community. The unincorporated Community of San Miguel, located in the northern portion of San Luis Obispo Salinas River Planning Area Plan. The 2000 census data indicates that the District's median household income was \$33,264. According to the County of San Luis Obispo, the County's Year 2008 median income for a family of four is \$67,000.	850,000	668	1,500 06	San Luis Obispo	IV	2009
1559 4510008	4510008-001	Fall River Mills C.S.D.		Drill a new well in second community to provide the reliability required by the Waterworks Standards.	м	15	c	One well serves two communities that are 8 miles apart. System does not fulfill the requirements of Section 64560(a)(6) (minimize the efects of equipment failures) of the Waterworks Standards.	150,000	477	1,600 02	Shasta	I	1998
1560 1610007	1610007-005	Home Garden CSD	Home Garden New Well for Arsenic Standard Compliance	To increase and maximize water pressure throughout the system and improve the District's ability to efficiently provide arsenic treated water for the overall community, it is essential that the District install a new well and lines. Currently, the District has two (2) wells that operate in the community. If one of these wells fails, the District would not have the capacity to treat or deliver arsenic treated water to the community. To avoid such a problem, the District would need to install a back up well. Each of the wells is over thirty (30) years old and there will be a need for their replacement in the future. Maintaining the capability of treating the existing ground water supply for high levels of arsenic is essential to the overall production of clean water to the community.	Μ	15	С	The Home Garden Community Services District (HGCSD) is an unincorporated district. It provides water to approximately 1800 residents in the community. In 2007, the HGCSD began constructing an Arsenic Removal Project. The State of California has designated Kings County as an extreme draught region. During 2007-2008, precipitation in the Hanford area was only 83% of the normal to date. Dry years have severely impacted the water supply for the District. In the last two years, ground level waters have dropped approximately 60 feet. The lowered water levels indicate groundwater pumping exceeds the recharge and the resulting increased lift adds to the District's operation, maintenance, and energy costs. The water demand during the summer months is high and a greater usage can occur during the maximum hour demand period of the day. As a result of this increase, many water users experience low water pressure. This, coupled with the anticipated growth in the District, would continue to place a strain on existing pumps and the water capacity and usage.	1,060,000	450	1,750 12	Kings	II	2009
1561 1710010	1710010-002	Lower Lake County Water District		Replace with 500K steel stank. Integrate with existing 500K tank with a 16 inch line and have the ability to shut off each tank for maintenance.	м	15	с	Old 100K redwood tank feeds to 500K tank. Restricts inflow limit to 600 gpm. Excess overflows tank.	200,000	886	2,025 03	Lake	II	1998

1562 3610048	3610048-003	TERRACE WATER CO	Terrace Water Co. Transmission Line Replacement	Terrace Water Company is seeking support from the CDPH Economic Recovery funding program to replace the system's main transmission line. Terrace Water Company has completed very few improvements since its establishment in 1890. The main transmission line, which faces structural integrity issues due to its age, heavy traffic, and logistical issues having had a school built on top of it, is in dire need of replacement. The major break that the line suffered during the summer of 2008 and subsequent replacement of 100 feet of line (and total service outage for 36 hours) is an indication of the immediacy of the problems faced. Terrace Water Company's main transmission line, which has significantly exceeded its life expectancy, runs approximately 3 miles from our wells down to our service area. Approximately 1/2 mile of this line is underneath a school and several homes built in the 1960s without regard of the water line. Nearly 2 miles of the remaining line has suffered structural damage due to heavy traffic. We have had a working relationship with Riverside Highland Water Company (RHWCO) for many years. They recently abandoned a large section of their main line, which runs parallel to ours down Rancho Avenue for approximately 2 miles, and have offered to deed the line to us, and we will assume all liability. It is our intention to run 16" HDPE	Λ	15	c	Terrace Water Company is seeking to replace the system's main transmission line. Terrace Water Company recently faced a significant break in the main transmission line, leaving customers entirely without water for 36 hours. The existing line is well past its life expectancy and so damaged and delicate that each time a repair band was attached, another piece of the old line broke off. The result was that instead of merely patching the line with repair bands, a 100 foot section of the line had to be removed and replaced with C900 pipe and a 16" gate valve. Terrace Water Company simply cannot afford to continue patching and replacing major sections of this transmission line that is in such bad order and past its life expectancy that it will most certainly continue to fail, leaving our customers without water service for extended periods of time. In addition to the age of the line, the Company's transmission line is compromised by heavy truck traffic and several buildings. The heavy traffic on the street that contains this main line has caused the pipe to flatten into an oval in several sections, greatly compromising its integrity. Another issue with this line is that during the 1960s several homes and an elementary school were built on top of it. A severe leak or a break in this portion of the line that has already surpassed its life expectancy and had several major leaks and failures elsewhere, would	2,600,000	574	2,200 13	San Bernardino	v	2009
1563 4510013	4510013-001	Shasta C.S.D.		pipe from our wells, and at the intersection of Rancho Construct 500,000 storage tank and pump station and A extend 12-inch main to increase pressure and provide	Л	15	с	result in severe consequences for the school and the Insufficient storage capacity resulting in water outages. System not fulfilling Section 64560(a)(4) (provide	650,000	708	2,320 02	Shasta	I	1998
4564 4540040	4540042 002			the reliability required by the Waterworks Standards.		45	6	adequate capacity) of the Waterworks Standards.	co 000	700	2 220 02	Charte		2000
1564 4510013	4510013-002	Shasta C.S.D.		Produce engineering construction plans and replace N restrictive deteriorating line	Л	15	С	System experiences low pressure at higher elevations, in violation of waterworks standards	68,000	708	2,320 02	Shasta	I	2000
1565 1010028	1010028-005	Riverdale Public Utility District	Well #2 Replacement	The proposed project will consist of drilling a new well to replace Well 2. The new well site will be located on property that District owns which is located about ½-mile away from the Well 2 site. The replacement well would be designed to replace the existing well capacity. The new well will NOT increase capacity. The project will be implemented in phases. In phase 1 a pilot hole will be drilled to a depth of up to 1,200 feet and zone testing will be conducted. The intent is to isolate a zone with desirable water quality characteristics such that arsenic treatment can be avoided or the cost of such treatment can be avoided or the cost of such treatment can be avoided or the cost of such treatment can be minimized. A final production well will be drilled and constructed based on the results of zone testing, in phase 2 the well site improvements will consist of furnishing and installing the well pump; site piping; electrical service, power and controls; and completing site grading and fencing. Site improvements will include treatment facilities if it is determined that treatment will be required. The District intends to relocate and utilize existing Well 2 treatment is required. The District is beginning design of phase 1 of the project due to the urgent nature of the problem.	л	15	c	Riverdale Public Utility District has three water supply wells that provide water to the community. The District's Well 2 has recently run dry due to declining ground water levels. The groundwater level has dropped below the well bottom and therefore the pump cannot be lowered. Well 2 is less than 300 feet deep and Wells 4 and 5 are less than 500 feet deep. Under normal operations Well 2 and 5 operate as primary supply wells and Well 4 serves as a backup well. The District is currently operating both remaining wells (Well 4 and 5) to meet system demands and has no backup well as a result. Title 22 requires community water systems using only groundwater to have the capability to meet maximum day demands with the highest-capacity source off line. The District cannot meet maximum day demands if Well 4 or 5 go off line.The District's water system has no backup supply poses a public health and safety risk. In the event that Well 4 or 5 go down, water system pressure could drop below minimum system pressures and put the system at risk of contamination. In addition, the system would not be able to meet fire flow and pressure requirements.In addition, the District has recently constructed an arsenic removal treatment facility at the Well 2 site. The facility cannot be utilized since Well 2 is down.	800,000	866	2,416 23	Fresno	Π	2009
1566 4510002	4510002-002	Mountain Gate C.S.D.	Distribution system	Construction of 250,000 gallon capacity storage tank, N booster pump station, 2,500 feet of 6-inch diameter water main.	Л	15	с	Very low pressures or customers out of water for extended periods, undersized main lines.	275,000	664	2,500 02	Shasta	I	2002

1567 3210009	3210009-003	Chester Public U.D.	Develop Well No. 5 to Replace Failing Well No. 4 Chester CPUD	The project would consist of developing test well In number five into a productive well, piping the well to the storage tanks, providing power to the well pump, well controls and an emergency generator.	м	15	C	Chester's water is currently obtained from four deep wells. The most recent well that was drilled approximately three years ago is now experiencing severe silting problems and has been taken off line after repeated attempts to rehabilitate it at great cost. The Chester Public UtilityDistrict is still working to bring it back on line. However, the consultants that have been hired are not optimistic that it will be productive. Our Summer month's water demands are such that without well number four in operation, we will be facing severe water shortages.Several years ago the District drilled a test well in the proximity of our water storage tanks. The water was of good quality and quantity. It was never developed because the growth of the community was in a direction away from the tanks and our engineer sugested that a well be drilled on the opposite side of the town to balance the system. Now that well four is failing it is imperative that well number five be developed to provide adequate water to the community.	120,000	1,199	2,645 02	Plumas	1	2009
1568 5110007	5110007-002	Sutter Community S.D.		Add a 1mgal tank and replace old pipe in one section of Mour system	M	15	с	Need additional source of emergency water	400,000	1,025	2,885 21	Sutter	I	1999
1569 2910002	2910002-004	City of Nevada City	Water Distribution Systen Valve Rehabilitation and Installation	Approximately twenty non-funtional valves will be replaced and approximately ten new valves installed. Although there are many more valves which need replacement/installation in the distribution system to make it fully functional, the construction of the proposed valves will be in strategic locations of greatest need. This will allow much more efficient control of system shut-downs to isolate smaller areas during repairs. Results will be reduced impacts to the public services, increased system reliability, and reduced threat to fire flow demands. Replacement of leaking valves will also conserve water.	м	15	С	Many of the City distribution system water valves were installed in the early 1900's, and some as early as 1890. Many valves are non-functional, which inhibits maintenance and repairs to pipelines. When early pipelines were installed, there were few valves installed at that time, which now necessitates shutting down major sections of the distribution system when repairs are performed on the antiquated pipes. This creates an inconvenient service outage to the public, and endangers fire flow availability in those shut down areas.	150,000	1,205	3,001 21	Nevada	I	2009
1570 2910002	2910002-002	City of Nevada City	Distribution System Inter- ties with Nevada Irrigation District	These circumstances of low pressures and reduced N supply, can be caused by several factors. First, many of the water mains are undersized and antiquated, having been in service for over 100 years. The cast iron pipe has become tuberculated with deposits which narrow the effective diameter, and inhibit flow quantity. Second, the three storage tanks float on the system without the benefit of altitude control valves, or automated level monitoring, which reduces the assurance of adequate retention of stored water. During periods of high demand, there are times when the water treatment plant (which is over 30 years old) has difficulty in keeping up with demand, which then neccesitates the draw-down on storage facilities to keep up with demand. The reduction of effective storage in the three tanks, threatens the ability to provide fire flow when these circumstances converge. The City storage quantity exceeds the minimum required by a factor of four, so additional storage is not the answer, and is expensive. The small City distribution system is surrounded by the larger Nevada Irrigation District (NID) distribution system. The City system is divided generally into four quadrants by the State Highway 49 freeway and by Deer Creek watercourse. The northwest quadrant has an existing manually operated small diameter pipe inter-tie with the NID distribution system, which has been used in the	Μ	15	C	During periods of summer peak hour flow, or during fire flow events, portions of the distribution system can experience low pressures, below the State required minimum of 20 psi. The system can also reach conditions of critically short supply during periods of high demand, which can threaten both domestic demand and fire flow demand. These circumstances are abnormal and infrequent, but are in need of correction to provide reliability of supply. System inter- ties with the Nevada Irrigation District would solve the problems.	175,000	1,205	3,001 21	Nevada	I	2009

15/1 2910002	2910002-003	City of Nevada City	Water Distribution Syste Pipeline Replacement	M Of the 20 miles of distribution system piping, about 60 percent is 4 to 6 inch cast iron, 38 percent 6 to 18 inch ductile iron, and 2 percent 6 to 8 inch PVC. Most of the pipe was installed 50-100 years ago, and is in need of replacement to correct problems of reduced pressure and quantity, and to reduce excessive repair costs. New pipeline will be either C-900 PVC or ductile iron. The proposed pipe runs most in need of immediate replacement are listed below.a) 6-inch main at South Pine St./Cross St., \$220,000b) 6-inch main at South Pine St./Cross St., \$220,000b) 6-inch main at Park Ave., \$85,000d) 6-inch main at Prospect St., \$160,000e) 4 and 6-inch main at Prospect St., \$75,000f) 4-inch main American Hill to Old Downieville Hwy, \$95,000Total project cost is \$810,000.	v	15	L	A significant portion of the water distribution system piping has out-lived its useful service life. About sixty percent is cast iron pipe, which was installed 50 to 100 years ago. The pipe is heavily tuberculated with mineral deposits, which narrows the diameter and results in reduced pressure during high demand periods, and which threatens fire flow quantities. There are portions of the system which experience service line pressures less than the State mandated 20 psi minimun at peak demand. Corrosion has reduced pipeline wall thicknesses, which promotes frequent leakage, or major blow-outs.	810,000	1,205	3,001 21	Nevada	I	2009
1572 2710019 1573 5310001	2710019-001 5310001-005	CWSC Oak Hills Weaverville C.S.D.		Install a GAC treatment process. Replace water transmission main.	M M	15 15	C C	Inactive well with DCE contamination. Water transmission main supplying 2.1 million gallon hydro reservoir from the East Weaver Treatment Plant is old and deteriorated and needs to be replaced to help ensure reliability of water supply to main pressure zone.	200,000 1,050,000	890 1,577	3,494 05 3,554 01	Monterey Trinity	II I	1998 1998
1574 1410001	1410001-005	CITY OF BISHOP	West Pine Watermain Improvements	Install new hydrants to provide adequate spacing and uniformity throughout system. Relocate and reconnect water services and install meter boxes to existing homes. Spot repairs on existing distribution pipeline.Survey and geotechnical work have been completed. Environmental documentation is under public review, with public comment scheduled to close 3/2009.	Μ	15	C	Many of the water services along West Pine Street were installed very close to sanitary sewer service laterals and should be relocated. Many of the sewer laterals are made of metal, and have since thoroughly corroded, contaminating the soil and the potential for contaminating the soil and the potential for contaminating the soil and the potential for spacing along West Pine Street is inadequate and does not meet fire code. More hydrants are needed and some existing hydrants need to be replaced to shorten the spacing between hydrants and to ensure that the hydrants are uniform. The distribution pipeline along West Pine Street also needs spot repairs in some locations. The City has a commitment of funds from the California Department of Transportation for street improvements, and the City needs financial assistance to improve the water system within West Pine Street prior to the street improvements (scheduled to start	80,000	1,161	3,643 13	Inyo	v	2009

Summer 2010).

1575 1410001	1410001-006	CITY OF BISHOP	Sneden Street Water Improvements	Abandon 4 inch cast iron pipe in Sneden Street from M Clarke Street to East Line Street and replace with 8 inch plastic pipe. Align 8 inch pipe with 8 inch ductile iron pipe in Sneden Street south of Clarke Street.Replace existing 8 inch "T" and valves at Clarke Street with a cross and 4 new valves.Connect to 8 inch ductile iron pipe on East Line Street with new "T" and 2 new valves (south and east legs).Replace 4 inch cast iron pipe in area affected by construction on Short Street with 8 inch plastic pipe connected to new 8 inch plastic pipe on Sneden Street with 3 new valves.Add fire hydrant at the Short Street intersection.Replace all galvanized steel service laterals and replace copper laterals that are in poor condition or that are smaller than % inch with % inch plastic or other appropriate size. (Laterals that require replacement to be determined by city forces.)Install water meter boxes with meter idlers and "curb stop" valves in planter strip or in sidewalk where there is no planter on each water service.Relocate water services that fall in driveway approaches or are located very close to sewer laterals.Survey and geotechnical work and master planning complete. Environmental documentation currently in public review (2/27/09). The City plans to complete wastewater improvements along Sneden Street; the City has applied for funds from the State Water Resources Control Board for economic stimulus package	15	C	The distribution pipeline along Sneden Street are undersized and old. The distribution network is unable to meet water demands for a residential fire. The pipeline is small, old, and corroding. Some of the service connections are located within a few feet of the sewer laterals, violating the 10' minimum separation requirements. Many of the adjacent sewer laterals are made of steel and have significantly corroded, making the potential for contamination of the water services higher. (Sewer lateral improvements are applied for under State Water Resources Control Board Pre- Application)The City's distribution mains replaced in recent years have leaks, causing water and electricity to be wasted. The water system could save water and energy by replacing the pipeline along Sneden Street. The aging, undersized 4" main, appurtenances and service connections need to be replaced with a larger pipeline to provide sufficient flow for fire event, remove the possibility of contamination from collapsed and damaged pipelines. There is inadequate fire hydrant spacing in the area. Additional hydrants are required to meet the minimum separation.	170,000	1,161	3,643 13	Inyo	v	2009
1576 1410001	1410001-003	CITY OF BISHOP	Hanby Street Water Improvements	Replace existing deteriorated 6 inch galvanized steel water line on Hanby Avenue from Line Street to East Pine Street with 8 inch plastic pipe for a distance of about 1000 feet. Construct new connections with water lines on Line, Willow, and May street including valves. Replace service laterals to provide separation from sewer laterals. Construct new 8 inch plastic water line along Hanby from Pine to East Yaney with valves and with service connections to proposed community improvements at the City Park and to the proposed 15 acre workforce housing development.	15	C	The water line in Hanby Avenue is very important to the entire City of Bishop water system. The Hanby water line forms the eastern edge of the grid of water lines in the city. Unfortunately, the existing 6 inch galvanized line is undersized, deteriorated, and leak prone. The existing line is about 1000 feet long. In addition, there is about a 1600 foot gap in this water line that destroys the strong system topology that would otherwise exist. At the south and, particularly, the north sides of this gap are dead end lines that can have difficulty with fire flow and stagnation. The nearest continuous pipe in the grid is almost 1/2 mile west.Hanby Avenue borders the Bishop City Park and land that has been identified for development of affordable housing and the development of affordable housing and the development of affordable housing and the City Park.The City of Bishop Targeted Income Group is 53%. This project is proposed in conjunction with Economic Recovery project, the origunation of Hanby Avenue and to make minor sewer improvements.	492,100	1,161	3,643 13	Inyo	v	2009
1577 1310011	1310011-008	Coachella VWD: I.D. NO. 11	Marina Drive, Sorrel Avenue, and King Avenue Main Replacements	The Marina Drive, Sorrel Avenue and King Avenue Main M Replacements project includes installing approximately 1,500 feet of 6-inch and 1,100 feet of 8-inch ductile iron water main including valves, services, hydrants and related appurtenances. This project is categorically exempt under Article 18, Section 15282 of the CEQA Guidelines as a pipeline installation less than a mile in length. A Notice of Exemption will be prepared per CEQA guidelines and filed with Riverside County prior to construction.	15	с	The Improvement District No. 11 (ID 11) water system consists of three wells, 16-inch and 18-inch transmission main, distribution piping and one 1.0 MG storage reservoir. ID 11 serves approximately 4,000 customers currently isolated from CVWD's main domestic water system. ID 11 domestic water infractructure is more than 50 years old and consists of 4-inch and 6-inch asbestos concrete pipe that has exceeded its useful life and is in very poor condition. New pipelines are needed to replace this failing infrastructure.	250,000	2,624	4,198 20	Imperial	v	2009

1578 1310011	1310011-006	Coachella VWD: I.D. NO. 11	Salton Drive, Harpur Ave., Rutgers Ave., Haven Drive and Desert Manor Ave. Main Replacements	The Salton Drive, Harpur Ave., Rutgers Ave., Haven Drive and Desert Manor Ave. Main Replacements project includes installing approximately 900 feet of 6- inch and 1,800 feet of 8-inch ductile iron water main including valves, services, hydrants and related appurtenances. This project is categorically exempt under Article 18, Section 15282 of the CEQA Guidelines as a pipeline installation less than a mile in length. A Notice of Exemption will be prepared per CEQA guidelines and filed with Riverside County prior to construction.	Μ	15	C	The Improvement District No. 11 (ID 11) water system consists of three wells, 16-inch and 18-inch transmission main, distribution piping and one 1.0 MG storage reservoir. ID 11 serves approximately 4,000 customers currently isolated from CVWD's main domestic water system. ID 11 domestic water infractructure is more than 50 years old and consists of 4-inch and 6-inch asbestos concrete pipe that has exceeded its useful life and is in very poor condition. New pipelines are needed to replace this failing infrastructure.	250,000	2,624	4,198 20	Imperial	v	2009
1579 1310011	1310011-005	Coachella VWD: I.D. NO. 11	Citrus Ave., Grand Ave., and Cornell Ave. Main Replacements	The Citrus Ave., Grand Ave. and Cornell Ave. Main Replacements project includes installing approximately 2,000 feet of 6-inch and 100 feet of 8-inch ductile iron water main including valves, services, hydrants and related appurtenances. This project is categorically exempt under Article 18, Section 15282 of the CEQA Guidelines as a pipeline installation less than a mile in length. A Notice of Exemption will be prepared per CEQA guidelines and filed with Riverside County prior to construction.	м	15	с	The Improvement District No. 11 (ID 11) water system consists of three wells, 16-inch and 18-inch transmission main, distribution piping and one 1.0 MG storage reservoir. ID 11 serves approximately 4,000 customers currently isolated from CVWD's main domestic water system. ID 11 domestic water infractructure is more than 50 years old and consists of 4-inch and 6-inch asbestos concrete pipe that has exceeded its useful life and is in very poor condition. New pipelines are needed to replace this failing infrastructure.	200,000	2,624	4,198 20	Imperial	v	2009
1580 0910003	0910003-008	Placerville, City of - Main	Tunnel Street Waterline Relocation Project	The project involves construction of approximately 4,000 LF of new 6-inch and 8-inch water main along with related valves and appurtenances, and construction of new services for the approximately 50 residences served by the existing main.	Μ	15	с	The existing water main needs to be replaced with a new water main since the existing main is approximately 45 years old, located in a drainage course, and is situated within 10 feet of an existing sanitary sewer contrary to California Waterworks Standards.	1,100,000	3,399	4,926 09	El Dorado	I	2009
1581 0910003	0910003-005	Placerville, City of - Main	Pardi Way Pipeline Replacement Project	The project will involve construction of approximately 1,000 LF of new 12-inch pipeline and associated valves and tie-ins to assure distribution system reliability in accordance with California Waterworks Standards.	м	15	с	Construction of the pipeline is necessary replace an existing 55 to 75 year old pipeline that includes cast iron pipe with leadite joints, and is in poor condition and subject to frequent outages due to leakage. The pipeline is located on Pardi Way and Big Cut Road.	350,000	3,399	4,926 09	El Dorado	I	2009
1582 3110001	3110001-014	North Tahoe PUD - Main		Construct a 2,660 ft long main. Involves design and construction.	м	15	С	Undersized main line.	267,500	3,294	5,000 02	Placer	I	2006
1583 3110001	3110001-006	North Tahoe PUD - Main		Create a pressurized sub-zone and provide service stubs to properties with pressures. Involves design and construction.	s M	15	с	Low head lines due to proximity in elevation to storage reservoir.	94,900	3,294	5,000 02	Placer	I	2006
1584 3110001	3110001-002	North Tahoe PUD - Main		Install a modern, supervisory control and data acquisition system.	М	15	С	Needs SCADA control system.	126,000	3,294	5,000 02	Placer	I	1998

1585 3310048	3310048-002	Coachella VWD: I.D. NO. 8	Reservoir 3601-2	The Reservoir 3601-2 project includeses the construction of a 1.75 MG above-ground, steel, domestic water reservoir on the same site as Reservoir 3601-1. The project includes a concrete ringwall, steel storage reservoir, appurtenances, coating and piping connections. On November 14, 2006, CVWD received State Clearing House #2006101089 which acknowledges compliance with review requirements pursuant to the California Environmental Quality Act. On November 28, 2006, the CVWD Board of Directors adopted a Negative Declaration for Reservoir 3601-2 project by Resolution 2006-263. A Notice of Determination was prepared and filed with the Riverside County Board of Supervisors.	M S J	15	C	CVWD's Improvement District No. 8 (ID 8) system is comprised of the Upper ID 8 Pressure Zone, Lower ID 8 Pressure Zone, ID 18 Pressure Zone and the Wide Canyon Pressure Zone. Existing Reservoir 3601-1 is the primary storage for the Wide Canyon, Upper ID 8 and ID 18 pressure zones serving nearly 4,000 customers. An independent engineering firm inspected Reservoir 3601- 1 in September of 2006 and determined the interior coating has exceeded its expected life and is in poor condition. Reservoir 3601-1 was constructed in 1966 and has never been re-coated. It is currently impractical to take this reservoir out of service for the much needed repairs and upgrades. A new reservoir (Reservoir 3601-2) will enable CVWD to remove Reservoir 3601-1 from service to perform necessary seismic, health and safety upgrades in order to comply with OSHA, CDPH and AWWA standards. In addition, a new domestic water reservoir will provide increased storage for fire protection, diurnal demands and emergencies. The new storage reservoir will also allow filling during off-peak electrical demands which result in energy savings.	2,000,000	1,555	5,132 20	Riverside	V	2009
1586 1910195	1910195-002	GSWC - HOLLYDALE		REPLACE WATER MAINS IN CRITICAL AREAS	м	15	с	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH	100,000	1,700	5,491 15	Los Angeles	IV	1998
1587 1910195	1910195-001	GSWC - HOLLYDALE		Cement lining water mains in critical areas.	М	15	с	Old cast iron pipes with bio-growth and potential nitrification	100,000	1,700	5,491 15	Los Angeles	IV	1998
1588 2310006	2310006-004	Millview County Water District		Add 1 600 gpm filter and 1 3,000 gpm roughing filter.	М	15	С	During peak summer months filtration capacity falls short of demand.	1,000,000	1,489	5,500 03	Mendocino	Ш	1998
1589 2310006	2310006-002	Millview County Water District		Enlarge and replace distribution lines.	М	15	С	Numerous areas in distribution system that are too small or need to be looped to provide adequate flow during peak flow times.	350,000	1,489	5,500 03	Mendocino	II	1998
1590 2310006	2310006-003	Millview County Water District		New pumping station, distribution system and storage tank.	М	15	С	Low pressure problem in north east part of town. Residents occasionally without water.	450,000	1,489	5,500 03	Mendocino	Ш	1998
1591 2710012	2710012-001	CWSC Salinas Hills		Install one million gallon tank and booster pump facility	. M	15	С	Need added storage and booster pumps.	805,000	3,359	5,573 05	Monterey	Ш	1998
1592 3910010	3910010-001	San Joaquin County - Lincoln Village		REPLACE ELEVATED TANK WITH PRESSURE TANK AND REPLACE STEEL LINES - (NO EVIDENCE OF CONSOLIDATION). OTHER = DESIGN AND CONSTRUCTION.	м	15	с	ELEVATED TANK DOESN'T MEET SEISMIC STANDARDS. OLD STEEL PIPES NEED REPAIR.	1,000,000	1,777	5,865 10	San Joaquin	ш	2006
1593 3310051	3310051-001	Myoma Dunes Mutual Water Company		Construct new mainlines, replace undersize & deficient mains, install isolation valves.	М	15	с	Quality is compromised due to incomplete arterial loop system and excessive number of dead end mains. Also distribution system cannot adequately be isolated for area's of repair or contamination.	348,000	2,408	6,600 20	Riverside	V	1998
1594 1910085	1910085-001	MAYWOOD MUTUAL WATER CO. #2		Construct 1.5 MG reservoir. Remove top 30' of two reservoirs. Construct new roofs on two reservoirs, construct hydropneumatic pump station and standby generator. Project involves: Design to solve problem, and Construction.	м ,	15	с	WW standards defects. Poor reliability of existing aged steel reservoirs. Insufficient storage.	2,000,000	1,908	6,700 16	Los Angeles	IV	2006
1595 1510041	1510041-003	North of the River MWD		Replacement of majority of distribution system, and customer service lines. OTHER - Design and Construction	Μ	15	С	Old and deteiorating distribution system with many leaks and breaks, under sized mains.	3,300,000	2,025	7,500 12	Kern	ш	1998

1596 3310063	3310063-006	Coachella VWD: I.D. NO. 10	Reservoir 6806-2	The Reservoir 6806-2 project includes the construction M of a 0.5 MG above-ground, steel, domestic water reservoir on the same site as existing 0.5 MG Reservoir 6806-1, Well 6806-1, Booster Station and Ion Exchange Treatment Plant. The project includes a concrete ringwall, steel storage reservoir, appurtenances, coating and piping connections. On November 27, 2006, CVWD received State Clearing House #2006101090 which acknowledges compliance with review requirements pursuant to the California Environmental Quality Act. On November 28, 2006, the CVWD Brad of Directors adopted a Negative Declaration for the Reservoir 6806-2 project by Resolution 2006-264. A Notice of Determination was prepared and filed with the Riverside County Board of Supervisors.	15	С	CVWD's Improvement District No. 10 (ID 10) system includes the Mecca Pressure Zone, North Shore Pressure Zone and Bombay Beach Pressure Zone. This project is located within the Mecca Pressure Zone (MP2) which serves approximately 1,150 homes and consists of two wells, an arsenic removal facility and one 0.5 MG domestic water reservoir (Reservoir 6806-1). Existing water storage volume is marginal for this system and additional loading will soon be added to the system (La Pena Housing Facility and St. Anthony's Mobile Home Park). A new 0.5 MG domestic water reservoir (Reservoir 6806-2) will provide increased storage for fire protection, increasing diurnal demands and emergencies. In addition, the new storage reservoir will allow filling during off-peak electrical demands which result in energy savings. A second reservoir will also allow the existing reservoir to be placed out of service for routine repairs and maintenance.	800,000	2,451	7,598 20	Riverside	v	2009
1597 3310063	3310063-004	Coachella VWD: I.D. NO. 10	Reservoir 7990-2	The Reservoir 7990-2 project includes the construction M of a 500,000 gallon above-ground, steel, domestic water reservoir on the same 1-acre parcel as the existing Reservoir 7990-1. The project includes a concrete ringwall, steel storage reservoir, appurtenances, coating and piping connections. On November 7, 2006, CVWD received State Clearing House #2006101002 which acknowledges compliance with review requirements pursuant to the California Environmental Quality Act. On November 14, 2006, the CVWD Board of Directors adopted a Negative Declaration for Reservoir 109-2 project by Resolution 2006-246. A Notice of Determination was prepared and filed with the Riverside County Board of Supervisors.	15	C	CVWD's Improvement District No. 10 (ID 10) system includes the Mecca Pressure Zone, North Shore Pressure Zone and Bombay Beach Pressure Zone. Reservoir 7990-1 is the primary storage (0.5 MG) for the North Shore and Bombay Beach pressure zones. During a recent underwater diving inspection, five feet of sand was removed from this existing reservoir. In addition, an independent engineering inspection confirmed that the interior coating system has failed and is compromising the structural integrity of the reservoir. Reservoir 7990-1 was constructed in 1966 and has never been re-coated. It is currently impractical to take this reservoir out of service for the much needed repairs and upgrades. A new reservoir (Reservoir 7990- 2) will enable CVWD to remove Reservoir 7990-1 from service to perform necessary seismic, health and safety upgrades in order to comply with OSHA, CDPH and AWWA standards. In addition, a new 0.5 MG domestic water reservoir will provide increased storage for fire protection, diurnal demands and emergencies. The new storage reservoir will also allow filling during off-peak electrical demands which result in energy savings.	800,000	2,451	7,598 20	Riverside	v	2009
1598 2410010	2410010-001	WINTON WATER & SANITARY DIST		LOCATE BY AREA ALL SUBSTANDARD SIZED LINES AND M REPLACE/CONSTRUCT A STORAGE TANK WITH CONNECTING LINES. OTHER - STUDY, DESIGN AND CONSTRUCTION	15	С	OLD SUBSTANDARD SIZED LINES CAUSING CONTINUED MAIN LINE BREAKS AND LOW PRESSURE PROBLEMS. WE ALSO HAVE A WATER SUPPLY PROBLEM WHICH REQUIRES A GROUND STORAGE TANK.	2,500,000	3,113	8,500 11	Merced	Ш	1998
1599 3610044	3610044-005	DWP - BIG BEAR LAKE/MOONRIDGE	Lakeplant Well No. 6 Pum <sub>i</sub> Station Construction	This project includes installing a pump, constructing a pumphouse, and installing the piping necessary to tie the well into the water system.	15	с	This well is designed to replace three wells in the same well field that are currently unusable for various reasons. The three wells were drilled in the late 1920's or early 1930's and don't have sanitary seals that meet current standards. One has a hole in the well casing. Two of the three have recurring bacteria contamination and the third feeds into the same forebay which is now unusable due to the reduced water flow from having the two wells offline.	246,950	10,366	8,839 13	San Bernardino	V	2009

1600 3610044	3610044-004	DWP - BIG BEAR LAKE/MOONRIDGE	Division Well No. 8 Drilling	Division Well No. 8 is being drilled to replace two wells M in the same well field that developed high manganese concentration levels. Prior to investing in this project, an investigation was performed to evaluate and identify the source of manganese in the existing wells. Additionally, further water sampling was performed at the Division No. 8 test hole to ensure that water of sufficiently high quality could be extracted from the new well to justify using it as a replacement well for the two problem wells. Once Division Well No. 8 is completed and brought online, the two problem wells will be abandoned.	15	с	The Division No. 8 Well will replace two wells in the same well field that developed high manganese levels due to corrosion of the well casing. The drinking water standard that was being violated was exceedance of the MCL for manganese. Water samples were taken from Division No. 8 test hole to verify that a new well could be brought into production with water quality that met all CDPH well water standards. No public notification was required.	122,276	10,366	8,839 13	San Bernardino	v	2009
1601 3310029	3310029-002	Perris, City of	Downtown Perris Waterline Replacement Program (Phase 3)	The planned project would replace all 2" diameter steel M pipelines within the City's water service area and install new pipes with 6" minimum diameter PVC lines. A total of 9,200 ft of pipeline would be replaced. In addition to the new pipe, appropriate blowoffs, fire hydrants, av/ar valves, and other appurtenances will be installed to ensure the locations in question are brought into full compliance with the state's water works standards. The proposed project will be Phase 3 of the City's program to replace inadequate pipeline facilities. The first two phases of this program were constructed in 2003-4, using funding from a state SDWSRF loan. Those projects, with a construction cost of over \$2 million, replaced over 6,000 feet of water pipeline in downtown Perris in addition to significant sanitary sewer upgrades.	15	с	The City of Perris Water System serves the downtown urban core of the city. The existing water infrastructure is largely made up of aging (50 years old or more) pipelines that do not comply with modern standards. In particular, there are 9,200 feet of 2" steel waterlines in the City. These pipes are out of compliance with water works standards.Due to the age of these facilities, they suffer routine failures and are plaqued by leaky services and meters. As a result, the City's ability to adequately supply residents with water service is compromised. The frequent failures in the aging, undersized pipes results in significant maintenance needs, which in turn causes City crews to delay or neglect other important maintenance activities such as regular flushing of lines and exercising of valves.A further problem which is common throughout the project area is inadequate separation between the waterlines in question and sanitary sewer lines (both horizontal and vertical).	1,800,000	2,268	9,000 20	Riverside	v	2009
1602 3310029	3310029-001	Perris, City of	Water Main and Valve Replacement	This Project will entail Water Main Valve locating and Inspection of Condition of valve and water main . All valves and mains that are in poor condition will be identified and scheduled for replacement as part of this project.	15	с	The City of Perris Water System has many aging Water Mains and Valves that have not been inspected or maintained . The City is on a Compliance Order by the DPH to maintain its service area to Include a Water Main Flushing Program . This would entail valve exercising and Hydrant Flushing , however It is estimated that a considerable amount of repair and or replacement of Non Conforming Valves would have to be undertaken to have an acceptable Water Main Valve Exercising and Flushing Program.	400,000	2,268	9,000 20	Riverside	V	2009

1603 1810001	1810001-003	City of Susanville	Cady Springs Booster Station, Storage Tank and Pipeline	Work needing to be completed: The installation of a pumping station, the building in which it will be housed The electrical supply to the pumping station, along with backup generator support. The SCADA equipment for control and monitoring of the pumping station. The chlorine injection pump and safety equipment for treatment. The installation of the Pressure Reducing Station located at the end of the 2.5 miles of exisiting water line. Installation of piping to connect the pumping station to the 10 inch water line previously installed. There will be the completion of three (3) state highway crossings, which underground casings already exist, water piping will have to be installed and tied into the existing 2.5 miles of water line. At which time all of the water line will be tested. This will pump water through the new 2.5 miles of new underground main with a new 1 million gallon water reservoir that has been completed. Construction of 11,000 feet of maintenance replacement access. The proposed water system improvements are needed to maintain a reliable and safe water supply with sufficient capacity for providing safe drinking water and fire protection in the event of any interruption in service from the old transmission line, do to the extreme age and vulnerability of the original transmission line.	M 1. g	15	c	The proposed project is necessary to maintain a reliable water supply with sufficient capacity for fire demands. The existing transmision main is not consideered reliable because most segments are 30 to 50 years old, and the majority is above-ground on steep slopes with a significant potential for rockfalls and slides. In addition, access for maintenance and emergency repairs is very limited. Concerns regarding pipeline reliability are further heightened because the pipeline transmits such a large portion of the City's water supply. Cady Springs source represents 40 to 45 percent of the City's total annual water consumption. In January 1998 and in June 2008, sections of the transmission line were damaged by falling boulders. Access to damaged sections could be abtained only by foot or helicopter. Although use of a helicopter was attempted, inclement weather prevented it from bring in the needed materials. Consequently, materials had to be hand-carried to the work areas by the water departments crew. Tanker truck were used to provide water to the California Department of Forestry station, Rocky Crest Mobile Home Park and residences during the outage. If a larger section of transmission main were to be damaged during the summer months, it would have a major impact on the City's total water supply and affect all water users. It would also affect the City's ability to provide safe drinking water and adequate fire	1,900,000	3,599	9,137 02	Lassen	I	2009
1604 4010011	4010011-010	MORRO BAY WATER DEPARTMENT	Blanca Pipeline	In 1997 the City of Morro Bay adopted an updated Water Master Plan. This plan included a hydraulic model designed to analyze flows through our system for both current and build out conditions. Based upon the findings of the model a feed line is needed to link the four Blanca water tanks to the Elena Tanks. The line will interconnect two pressure zones, and will facilitate the feeding of the Blanca tanks through the distribution lines. The line will also allow water to be feed to the lower pressure zone eliminating the need for one of the cities booster pump stations and the associated energy consumption. This will eliminate the need to operate and maintain the pump station, reducing both the energy consumption and associated maintenance costs for the pump station. The new line will be constructed or 1580 ft of 16-inch diameter PVC pipe.	M r I	15	с	The City of Morro Bay feeds the four Blanca water storage tanks by flowing water from another tank site through the water distribution system. In order for the City to operate an efficient and adequate water supply two pressure zones need to be tied together with a dedicated feed line to the Blanca tanks.	85,500	5,425	10,270 06	San Luis Obispo	IV	2009
1605 4010011	4010011-012	MORRO BAY WATER DEPARTMENT	Chorro Valley Pumping Line Slip Lining	The City of Morro Bay Public Services Department has determined that slip lining of the Chorro Valley Pumping Line would provide the most cost effective solution to ensuring the integrity of the pumping line. The 12,800 ft of pumping line will be taken out of service prior to the lining, during such time the City will use other sources of water. A slip liner will be installed in the pumping line and then tested to ensure proper installation and reliable future operation.	M g	15	С	The City of Morro bay owns and operates an 8" AC PC 100 pumping line to transport water from the City's groundwater wells to the City's distribution system. The line is old and in need of repair. Since the line is the only means of transporting water to the City from the Chorro Valley groundwater wells, the consequence of failure of the line is high. In addition, the pressure line is operating at a higher pressure then the line is rated for.	4,200,000	5,425	10,270 06	San Luis Obispo	IV	2009
1606 1010019 1607 1010019	1010019-005 1010019-001	Kingsburg, City of Kingsburg, City of		CONSTRUCT A NEW WELL (NO. 15). PREPARE A FEASIBILITY STUDY TO EVALUATE THE EXTENT OF THE PROBLEM AND TO DEVELOP ALTERNATIVES.	M M	15 15	C C	INADEQUATE WATER SUPPLY CAPACITY. GROUNDWATER IS CONTAMINATED WITH DBCP, SOME WELLS EXCEED THE MCL.	350,000 30,000	3,413 3,413	11,300 23 11,300 23	Fresno Fresno	 	1998 1998
1608 1010019	1010019-004	Kingsburg, City of		CONSTRUCT A GAC FILTRATION SYSTEM FOR WELL NO. 11.	м	15	С	GROUNDWATER IS CONTAMINATED WITH DBCP. WELL NO. 11 EXCEEDS THE MCL.	400,000	3,413	11,300 23	Fresno	ш	1998
1609 1210006	1210006-003	City of Fortuna	Stewart Reservoirs Repair	Reconstruct/rehabilitate two tanks; replace pump station (w/ supporting engineering evaluation)	М	15	С	Two reservoirs structurally failing and too small to serve the area; booster station needs to be replaced.	1,250,000	4,312	11,649 01	Humboldt	I	2003

16	510 3310003	3310003-002	Blythe - City of	Murphy Street Well Replacement w/Iron & Manganese Treatment	The project will be constructed on an existing site. Improvements will include a 1500-gpm cased well and iron / manganese treatment. As discussed within the problem description, Well No. 7 which is experiencing potential hydrocarbon influx, will be relocated to this site due to this site's sufficient size and capability for expansion. Most improvements required to operate a production facility already exist and include a 2.2-MG reservoir, booster pump, and emergency back-up generator.	Μ	15	С	City of Blythe Well #7 is at risk from 3 co-mingled hydrocarbon plumes. Co-mingled plumes #1, #2, and #3 are within Well #7's zone of influence. Main constituents of concern within the 3 hydrocarbon containing groundwater plumes are benzene and MTBE. Based on a risk assessment done by FHA, the plume is traveling towards Well #7 and in time will adversely impact well. The most feasible alternative is abandonment and relocation of Well#7 to a new location away from contamination sources.	1,976,150	3,414	12,155 20	Riverside	V	2009
16	511 4510014	4510014-002	Bella Vista Water District		Build two reservoirs to increase storage capacity and provide the reliability required by the Waterworks Standards.	М	15	С	Insufficient water storage capacity, not fulfilling Section 64560 (a)(4) (provide adequate capacity) of the Waterworks Standards.	1,400,000	5,875	14,500 02	Shasta	I	1998
16	512 4510014	4510014-007	Bella Vista Water District	Bella Vista Water District	Loop deadend mains to solve low pressure problem and provide the reliability required by the Waterworks Standards.	M	15	С	System has low pressure problem caused by deadend mains and is not fulfilling Section 64566 (system pressure) and Section 64626 (layout of water mains) of the Waterworks Standards.	1,775,000	5,875	14,500 02	Shasta	I	1998
16	513 4510014	4510014-005	Bella Vista Water District		Construct storage, pump station and pipe line to solve low pressure problem and provide the reliability required by the Waterworks Standards.	Μ	15	С	System has low pressure problems and is not fulfilling Section 64560 (a)(4) (provide adequate capacity to meet pressure requirements) of the Waterworks Standards.	3,590,000	5,875	14,500 02	Shasta	I	1998
16	514 4510014	4510014-004	Bella Vista Water District		Study and pre-design of solution to low pressure problem and provide the reliability required by the Waterworks Standards.	М	15	С	System has low pressure problem and is not fulfiling Section 64560 (a)(4) (provide adequate capacity to meet pressure requirements) of the Waterworks Standards.	100,000	5,875	14,500 02	Shasta	I	1998
16	515 2710009	2710009-001	CWSC King City		Design and construct treatment facilities and piping systems.	М	15	С	Inactive wells (1-02, 1-03, 5-01, 2-02) need nitrate treatment.	1,500,000	2,172	14,781 05	Monterey	П	1998
16 16	516 3410704 517 1610002	3410704-004 1610002-009	SCWA Mather-Sunrise Avenal, City of	Water System Replacement	Replace deficient valves and hydrants. The City of Avenal is proposing to replace all of the defective gates valves and fire hydrants within the distribution system. The City staff will have to coordinate a systematic approach to the gate valve and fire hydrant replacement program to minimumize customer outages.	M	15 15	c C	Replace deficient valves and hydrants. The City of Avenal's (City) water distribution gate valves were installed in the early 1960's. Currently, a large majority of the original gate valves will not close, or remain broken in the "open" position. Likewise, it is possible the working gate valves have also become stuck in the "closed" position. In 2006 alone, 109 leaks were reported within the City's distribution system. While repairs or connections to the distribution system are made, the gate valves must be closed. Due to the failed condition of the many valves, often a large portion of the system must be shutdown to isolate the repair site, disrupting water service for a minimum of three to four hours to an area that can range from a City block of 60 residences to one-third of the City, including the downtown area and schools. The water system replacement project proposes to replace failing or failed gate valves with new butterfly valves throughout the City distribution systemThe majority of the City's fire hydrants were also installed in the early 1960's, and are not equipped with break off risers and check valves. Thus, the only method available to close the hydrant when unanticipated failures and/or accidents occur is by use of the adjacent failing gate valves. Additionally, many of the existem hydrants are corroded and leaking. The water system replacement project proposes to uggrade approximately 170 fire hydrants.On many occasions the connections are made	175,000 3,900,000	4,330 1,892	15,903 09 16,737 12	Sacramento Kings	1	1998 2009
16	518 1910161	1910161-002	PARK WC - LYNWOOD		Preliminary and final design of well and construction of well. Project involves: Design, and Construction	м	15	с	Existing wells are over 45 years old. They are declining in both production and water quality.	450,000	4,392	17,124 22	Los Angeles	IV	2006
16	519 1910161	1910161-001	PARK WC - LYNWOOD		Final design of well head and construction of well head. Project involves: Design, and Construction	М	15	С	Existing wells are over 45 years old. They are declining in both production and water quality.	730,000	4,392	17,124 22	Los Angeles	IV	2006

1620 2710008	2710008-003	Greenfield, City of	New Domestic Water Well Construction	There are no violations of any water standard nor M compliance problems present. The construction of the domestic water well will consist of drilling and construction of a production well on City-owned land near 10th Street and Cherry Avenue. The project will also involve the associated pumps, motors, motor control center including SCADA and pipeline to the existing 1.5 MG water tank on 10th Street.	15	С	The proposed construction of the new domestic water well (#8) is necessary to reduce the operating time of the older domestic water wells (#1 and #6), thereby increasing their life expectancy. There is no water standard being violated. The project is to necessary to ensure that the water demands of the City are met.	975,000	3,408	17,547 05	Monterey	II	2009
1621 3610008	3610008-008	BIG BEAR CITY CSD	CIP Project 3 Water Main Replacement	The CIP Project 3 Water Main Replacement involves M replacing numerous pipes in the vicinity, and many that are 2" steel pipes which are recommended to be phased out due to age and condition issues. All water lines in this project will be replaced with 8" PVC pipes, and fire hydrants installed at distances approved by the local fire agency. All water services in this project will be replaced with copper pipe.	15	С	Hydraulic modeling of the distribution system returned pressure and velocity deficiencies in this area. This area does not meet current fire-flow standards. Big Bear City and the surrounding area is prone to wildfires. This is one of the top priorities for pipeline replacement projects due to inadequate fire flow and wildland / urban interface.	1,224,000	6,356	25,000 13	San Bernardino	v	2009
1622 1010027	1010027-006	REEDLEY, CITY OF	Rehabilitate Well # 9 and Install Back-up Generator	This project will abandon the existing well and drill a M new well approximately 50 feet away. The new well will be drilled to a depth of about 500 feet and will require casings and a larger pump to handle the depth. A back- up generator will be installed to run the well during periods of power outages. The City is in the process of seeking funding to complete the City of Redley's citywide Supervisory Control and Data Acquisition (SCADA) system to monitor and control the City's water, sewer, and storm drain facilities. Once this new well is operational, it too will be connected to the citywide SCADA system. The City is in the process of seeking funding to install chlorine residual analyzers at each of the City's wells to better monitor and control the residual chlorine in the system. This new well will also be fitted with a chlorine residual analyzer as funding becomes available.	15	c	The City of Reedley's Well # 9 has been a problem for the City for many years. The City must replace the carbon filtration system media , required to remove the DBCP contaminants from the ground water, each year at a cost of approximately \$80,000 annaully. In addition, the well has been shut down since November of 2007 due to high concentrations of nitrates. This well site does not have a back-up generator system and when it was being used would not be available when there were power outages. The existing well is approximately 230 deep, the well needs to be about 500 feet deep to get below the DBCP and nitrate plume. The Well needs to be drilled deeper to get out of the DBCP and nitrate plume. The well needs to have new casing installed to reduce the amount of sand reaching the distribution system. The well site during power outages.	750,000	6,619	25,584 11	Fresno	Ш	2009
1623 1010027	1010027-004	REEDLEY, CITY OF	1.5 Million Gallon Water Tower	The project will allow for a 1.5 million gallon water tower to be constructed in the northern part of the City of Reedley in order to stabilize the water pressure and provide the City with more than 24 hours of reserve capacity. A (Supervisory control and data acquisition) SCADA system will be installed to monitor levels and pressures. The project will also include a chlorine residual monitoring equipment that will inetrface with the SCADA system to provide disinfection status of the towers. The City currently owns property where the water tower is planned to be constructed and is adjacent to a City well site providing minimal work to incorporate the water tower into the City's domestic water system. The water tower would provide the City the opportunity to pump water into the tower during off-peak electrical load periods.	15	c	1. Reserve Fireflow Capacity - The City currently only has about 25 minutes of reserve fireflow capacity should there be an extended power outage. The City of Reedley should have a minimum of 24 hours of reserve fireflow capacity. This new water tower will help provide that necessary fireflow reserve capacity 2. Reserve Domestic Water Supply - The City currently has only two 60,000 gallon water towers to provide reserve capacity for a City with a population of about 24,000. There are approximately 5,000 water service connections in the City. This is not adequate should the City experience an extended power outage. This new water tower will help provide the adequate reserve capacity for the residents of Reedley.3. Improve Water Pressure - There are several areas of the City which experience low water pressure on a regular basis (mostly in the northern part of the City). This water tower will help stabilize the water pressure in these areas. The existing water towers are located in the downtown area of the City. A new water tower is being constructed in the southern part of the City and will accommodate the water demand for that area, however another water tower is needed in the northern part of the City to alleviate the water distribution problems (low water pressure) in that area.	8,000,000	6,619	25,584 11	Fresno	III	2009

1624 1010027	1010027-005	REEDLEY, CITY OF	Reed Avenue Water Main Replacement	Construct a 12 inch diameter water main in Reed Avenue from Manning Avenue to South Avenue. All work will be completed within City right of way, no additional right of way will be required. It is anticipated the environmental document will be a CatEx/NegDec. This project will adequately supply domestic water to the City's distribution system.	Μ	15	c	The City of Reedley has recently constructed a new City domestic water well for the northern part of the City. One of the potential sites of a new water tower may be at the Reedley College site. The water tower would be tied directly into the water main in Reed Avenue The existing water main in Reed Avenue will convey the water from this new well (and water tower) and serve much of the northern portion of the City. The existing water main in Reed Avenue is only 8 inch and is inadequate to serve the tributary area the new well will be serving. The water mains tying into the main in Reed Avenue are larger diameter pipes (10" diameter), therefore, for the City water system to perform adequately, the water main in Reed Avenue that will be connected to the new well and water tower will need to be 12 inch in diameter to adequately feed the water mains tying into the Reed Avenue water main.	950,000	6,619	25,584 11	Fresno	II	2009
1625 1010027	1010027-003	REEDLEY, CITY OF	Residential Water Main Replacement	Install approximately 25,000 linear feet of 8 inch domestic water mains. This project will provide the adequate domestic water delivery capacity for this area and an adequate fireflow capacity to service the developments that have occured in this area. This is an appropriate time to install the new water main in that the City's future growth will primarily be to the north and west due to the Fresno/Tulare County line being immediately south of the City of Reedley and the City of Dinuba being in close proximity to the east City limits of Reedley. All work will be completed within City right of way and the environmental document for this project would be a CatEx/NegDec.	M	15	c	The southeast quadrant of the City is one of the oldest areas of the City. The City has outgrown much of the infrastructure that was constructed when this area was developed. Many of the residential neighborhoods are served with a 4 inch water main and in some case the water main is only a 2 inch water main. This is insufficient to service the area this system covers. This area sufers from low water pressure and insufficient flow to meet the demand. In addition, the small water mains do not provide sufficient fireflow capacity given the extensive growth in this area. The City has reached its southern expansion limit in that the south City Limits/Sphere of Influence is located along the northern Tulare County line (Reedley lies in Fresno County). The City is limited in its ability to grow much further to the east due to the close proximity to the City of Dinuba. The 4 and 2 inch water mains need to be replaced with an 8 inch water main to provide adequate water delivery capacity.	2,500,000	6,619	25,584 11	Fresno	Ш	2009
1626 1910021	1910021-001	PARK WC - COMPTON		Final design of well head and construction of well head. Project involves: Design, and Construction	м	15	с	Aged wells are declining in both production and water quality.	1,180,000	6,852	27,236 22	Los Angeles	IV	1998
1627 2410005	2410005-002	LOS BANOS-CITY		Construct Storage Facilities	М	15	С	Low pressure and lack of capacity during peroids of high demand	1,500,000	12,277	27,635 11	Merced	ш	1999
1628 3610043	3610043-003	GOLDEN STATE WATER CO - BARSTOW	GSWC-Barstow System- Bear Valley Reservoir, Phase 1	To furnish and erect a new 0.75 MG welded steel water storage reservoir with appurtenances; including ring wall foundation, and reservoir sub grade preparation. Also included in the scope of this project is to abandon and replace portions of the existing onsite piping. The plans for the project are completed and the estimated construction start date will be in July of 2009.	Μ	15	С	The old Bear Valley Reservoir was a post tensioned concrete reservoir that no longer conformed to current AWWA codes. The new reservoir will replace this recently demolished concrete reservoir and old onsite piping which have reached the end of their useful life.	1,586,989	9,233	30,469 13	San Bernardino	v	2009

1629 3610043	3610043-004	GOLDEN STATE WATER CO - BARSTOW	GSWC-Barstow System- Barstow Pipeline Replacement Project	The proposed project is to replace the existing mains in Leona Rd. south of Arrowhead Ave.; Camerillo Ave from State 58 and ending at Palermo St.; State 58 between Irwin Rd. and Boulder Ave.; Irwin Rd. between Gabiland St. to Exeter St. and in Irwin Rd. between Exeter St. and Old CA-58; State 58 west of Irwin Rd.; Arrowhead Ave. west of Irwin Rd.; Radio Ave. west of Irwin Rd.; Crooks west of Ist continuing into Pierce; May between Main and Buena Vista; Ist Ave. between Main St. and Buena Vista St.; Silver Lane from Buena Vista ends on Silver Lane; Fredericks St. between 1st and Barstow; 5th sout of Clark St.; 6th Ave. and Williams St.; A Ave. between Nancy and Flora; 6th Ave. from Pioneer St. and ends at Barstow Rd.; Lance Dr. between 7th Ave. and Barstow Rd and Lillian between Mountain View St. and Elizabett St.; Lillian Dr. north of Bigger ending at Melissa; Buena Vista St. to Mountain View St.; Arville Ave.; 2m Ave and Fairview St.; Grace St to Grace St. and install check valve; Mountain View Dr. between Murriel Dr. and Elm Ave.; Mountain View Dr. between Murriel Dr. and Elm Ave.; Mountain View Dr. and Basstett of Yucca; Ann St. between Coldwater and xers of Yucca; Ann St. between Lillian Dr. and Bassett Dr.; Montara Rd. and ends before Barstow freeway; Chateau between Armory and Crescent and Armory an Colonial; Guadalupe Dr. south of Teton Dr.; Juniper between Lotebush and Wisteria; Windy Pass west of	n M g g g d	15	C	There are fire flow deficiencies in the Barstow system due to undersized 1920's era mains installed that range in size from 4 inch to 12 inch in diameter.	18,304,000	9,233	30,469 13	San Bernardino	v	2009
1630 4210006	4210006-002	LOMPOC-CITY WATER UTILITY DIV	City of Lompoc Flocculation and Clarification Replacements	This equipment has been in use for 45 years and has undergone annual maintenance to extend it's life, assure reliability and SDWA compliance. The drive motors are no longer available and will be replaced wit upgrades. Structural modifications will be made to accomodate the new drive motors. Sweep arms and flocculator shafts will be rehabilitated and upgraded, and reinstalled with new shaft seals.	M	15	с	Replacement of the processing equipment for the flocculation and clarification basins (2 each) is needed to assure SDWA compliance and treated water delivery reliability. The basins contain moving rake arms and paddles that are mechanically driven by electric motors. This aging equipment was installed in 1963 and, because of its age, much of it is no longer available. The equipment must be upgraded and replaced. Failure of this equipment will cause a 50% production capacity reduction, which would place restrictions upon the community during high demand periods when both basins are required. This project has been postponed due to lack of funding during our budget process.	820,000	9,647	38,311 06	Santa Barbara	IV	2009
1631 3610055	3610055-002	YUCAIPA VALLEY WD ID-A&2	mainline replacement - wildwood cyn	Replace mainline	М	15	с	Substandard mainline serving Wildwood Cyn area	639,450	2,312	40,654 13	San Bernardino	v	1998
1632 3610055	3610055-003	YUCAIPA VALLEY WD ID-A&2	limited source capacity - wilson ck area - drill well	Drill new well in Wilson Creek area	М	15	С	Limited Source capacity resulting in service connection limitation	425,000	2,312	40,654 13	San Bernardino	V	1998
1633 3610055	3610055-001	YUCAIPA VALLEY WD ID-A&2	mainline replacement	Replace mainline	М	15	С	Substandard Mainline	1,000,000	2,312	40,654 13	San Bernardino	V	1998

1634 4410011	4410011-001	Watsonville, City of	Corralitos Membrane Pla	nt The project will address three solutions:Solution 1: M	15	С	Problem 1: The existing water treatment plant has	12,000,000	15,448	51,703 05	Santa Cruz	Ш	2009
				Convert the existing slow-sand filtration plant into a 2.5			filtration treatment deficiencies and does not meet						
				mgd membrane plant. The water treatment plant will			current state surface water treatment requirements.						
				meet current state surface water treatment			Corralitos Creek, the source water for the existing						
				requirements. The membrane filtration plant will			surface water treatment plant, is classified as "Grossly						
				provide a higher, more reliable level of treatment for			Contaminated" by CDPH (total coliform levels over 1000						
				the surface water sources, and will be able to overcome			organisms per 100 ml of sample). CDPH requires the						
				the regulatory issues associated with high turbidity			existing slow-sand filtration plant be shut down when						
				water that cannot be addressed by the existing slow-			the source water exceeds 10 NTU, generally during the						
				sand filtration plant. Solution 2: The membrane water			winter. The prevalence of high-intensity storms and						
				treatment plant will run year-round and will provide a			significantly increased creek flow rates during the rainy						
				continuous, reliable source of water. It will solve the			season results in turbidity spikes over 100 NTU and						
				problem of "water outages" associated with the existing			sustained turbidity events (longer than 1 week) over 20						
				slow-sand filtration plant. Solution 3: The water			NTU.Elevated coliform levels have necessitated						
				treatment plant will increase surface water sources in			additional log removal requirements for Giardia and						
				an over-drafted groundwater basin. The City has			Cryptosporidium to comply with the Long Term 2						
				historically produced 1,100 AFY from this water source.			Enhanced Surface Water Treatment Rule. Sources of						
				This project will increase production to 2,000 AFY.			bacteriological contamination are varied and include						
				Project Details: The project scope includes removal of			runoff from lands with livestock and leaking septic						
				the existing slow-sand filter plant, and construction of a			systems. The plant may not treat water until the source						
				pretreatment system, membrane filtration plant and			water remains below 10 NTU for 48 hours. As a result,						
				pump station, solids handling facilities, a clearwell, and			the bulk of surface water available to the City from						
				all associated electrical and instrumentation control			Corralitos and Browns Creeks remains unused.CDPH has						
				systems. Pretreatment includes installation of flash mix,			declared the City's 70-year old slow-sand filtration plant						
				flocculation, and a pre-fabricated package plate settling			to be inadequate for treating high turbidity flows, as						
				unit (with coagulant and polymer addition) for color and			indicated in the system's operating permit. Problem 2:						
				total organic carbon removal to ensure compliance with			The existing water treatment plant is plagued with						
1635 4410011	4410011-004	Watsonville, City of	Hames and Rider Pump	The project will address these solutions: Solution 1: The M	15	С	Problem 1: The Hames and Rider Booster Stations are	775,000	15,448	51,703 05	Santa Cruz	Ш	2009
			Station Replacement	most cost effective way to replace the Hames and Rider			now 37 years old, are no longer reliable, and need to be						
			-	Booster Stations is to combine facilities and build a new			replaced. The worn and obsolete equipment at these						
				single booster station. The new booster pump station			booster stations can no longer simply be maintained.						
				will be located at the existing Hames Road Reservoir			but need to be upgraded to modern standards. The						
				site. The pumps at this booster pump station will share			Hames Booster Station, built in 1972, provides water to						
				a single electrical service, auxiliary power generator and			the City of Watsonville Pressure Zone 5. The Rider						
				controls system. Two 280 gpm vertical turbine pumps			Booster Station, built in 1972 in conjunction with a						
				will be installed in the new booster pump station. These			hydro-pneumatic tank, provides water to Pressure Zone						

5A. Problem 2: The Rider Booster Station does not meet

fire flow standards, and is a potential risk to community

safety. Additional pumping capacity is needed in order

Hames and Rider Booster Stations require a stationary

operations and increased system reliability.Problem 4:

does not meet the City's standards for providing water

service. The City would like to minimize the pressure

fluctuations and limit it to 6 PSI by modernizing Zone 5A

pressure control. Problem 5: The pumps and generator

are open to the environment, and are vulnerable to vandalism. They are also a source of irritating noise in

the neighborhood. The facility needs to be enclosed

inside a building to increase water system security and

decrease noise complaints associated with this facility.

The current system pressure can vary by 20 PSI, and

to improve the system's reliability.Problem 3: The

generator to provide backup power for continuous

pumps will be dedicated to Zone 5 and will replace the

Zone 5 Reservoir (Rider Reservoir) to be refilled during

PG&E night time off peak electrical rate times. Two 153

Hames Booster Station. These pumps will allow the

frequency drives will be installed in the new booster

pump station. These pumps are sized to meet peak

and will replace the Rider Booster Pump Station.

for continuous operations and increase system reliability, a 150 kw diesel powered standby generator

domestic day demand and will be dedicated to Zone 5A

Solution 2: A 500 gpm vertical turbine pump fitted with

booster pump station to provide the additional fire flow

capacity required.Solution 3: To provide back-up power

with automatic transfer switch will be installed at the

new pump station.Solution 4: To decrease fluctuations

in the water pressure provided by the booster station, a

a variable frequency drive will be installed at the new

gpm vertical turbine pumps fitted with variable

1636 4410011	4410011-002	Watsonville, City of	Augmentation of System Groundwater Supply	The project will address the need for additional source M water capacity:Solution: To supply current demand and bring the City into compliance with the California Water Works Standards, two wells with a capacity of 1,500 gpm each will be constructed. This project will increase the City's groundwater source capacity by approximately 3,000 gpm. The project will increase system reliability, and will help prepare the City for future drought conditions and associated water supply reductions. Major project components for the construction/installation of the two ground water wells consist of the following:1. Drill test wells, finalize well design based on test-well results, and drill production wells of approximately 2 million gallons/day each (1500 gpm).2. Construct two well houses including electrical service, housing for major plumbing, chlorination equipment and auxiliary generator.3. Install two stationary generators to provide backup power for continuous operations.4. Install variable frequency drives for flow and speed control for each well.5. Install and program modern programmable logic control system and associated instrumentation interfaced with the City's Supervisory Control and Data Acquisition (SCADA) system to control the well pumps and associated equipment.6. Install chlorination equipment at each well.	15	C	The City's water system has a significant water quantity problem caused by source water capacity that is insufficient to supply current demand. The City's water system is under-capacity based on the California Water Works Standards. The City needs to increase groundwater source capacity by 3,000 gallons per minute (gpm). California Department of Public Health (CDPH) indicated in their system inspection summary of 2004 that the required source capacity for the City of Watsonville water system is 14,000 gpm and that "the city is under-capacity based on the California Water Works Standards." Since the 2004 CDPH inspection, additional water demands have increased the City's required source capacity to 15,375 gpm, while the City's current actual production capacity has been reduced to 12,495 gpm. The addition of two 1,500 gpm wells would provide sufficient additional capacity to meet the City's required source capacity as indicated by CDPH. While demands on the water system have increased substantially over the last several years, there has also been a significant decrease in ground water production capacity for several of the City's wells, particularly during the high demand summer months. This is a major concern to the future reliability of the system if these trends continue. In addition, new environmental requirements severely limit the amount of water that can be diverted from the City's surface water sources	2,950,000	15,448	51,703 05	Santa Cruz	1	2009	
1637 1610003	1610003-002	Hanford, City of		DEVELOP NEW DEEP WELL USING ZONES WITH LOW M	15	С	HIGH ARSENIC IN FIVE ACTIVE WELLS	750,000	14,557	53,320 12	Kings	Ш	1998	
1638 2010002	2010002-012	MADERA-CITY	City of Madera Well and Pipeline Replacement Program	The project would be to complete two additional water M wells (wells number 38 and 39) to add to the existing 18 wells that makes up the City of Madera's water distribution system. The completed wells will be cased during the drilling process. There will be a surface seal placed on each well to prevent surface contamination of the wells. The surface seal creates an impermeable seal from the surface to the next confining layer that keeps contaminants from traveling down the outer sidewalls of the casing or borehole and into the aquifer. Each of the wells will be caped with either an engineered well cap or seal that vents air through a screen into the well, but keeps insects, small animals, and unauthorized persons from accessing the wells. Based on the formation of each well, at the bottom of the wells will be placed a screenting device, filter pack, slotted casing, or open bore hole to allow the flow of water into the wells. This allows the water to be filtered of unwanted materials before entering the wells and pumping zones. Each of the two wells will be production wells constucted for extracing water from the aquifer by a pump.Completion of wells number 38 and 39 is considered the most cost effective method to ensure available water to the City of Madera's commerical and residential customers with sufficient system capacity and backup in an emergency situation. The balance of the grant will go to upgrade older water lines up to 12"	15	c	The City of Madera has 18 water wells which provide water to its commercial and residental customers. This year two wells had to be pulled off-line due to mechanical failure and routine maintenance. The remaining 16 wells had to operate at the same time during peak hours to meet normal water system demand. The problem then became there was no backup capacity during this peroid of well repair and maintenacne. An additional concern is that in case of an emergency need by the City's Fire Department to fight fires, the overvall water capacity would have been compromised. The City would be better prepared to ensure availble water to all its customers including emergency backup for emergency use by the City's Fire Department if two additional wells are developed and brought on line. There is also a need to upgrade older installed pipes up to a 12" size in various parts of the City. This pre-application is to pay for the costs of developing two more water wells (wells number 38 and 39) for the City of Madera. It is anticipated that each of the two wells would cost up to \$1,400,000.00 each to complete and bring on line for commerical and residential use. Two more water wells would also ensure adequate emergency water use by the City's Fire Department when that added need arises. The balance of the grant request will pay for the replacement of older lines up to a distribution size of 12".	3,000,000	12,419	57,318 11	Madera	11	2009	
1639 0910	0910002-005	South Tahoe PUD - Main	Waterline Replacement Project	The proposed project is the replacement of 11,700 linear feet of leaking 1 to 2 inch water supply lines with 8 inch lines; 6,046 linear feet of waterlines in the Al Tahoe subdivision and 5,700 linear feet of waterlines in the Sonora subdivision. The estimated cost of replacement is \$245 per linear foot for a total project cost of \$2,866,500. STPUD engineers are responsible for the planning, design, and management of the project, with the actual construction being outsourced to local contractors. This project has completed the planning phase with a 100% set of plans and specifications and is ready to go out to bid. CEQA has also been completed and a Categorical Exemption will be filed with all the appropriate agencies. Construction is planned for May 2009 and will be completed by December 2009.	Μ	15	C	The current water delivery system in the South Tahoe Public Utility District (STPUD) service areas of the AI Tahoe and Sonora subdivisions is in serious need of waterline replacements. Both areas, classified as disadvantaged communities, have populations where the majority of the residents are living in multiplex units. The waterline replacement projects proposed are due to aged and leaking water pipes that serve these units. Water pipes have a lifetime expectancy of 40-50 years depending upon placement, material constructed of, and use. In municipal water systems, the largest percentage of lost water is due to leaking in the water pipe delivery system. There are two ways to stop leaks in the water supply line delivery system: utilize leak detection and repair or replace the line. In cases where the water lines have deteriorated and corroded from long use (as is the case for the waterline replacement projects proposed) leak repair is no longer sufficient to stop water loss and the lines must be replaced. These units are currently being supplied water by 1 or 2 inch waterlines that are leaking water, causing wastage, and require frequent, costly repairs. According to the American Water Works Association (AWWA), it is estimated that water losses from leaks account for 10- 15% of daily water usage. STPUD also estimates that water supply line leakage represents 10% of the District's water production annually. This water line	2,281,500	13,635	60,000 09	El Dorado	1	2009
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1640 3610	3610052-004	VICTOR VALLEY WATER DISTRICT	Pipeline Replacement	Replacement of aging stainless steel pipeline placed in service in excess of 50 years ago, along with ancillary infrastucture.	М	15	С	This pipeline will replace of approximately 3 miles of stainless steel pipe to maintain water quality and improve infrastructure efficiency.	2,000,000	22,257	81,418 13	San Bernardino	V	2009
1641 3610	3610052-002	VICTOR VALLEY WATER DISTRICT	Well #142 Replacement	Well 142 has already been drilled and the proposed project is to install pumping equipment and related infrastructure.	М	15	С	This well replaces an existing well that was originally constructed in 1951 and was taken out of service due to declining production and efficiency.	1,300,000	22,257	81,418 13	San Bernardino	V	2009
1642 1910	)152 1910152-002	SOUTH GATE-CITY, WATER DEPT.	City of South Gate- SCAD, System	A The City is currently using an outdated SCADA system of which part are no longer available or becoming scarce. SCADA manages the entire water system consisting of 14 wells, 12 boosters, 14 pump motors, five reservoirs, and the security system as required by Homeland Security. This projects serves the entire population of the City of approximately 105,000; it monitors water availability on a 24 hr basis. It ensures all facilities are monitored for terrorist actions, including contamination and water supply as requested by Homeland Security. Full funding is requested.	Μ	15	с	The City is currently using an outdated SCADA system of which part are no longer available or becoming scarce. SCADA manages the entire water system consisting of 14 wells, 12 boosters, 14 pump motors, five reservoirs, and the security system as required by Homeland Security.	2,000,000	16,500	96,375 22	Los Angeles	IV	2009
1643 1910	1910152-003	SOUTH GATE-CITY, WATER DEPT.	Water Main Improvemen Project	t The City's water distribution system has grown and developed with the City. As a result the system contains a mixture of pipe of different ages. The hydraulics characters of the pipe changes as it ages due to corrosion, scaling, and other physical and chemical processes. The City has done a commendable effort in upgrading such deficiencies, but there remain several areas though out the City that lacks adequate service. About 48% of the distribution main serving the City's 105,000 residents are 6 inches in diameter or smaller. This deficiency creates an issue with water pressure and fire flows. The City is requesting full funding as alternate source of funding has not been made available.	Μ	15	с	Approximately 48% of the City Water Mains are deficient. The lines need to be upgraded to provide adequate fire flow and distribution pressure.	15,000,000	16,500	96,375 22	Los Angeles	IV	2009
1644 2710 1645 2710	0010         2710010-001           0010         2710010-002	CWSC Salinas CWSC Salinas		Install GAC treatment. Design and construct treatment facilities.	M M	15 15	C C	Two inactive wells need PCE treatment. Inactive wells (10-01, 17-01, 21-01) need nitrate treatment.	400,000 1,500,000	25,451 25,451	114,840 05 114,840 05	Monterey Monterey	 	1998 1998

1646 3310012	3310012-005	Elsinore Valley MWD		See attached sheet	м	15	С	El Cariso water system replacement project due to poor condition of distribution system. See attached sheet.	4,300,000	36,817	121,420 20	Riverside	V	1998
1647 3910012	3910012-008	City of Stockton	Stockton Delta Water Supply Project	Construct new surface water treatment plant to treat Sacramento-San Joaquin River Delta water for Stockton.	м	15	С	Decreasing availability of groundwater and current surface water supplies.	121,000,000	46,119	158,113 10	San Joaquin	ш	2004
1648 3310009	3310009-064	Eastern Municipal WD	Hemet/San Jacinto Integrated Recharge and Recovery Program	The goals of the Hemet/San Jacinto Integrated Recharge and Recovery Program (IRRP) are:• reduce Nitrate migration and protect nearby potable water wells;• provide high quality recharge water to ensure long-term basin water quality mitigate overfarf that reduces the supply to local water systems• increase supply reliability during droughts and emergencies• reduce reliance on imported water suppliesFacilities to be constructed under the IRRP include:• Warren Road and Commonwealth Booster uggrades – additional capacity required to supply replenishment water to recharge ponds;• Recharge ponds – 35 acres of ponds along the San Jacinto River;• Well pipelines and recharge pipeline laterals – to convey water from new extractions wells to local distribution systems and replenishment water to ponds for recharge;• Monitoring wells – three wells to monitor recharge operations;In addition to the above facilities, the program includes willing and equipping of three new extraction wells which are in progress and scheduled for completion in Summer, 2009. Once the program infrastructure is in place, Metropolitan Water District of Southern California (MWD) will supply an average of 7,500 acre-feet of replenishment water per year for groundwater recharge as part of a settlement of an outstanding rights dispute in accordance with the Soboba Band of Luiseño Indians Settlement Act of 2007, P.L. 110-297. Additional replenishment water for	e M	15	c	The IRRP has been formulated to address groundwater quality and dramatically declining water levels in the San Jacinto Valley. In a number of wells water levels have declined in excess of 240 feet over the last 50 years. The goals of the Hemet/San Jacinto Integrated Recharge and Recovery Program (IRRP) are: reduce Nitrate migration and protect nearby potable water wells; provide high quality recharge water to ensure long-term basin water quality entitigate overdraft that reduces the supply to local water systems increase supply reliability during droughts and emergencies reduce reliance on imported water suppliesThe precipitous decline in water levels has made the area more and more dependent on imported water sources. Additionally, a number of wells in the groundwater Maximum Contaminant Level (MCL) of 10 mg/L.Once the project infrastructure is in place, Metropolitan Water District of Southern California will supply an average of 7,500 acre-feet of water preyar for replenishment activities in accordance with a stipulated judgment satisfying a water rights lawsuit brought by the Soboba Band of Luiseño Indians. The program is funded by local agencies, including Eastern Municipal Water District (EtWWD), Lake Hemet Municipal Water District (Div MD).	8,199,200	141,243	414,710 20	Riverside	v	2009
1649 3310009	3310009-060	Eastern Municipal WD	Western Way Pump Station	The Western Way Pump Station (WWPS) will provide a regional supply of treated water from the Henry J. Mills Water Filtration Plant (Mills) of the Metropolitan Water District of Southern California (MWD). The MWD will deliver up to a maximum flow of 145 cubic feet per second (cfs.) at the designated EM-24 connection located at the boundary of the Eastern Municipal Water District (EMWD). The District is completing the final design phase of the Western Way Pump Station (WWPS). The WWPS will be located at the intersection of Western Way and Harley Knox Avenue (aka Oleander) within the EMWD Perris Valley Service Area. The WWPS will utilize up to five (5) duty and one (1) stand-by 300 Hp and two (2) duty and one (1) stand-by 300 Hp and two (2) duty and one (1) stand-by 300 Hp and two (2) duty and one (1) stand-by 300 Hp and two (2) duty and one (1) stand-by 60 Hp vertical turbine pumps to raise the hydraulic grade from the discharge side of the Perris Valley Pipeline to the Oleander Transmission Pipelines, the existing distribution systems across the 1627 and 1705 PZ's will be able to convey the water supply to all users, wholesale customers and economically disadvantaged customers served within the and from the Perris Valley Service Area. The supply from the build-out of the WWPS and additional transmission facilities is anticipated to provide enough supply to allow the district to serve its existing and future customers	M	15	C	Eastern Municipal Water District (EMWD) provides water to a 555-square mile area in western Riverside County, serving approximately 675,000 people. EMWD's total potable water demand of 134,000 acre feet per year (AFY) includes 82% of imported water from the State Water Project and Colorado River Aqueduct and the remainder is provided by local groundwater.EMWD has recently completed an updated Water Facilities Master Plan (WFMP). The WFMP has identified supply and demand scenarios, deficiencies and required infrastructure improvements through ultimate buildout. The required infrastructure improvements include major supply, conveyance and storage facilities within the District's four major service areas, Moreno Valley, Perris Valley, East Valley and South Valley. The largest service area is the Perris Valley Service Area and due to the pace of growth in recent years will require the largest investment for supply, conveyance and storage facilities to meet existing and ultimate demands.The Perris Valley Service Area lies almost entirely within the 1627 Pressure Zone (PZ) and is the District's largest base zone serving the largest number of customers including several disadvantaged communities and wholesale connections.EMWD in conjunction with the Metropolitan Water District of Southern California (MWD) and Western Municipal Water District (WMWD)	15,740,000	141,243	414,710 20	Riverside	v	2009

1650 3310009	3310009-062	Eastern Municipal WD	Perris II Desalter	The Perris II Desalter will provide up to 5 million gallons per day (MGD) of potable water from brackish wells feeding into a reverse osmosis (RO) desalination plant.	s M	15	С	The goals of this project are to:• Mitigate exceedances of the primary MCLs for Nitrate and Perchlorate;• Mitigate exceedances of the secondary MCL for Total	53,000,000	141,243	414,710 20	Riverside	V	2009
				The plant will be constructed to an initial capacity of 3				Dissolved Solids (TDS): • Reduce demand on imported						
				MGD with the ability to ungrade to an ultimate capacity				water. Protect drinking water sources: and						
				of 5 MGD. This new water source will supply up to	,			Supplement water supplies for disadvantaged						
				11 000 families in the disadvantaged community of				communities using a Desalination which provides an						
				Perris California and reduce imported water demands				efficient use of local water resources and is more						
				at a rate of 1 to 1. The proposed Perric II Desalter				operate efficient than imported water cupplies thereby						
				at a fate of 1 to 1. The proposed Perifs in Desalter				reducing our Greenhouse Cas feethrint, and a Water						
				project consists of pre-treatment facilities (non and				thet would not otherwise he would thereby concerning						
				manganese removal), the KO treatment facilities,				that would not other wise be usable thereby conserving						
				to disease of the bring segmentate and deliver the				Water resources for use in other areas.Eastern						
				finished notable water to the distribution system. The				EEE coupro milo propin wortern Biverside Coupty						
				institution system. The				sos ing approximately CC0 000 people _EMM/D/a total						
				iron and manganese racincles will pre-treat the entire				serving approximately 660,000 people. Elvivod s total						
				raw well water reed to remove the potential iouant to				(ACV) includes 92% of imported water from the State						
				inelude certrides filters, DO feed summe DO				(AFY) Includes 82% of Imported water from the state						
				membranes, shamical storage and food (for the				remainder is provided by local groundwater EMIMD						
				addition of disinfoctant, control of PH, throshold				has successfully constructed two groundwater. EWWD						
				inhibitor and PO membrane cleaning agents). The				deselization plants and implemented a deselization						
				initiation, and RO memorane cleaning agents). The				desaination plants and implemented a desaination						
				project includes pumping facilities to dispose of the				program in the Perris Valley. Currently, up to 8 million						
				the distribution system. The project includes other				can be generated by the decalters. These efforts were						
				required supporting facilities including instrumentation				implemented in order to: Increase reliance on local						
				and control Jahoratony facilities maintenance facilities				groundwater, decreasing dependence on imported						
				HVAC and electrical EMM/D is funding the construction	,			water: a lacrosse reliance on local water recourses in						
				HVAC, and electrical.Elvivo is funding the construction				water;• Increase reliance on local water resources in						
1651 1010007	1010007-017	FRESNO, CITY OF	Water Well Rehabilitation	Rehabilitate and redevelop the affected wells.	м	15	С	The production of some wells is diminished due to mineral build-up on the casings.	1,050,000	128,152	457,511 11	Fresno	111	2007
1652 1010007	1010007-013	FRESNO, CITY OF	Central Fresno Storage	Construct a new 2 MG storage tank, booster pump	M	15	C	Need to increase the water storage and delivery	6,339,800	128,152	457,511 11	Fresno	III	2004
			Tank	station and transmission line to provide water to				capacity in Central Fresno, which has expanded.						
				downtown Fresno.										
1653 1010007	1010007-016	FRESNO, CITY OF	Water Main Replacement	Install new water mains.	М	15	С	The water mains in the older parts of the City are old deteriorated and leaky.	5,215,000	128,152	457,511 11	Fresno	Ш	2007
1654 1010007	1010007-015	FRESNO, CITY OF	SWTP Backup Generator	Install a backup generator to operate critical plant	M	15	С	The new SWTP does not have adequate backup power.	500,000	128,152	457,511 11	Fresno	Ш	2004
				facilities and one treated water pump.										
1655 1010007	1010007-014	FRESNO, CITY OF	Replacement of Old Wells	Construct new wells to replace the old wells.	M	15	С	The City has many old wells that were constructed in	6,750,000	128,152	457,511 11	Fresno	ш	2004
								the 1940's and 1950's that are of open bottom wells						
								without annular seals.						
1656 1400102	1400102-001	Laws Town LADWP		Construct new well	M	15	Р	Lack of reliability due to singe well	150,000	17	30 13	Inyo	V	1998
1657 1400102	1400102-002	Laws Town LADWP		Replace mainline	M	15	Р	Old substandard mainline	30,000	17	30 13	Inyo	V	1998
1658 4500169	4500169-001	CEDAR CREEK SCHOOL		Improve spring or drill a new well to provide the	M	15	Р	The spring source and storage tank are shared with a	60,000	1	35 02	Shasta	I.	1998
				reliability required by the Waterworks Standards.				mobile home park, making it difficult to fulfill Section						
								64560(a)(2) (protect the quality of the water) of the						
								Waterworks Standards.						
1659 2000840	2000840-001	INDIAN SPRINGS CHILDREN CENTER	Indian Springs Childen's	Upgrade existing water supply and system, increase	М	15	Р	Upgrade existing water supply, increase water	20,000	1	48 11	Madera	Ш	2009
			Center Water System	water flow/volume, add water storage tank and new				flow/volume, add water storage tank and new booster						
			Upgrade	booster pressure pump in case of well failure so water				pressure pump in case of well failure so water can be						
				can be trucked in and stored for use, also provide local				trucked in and stored for use, also provide local fire						
				fire departments access to water in case of fire. Install				departments access to water in case of fire. Install new						
				new required water meter as per Madera County				required water meter as per Madera County						
				Enviromental Health Dept. CA Water Works Standards,				Enviromental Health Dept. CA Water Works Standards,						
				CA Code Of Regulation Title 22, Div 4, Chapter 16,				CA Code Of Regulation Title 22, Div 4, Chapter 16,						
				Article 3, Sections 64561(a,b) This will require a				Article 3, Sections 64561(a,b) This will require a						
				complete new replumbing of water well and pump.				complete new replumbing of water well and pump.						
				Install new wiring and main breaker box for additional				Install new wiring and main breaker box for additional						
				load of boost pump, new pipeline from water system to	0			load, pipeline from water system to building and						
				building and property. Ground work, tree and brush				property. Ground work, tree and brush removal for site						
				removal for site prep.				prep.						

1660 1500517	1500517-003	STOCO MUTUAL WATER COMPANY	Alternative Water Source (2nd Well)	Installations will require:MOBILIZATION, DEMO & PERMIT30" CONDUCTOR18 PILOT BOREHOLE & E- LOGREAM 26" HOLE & CAL LOG16" OD BLANK 5/1616" OD STD FLO LOUVERED 5/16"16" ODFULFLO LOUVERED 5/16"16" OD MILLSLOT 64 ROW 5/16"GRAVEL PACK / CEMENTAIRLIFT SWABINSTALL TEST PUMPTEST PUMP DEVELOPMENTTEST PUMP CONSTANTCONCRETE PUMI BASE100 HP PUMP, MOTOR, BOWL, HEAD, AND PIPING FROM THE HEAD TO THE PRESSURE TANKBACK-UP GENERATOR FOR POWER FAILURE 180 KW USED UNIT WITH 10,000 HOURS EQUIPMENTELECTRICAL CONECTIONS TO EXSISTING POWER TWO SLECTOR SWETCHES AND NEW PANNEL TO OPERATE EACH WELL SEPERATELY	M ) ;	15	Ρ	This well is at least 35 years old. There is no alternative source for the users at this location other than the 10,000 gallon pressure tank. This second well would be designed to have the same capacity as the existing well and act as a back up in case the primary well or pump fails.	500,000	6	85 19	Kern	u	2009
1661 2100545	2100545-003	WALKER CREEK RANCH EDUCATIONAL CEN	IT Replacement of Primary Potable Water Storage Tank at Walker Creek Ranch	This project is to replace the existing 100,000 gallon redwood water storage tank, which serves as the primary potable water storage tank at the Walker Creel Ranch campus. The plan is to identify and purchase a replacement tank that will most cost effectively serve the long term water storage needs of the campus, to remove, disassemble, and recycle the existing tank, to prepare a base for and install the new tank. This project will further efforts to become a Marin County Certified Green Business by minimizing and eliminating water loss, and supporting water conservation efforts.Redwood planks from the existing tanks will be used to provide amphitheater and bench seating for students and guests. The Main County Outdoor School at Walker Creek Ranch serves about 6,000 elementary school students per year from around the Bay Area region for a five day residential outdoor science school program. On weekends and over the summer the facility is utilized as a residential science camp site and as a retreat and conference center, which serves over 100 separate groups and over 5,000 guests annually. The summer camp programs provide scholarship opportunities for economically disadvantaged students, and includes a day camp program for special needs students.	M k	15	Ρ	The existing 100,000 gallon redwood storage tank, which serves as the primary potable water storage tank for the Walker Creek Ranch Campus, is approximately 50 years old, and is approaching the end of its life expectancy. Recent estimates are that the tank is loosing 2 to 3 gallons per minute, due to leaks, which equates to over 1 million gallons annually. With the water system being fed by two wells on the property, the additional draw on the water table from this water loss is a growing concern, in the midst of the third consecutive year of drought conditions. This project aims to replace the existing tank with a new tank, in an effort to minimize and eliminate water loss due to leaks in the storage system.	375,000	21	100 18	Marin	Ι	2009
1662 1710800	1710800-001	CDF-Konocti Conservation Camp		Replace distribution system, isolate irrigation system fo wastewater and replace hydrants.	or M	15	Р	Distribution consists of transite pipe and 35 years old. System leaks are common and difficult to repair.	68,000	1	100 03	Lake	Ш	1998
1663 2702317	2702317-001	MISSION SCHOOL WS		General system upgrade.	м	15	Р	System is aging and needs improvements.	15.000	1	100 05	Monterev	Ш	1998
1664 2400110	2400110-001	MCHA ATWATER CENTER		Construct treatment system	M	15	P	Well is vunerable to nitrate contamination	75,000	45	140 11	Merced		1999
1665 1400019	1400019-002	Round Valley School		Construct new well	М	15	Р	Single source of supply	12,000	1	140 13	Inyo	v	1998
1666 3702364	3702364-002	CLOVER FLAT ELEMENTARY SCHOOL	clover flat	redrill current well to at least 800 ft. replace current	М	15	Р	high nitrates,old storage tank,poor testing sites	60,000	1	160 14	San Diego	v	2009
			elementary/well/tank/test ing stations	storage tank with new one. install new sample testing stations(5) at various locations								č		

1667 3701010	3701010-002	WARNER UNIFIED SCHOOL DISTRICT	Backup Water System	A new well system in operation at a different location. M This is due to our district having permanent housing for our FFA animals that the students are raising. We are still within a safe distance but, it would be ideal to be safe at our choice of where the well should be. Basically the well system would include materials dealing with the well system. Maybe my estimate is not correct with some costs but, this is where I would need help in determining the cost to get this job going. Also to have one of of expertise look at the location to determine if it is a safe location to set up a well system. As I mentioned before we took out a current well due to the fact rain moisture affected it and it was too old and costly to try to make repairs. The well had existed since the 1940s. The cost would include materials, pump,electrical,pipes ect Trenching and well drilling of course.	1 1	15	Ρ	Currently we have no back up water system for our public school. As of now we have 1 potable water system or well. This could in fact create a problem should something happen to our our existing well system. Our school would have to shut down due to no water. Our back up well we had # 2 has been out of operation for the past 3 years, so as you can see there is a need for a new well. We would very much appreciate your help in getting our school a back up system so we can breathe a little easier and make it a positive environment for our students as well safer.	60,000	15	250 14	San Diego	v	2009
1668 1000315	1000315-001	CLAY JOINT SCHOOL		DRILL A NEW WELL AND EQUIPT. OTHER - DESIGN AND M CONSTRUCTION	1 1	15	Ρ	PRESENTLY HAVE A GAC FILTRATION SYSTEM TO REMOVE DBCP. DBCP LEVELS IN THE WELL HAVE LOWERED BELOW MCL. LACK OF ADEQUATE SOURCE RELIABILITY.	200,000	1	250 23	Fresno	Ш	1998
1669 3700018	3700018-001	CAMPO ELEMENTARY SCHOOL	new campo elementary/new well/new storage tank	the new well would provide the school with safe water. M the storage tank would insure that we have an adequate supply of drinking water,our current tank is setup to where we can access only 30% (the rest is for fire).the sampling stations would provide more accurate results	1 1	15	Ρ	our top producing well is over the max. m.c.l. in nitrates we also need to install (5) sampling stations in order to better test	80,000	4	300 14	San Diego	V	2009
1670 3700963	3700963-001	POTRERO ELEMENTARY SCHOOL	potrero/new well/new storage tank	drill existing well deeper/replace existing storage tank M and possibly move to new location. install (5) water sampling stations to improve water testing	1 1	15	Ρ	this school is always high or above in nitrates (mcl) the storage tank should replaced because of its age and condition.(5) water sampling stations need to be installed for better water quality	60,000	2	300 14	San Diego	V	2009
1671 0900111	0900111-001	PIONEER SCHOOL	Pioneer School/Mountain Creek School	Create additional source (another well). Install new M holding tank and storage system. Involves design and construction;	1 1	15	Ρ	System does not have adequate source capacity.	35,000	5	350 09	El Dorado	I	2006
1672 1000020	1000020-001	FCSA #1/TAMARACK	Replace 30,000 gallon water storage tank and 1/2 mile of transite piping	The District shall replace the water storage tank. The cost estimate to replace the tank is enhanced because the tank is located on a hill. In order to remove the existing tank, a helicopter service shall be required to haul the tank off of the hill. Brush leading up to the hill must be removed. A galvanized steel water storage tank shall be reconstructed in the same location as the previous tank. The cost estimate to clear brush, remove the existing tank, and construct a new water storage tank is approximately \$150,000. An alternative measure could be to relocate the water storage tank is approximately \$200,000. We estimate this alternate course of action would be more costly than replacing the tank on the hill. The 1/2 mile of transite piping shall be dug out and removed from the water cost estimate to the streets within the District. The piping must then be properly disposed of since it contains asbestos material. The cost estimate to remose the ransite piping is approximately \$25,000.	1 1	15	Ν	CSA 1 must be able to serve water to 45 single family residential lots and a 10-unit motel. The water storage tank and water distribution system was originally installed in 1962. The 30,000 gallon water storage tank receives water from 2 well sources. It is located on a hill and uses gravity-feed to distribute water to the community. The water storage tank has been leaking for several years. The leakes are plugged using epoxy, but the epoxy plugs only last a short time before the leaking resumes. The water storage tank has exceeded it's life expectancy and has deteriorated beyond repair. Additionally, the pontential for tank corrosion to leach into the water system represents a health hazard that must be addressed. The 1/2 mile transite piping distribution system is made of concrete and asbestos. The piping shall be replaced with PVC or PEX piping in order to prevent an asbestos related health hazard. Once the piping has been replaced, the trenching within the water easements adjacent to the public roads shall be back filled and rebuilt to their original standards.	175,000	33	18 23	Fresno	111	2009

1673 4300814	4300814-001	SCC Animal Shelter/Airport		Implement all recommendations of certified cross- connection control specialist's survey (included with pre application).	M 2-	15	N	Inadequate backflow and cross-connection protection. Significant risk of contamination to potable water system.	20,000	2	25 17	Santa Clara	Ш	1998
1674 1000024	1000024-001	FCSA #23/EXCHEQUER HEIGHTS	Replace water storage tank, piping, and a fire hydrant	The project will consist of dismantling and removing the existing storage tank which will be salvaged through a recycler. A new 30,000 gallon water storage tank will be constructed at the same location. The estimated cost to replace the tank is \$100,000. The steel piping will be excavated and removed and replaced with PEX or PVC piping system. The estimated cost to replace the 800 feet of piping is \$25,000. The cost estimate to repalce the inoperable fire hydrant is \$5,000	: M : :	15	Ν	CSA No. 23 provides potable water to 16 residential parcels located between Shaver Lake and the Dinkey Creek area. The existing water infrastructure was constructed in 1970. It consists of two wells, a 30,000 gallon water storage tank and approximately 800 feet of buried galvanized steel water pipe. The storage tank is corroded and water is being lost. Corrosion of the tank represents a potential health hazard if corrosive material leaches into the water system. The have been numerous pipe bursts over the years due to excessive freezing and thawing during the winter season. The one fire hydrant serving the CSA No. 23 is non-operational. Because the development is surrounded by the Sierra National Forest at about the 6000 foot elevation, having an operating fire hydrant is essential.	130,000	15	25 23	Fresno	Ш	2009
1675 2701176	2701176-001	SOLEDAD MISSION WS		New well and pipes.	М	15	N	Water system is aging and needs improvements - new well and pipes.	10,000	2	25 05	Monterey	Ш	1998
1676 5400896	5400896-001	FAR HORIZON CAMP		Install a new 3" diameter water main	М	15	Ν	Low water pressure - inadequate in an emergency	20,000	12	60 12	Tulare	Ш	1999
1677 5500171	5500171-001	REGIONAL LEARNING CENTER		INSTALL NEW TANKS AND HOOK-UP	м	15	Ν	NEED STORAGE FOR ADEQUATE SUPPLY RELIABILITY.	45,000	25	250 11	Tuolumne	ш	1998
1678 1910253	1910253-007	Central Basin MWD	Central Basin MWD WQPP SCADA System Upgrade	P CBMWD SCADA System UpgradeA new, SCADA system would be constructed under this project. It would allow monitoring and control capability at Central Basin's headquarters and be linked to two water wells and the granular activated carbon treatment facility located in the city of Whittier through District's operators instead of using contract operator. Part of the facilities installed include, remote transmitting units, receivers, and computer hardware and software. Well Pump ReplacementThe well pumps for CB-1 and CB-2 would be replaced with new, energy efficient pumps. Project ScheduleAt present, the District is in the process on completing CEQA documents for the project. The designs for the above projects will be completed by February 2010. District plans to start construction in March 2010 for completion in September 2010. The facilities will be in operation in the Fall of 2010.	M	10	c	BackgroundIn the 1980's a contaminated plume was found in San Gabriel Valley, posing a threat to the areas groundwater supply. In order to remedy the contamination, Central Basin Municipal Water District (CBMWD), with the partnership of other impacted agencies, built two extraction wells to pump contaminated water to a treatment facility where the water is cleaned and distributed to the purveyors. This project, Water Quality Protection Project (WQPP) of CBMWD, has been in operation since 2005. This project serves two purposes: 1) Prevent spread of a volatile organic carbon (VOC) plume into downstream aquifers and thereby polluting a large number water wells in the downstream of the aquifers impacting water supply to many cities; and 2) Producing potable water for neighboring citiesThe existing WQPP facilities consist of two water wells (CB-1 and CB-2), and granular activated carbon water treatment system to remove VOC in the groundwater, primarily PCE and TCE. These facilities are fully automated, and operated, maintained, and monitored by the operators contracted by the CBMWD. ProblemCBMWD currently relies on Supervisory Control and Data Acquisition System (SCADA) maintained by contract service providers to control and monitor this crucial facility. The existing SCADA systems are linked to control centers of the service providers with no information being transmitted to the CBMWD on a	250,000	3	0 15	Los Angeles	IV	2009
1679 4010022	4010022-008	LOPEZ PROJECT	Lopez Project - Distribution System Telemetry at Turnouts and Outlet Works	n The Lopez Distribution Telemetry at Turnouts and Outlet Works Project involves the installation of instrumentation, programmable logic controllers, radios, and other equipment necessary to provide a complete supervisory control and data acquisition (SCADA) system for the Lopez distribution system's five turnouts and outlet works. The project will also include integration of the new telemetry controls into the existing Lopez Water Treatment Plant SCADA system.	М	10	с	The Lopez Water Treatment Plant (LWTP) is a six MGD treatment plant that treats surface water from Lopez Reservoir. Its distribution system has five turnouts serving the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, community of Oceano, and community of Avila Beach. Controls and data acquisition for each of the turnouts and the system's outlet works are manual, creating inefficiency in operations and no way to measure or adjust flows to each turnout in real time.	250,000	31	0 06	San Luis Obispo	IV	2009

### 1680 5000218 5000218-006 COUNTRY VILLA APTS

Main Well 2 - Renovation This project proposes to renovate an existing out-ofм service well (Main Well No. 2) sufficient to be used as a stand-by water source in the event the North Well is temporarily removed from service for repairs. This project would consist of removal of the existing hydropneumatic tank, piping and pump, and cleaning of the existing well casing. Installation of a new 5 HP submersible pump, 1800 gallon hydropneumatic tank and related piping and a new electrical panel. This project would also include the proper destruction of a nearby existing abandoned well including removal of the wellhead. Although the Owners privately funded the design and construction of the North Well, pump and hydropneumatic tank, there is insufficient funding available to complete the remaining necessary improvements to the water system including the renovation of Main Well No. 2 to be used as back-up well. Project participants include the Owner of Country Villa Anartments, Robyn Dorius, a licensed California Professional Engineer and a Certified Water Distribution Operator.

1681 5000218 5000218-004 COUNTRY VILLA APTS

2300502-001

Albion Mutual Water Company

1682 2300502

1683 2700622

Piping Replacement

Reservoir Roof

Replacement

for Back-Up Well

Underground Distribution This project provides for the replacement of all м underground galvanized distribution piping with PVC Schedule 80 piping from the North Well location to all 23 service connections. This project includes the replacement of:850 feet of 2 inch pipe.300 feet of 3 inch pipe.25 valvesAssorted fittingsAlthough the Owners privately funded the design and construction of the North Well, pump and hydropneumatic tank, there is insufficient funding available to complete the remaining necessary improvements to the water system including the replacement of the existing underground distribution piping system. Project participants include the Owner of Country Villa Apartments, Robyn Dorius, a licensed California Professional Engineer and a Certified Water Distribution Operator.

The new roof will be a 5:12, wood frame, gable with a M

South facing slope to accommodate the future

relocation of water treatment functions.

installation of a solar panel array. The "attic" area will

Design services are being provided "pro-bono" by an

Architect who is a member of the Water Company.

provide for material storage and space for future

Country Villa Apartments, built in 1950 in an unincorporated area of Stanislaus County, has a single well (North Well) that serves 23 service connections (approximately 75 residents). The 400 foot deep North Well, 10 HP pump, 2500 gallon hydropneumatic tank, and related piping wer all installed in 2007 to replace an older well that repeatedly violated the Total Coliform MCL. The North Well is in violation of the State of California Drinking Water Regulation for Arsenic (allowable is 10 ppb). The North Well currently has an Arsenic level of 22 ppb that requires public notification to all residents every 90 days.Due to a lack of adequate funds, the Owners must seek outside funding to complete the following water system upgrades: 1) Arsenic Treatment study, 2) Arsenic Treatment Filter, 3) Wellhead Protection Improvements, 4) Emergency Back-Up Electrical Generator, 5) Underground Distribution Piping Replacement, and 6) Renovation of Out-of-Service Back-Up Well. The North Well is the only potable water well in service at Country Villa Apartments. If the North Well must be placed out of service temporarily for maintenance or repairs, there is currently no backup well. The North Well was built in 2007 to replace the older Main Well No. 2. This project proposes to renovate Main Well No. 2 sufficient to provide a backup water source on an emergency basis only. This project would include cleaning the well casing, Country Villa Apartments, built in 1950 in an unincorporated area of Stanislaus County, has a single

46.500

23

30 10

Stanislaus

52,500 23 30 10 Stanislaus 2009 111 well (North Well) that serves 23 service connections (approximately 75 residents). The 400 foot deep North Well, 10 HP pump, 2500 gallon hydropneumatic tank, and related nining were all installed in 2007 to replace an older well that repeatedly violated the Total Coliform MCL. The North Well is in violation of the State of California Drinking Water Regulation for Arsenic (allowable MCL is 10 ppb). The North Well currently has an Arsenic level of 22 ppb that requires public notification to all residents every 90 days.Due to a lack of adequate funds, the Owners must seek outside funding to complete the following water system upgrades: 1) Arsenic Treatment Study, 2) Arsenic Treatment Filter, 3) Wellhead Protection Improvements, 4) Emergency Back-Up Electrical Generator, 5) Underground Distribution Piping Replacement, and 6) Renovation of Out-of Service Back-Up Well. The apartment complex consists of 5 separate buildings spread out on 4.24 acres. The underground distribution piping is undersized galvanized piping that is now 60 years old. Although the North Well was built in 2007 to provide an 80 gpm flow, the existing undersized and aged distribution system causes insufficient water pressure to the residents. This project proposes to replace the existing underground The flat, wood-frame roof on our 70,000 gallon concrete 20,000 26 40 03 Mendocino 2007 water tank is over 30 years old. The membrane roofing was replaced approximately 15 years ago. The perimeter venting system has been patched and repaired over time and the exposed wood edge blocking is crumbling. Major structural elements of the roof are

2700622-001	OUTLOOK WA	Replace existing tanks with two concrete tanks and	м	10	С	Water storage tanks and main service lines are 30 years	24,773	19	45 05	Monterey	П	1998
		replace water mains, misc. plumbing, etc.				old and need replacement.						

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С

deteriorating rapidly.

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С

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2009

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1684 3100019	3100019-001	NORTH EDEN VALLEY		Construct an additional well to 400 ft. Add additonal 20.000 gallons of storage capacity.	М	10	С	Single well source not reliable. Needs second well.	45,000	16	45 02	Placer	I	1998
1685 4700630	4700630-003	Shasta View Heights Owners Association	Shasta View Heights Owners Assoc. Water Project	We need to re-drill and reline a collaping lower shaft in well 1 and replace structures housing wells 1 &2 a reconnect well 1 to stoarage tanks by replacing destroyed piping. Pipe footage to be replaced is approx. 3000 feet.Replace existing 2" & 4" lines with 8" c-900 pipe in upper loop & in Bennet Drive run to tank. Original and existing pipe is 2" & 4" grey electrical conduit pipe. Replace existing 2" & 4" lines with 6" C- 900 pipes in lower loopAdd adequate fire hydrants to bring fire protection up to current standards.	Μ	10	с	Well number 1 is collapsing and Well number 2 has broken pipes, supply line failure and insufficient storage. Low water levels in summer. Water treatment is occasional chlorine with daily reading and monthly testing.	200,000	17	50 01	Siskiyou	I	2009
1686 1500455	1500455-002	WILLIAM FISHER MEMORIAL WATER COM	PA Upgrade Distribution System	Replace distribution system with 8" C900 PVC.	М	10	С	Distribution system consists primarily of inadequate 2" and 4" mains.	100,000	18	51 19	Kern	ш	2007
1687 1900038	1900038-002	LANCASTER PARK MOBILE HOME PARK	Lancaster Mobile Park - ARSENIC Treatment and Additional Well	The Lancaster Mobile Estates is a water system in need of an additional water source to meet the demands of the community and including treatment for ARSENIC concentrations that exceed the Maximum Contaminant Level. The Water system has insufficient water storage for fire protection. In addition, the water system is in need of additional water source, a new ground well, and improvements to the water distribution lines.	M	10	C	The Lancaster Park Mobile Estates is a water system in need of an additional water source to meet the demands of the community and including treatment for ARSENIC concentrations that exceed the Maximum Contaminant Level. The Water system has insufficient water storage for fire protection. In addition, the water system is in need of additional water source, a new ground well, and improvements to the water distribution lines.	100,000	21	53 16	Los Angeles	IV	2009
1688 2700547	2700547-002	DESMOND RD WS #03		The electrical panel, tanks, and some water lines all need to be replaced. The application says the project only involves design, but it seems like it would also involve construction.	Μ	10	с	Add storage and replace mains.	30,000	19	55 05	Monterey	II	1998
1689 1200687	1200687-001	Riverbend MHP	Riverbend MHP water system	We do not know yet if it would be possible to use the existing well and merely upgrade the treatment and distribution system. We have been advised that storage tanks up the incline would be more efficient, but we wil need to have an engineer assess the problems and suggest the most cost effective plan. Our intent is to consult such an engineer and upgrade to an effective community water system.	м е 1	10	c	This is an older mobile home park in an isolated area, with 29 spaces. The nearest city, Fortuna, is 45 miles over small country roads. The park is built on a flood plain of the Van Duzen River, about 1/2 mile from the Dinsmore airport. The population of the park is universally low income. The well is barely adequate for the population of the park when we are at capacity (which is currently the case). The well is currently in the middle of the occupied area of the park, and the distribution infrastructure is contained in the utility system (essentially a ditch down the middle of the occupied area which also contains the electrical and the septic systems). We have had some violations of drinking water standards in our tests and have been chlorinating sporadically. There are times when the water system has been offline for more than a day while we were working on it, and we had to import portapotties and bottled water for the tenants. We have upgraded both the well and the septic system, but old piping remains underground and probably will cause continuing problems. We have bean advised that it would be optimal if we were to become a community water system.	250,000	28	60 01	Humboldt		2009
1690 2700579 1691 2700579	2700579-002 2700579-001	ELKHORN RD WS #04 ELKHORN RD WS #04		Replace tank. Replace pipes with new material which is up to standard.	M M	10 10	C C	Water storage tank needs replacement. System has inconsistent pipe types and sizes - the locations of which are unknown and need to be determined.	20,000 21,500	20 20	60 05 60 05	Monterey Monterey	 	1998 1998

1692 2702110	2702110-001	DELANY WC	Tank repair/replacement and installation of wireles: remote DeLany Sys.	Initially, the tanks will need to be drained to install proper valving so that tanks can be isolated to proceed with the maintenance and upgrade. Man access doors will need to be cut into the side walls for safe cleaning, sand blasting and re-painted outside to extend their finished inside and re-painted outside to extend their ployed to be structurally sound, this wil be a much more affordable option than tank replacement with poly tanks that could total up to \$40,000. I am current operating the pump manually because we have lost communication between the float switch and the pump relay. Because of the terrain (steep hillsides, heavily wooded), re-trenching and installing new wires in conduit would be cost-prohibitive. The much more elegant soution is the installation of a low frequency radio controlled switch to trigger the pump relay. Since electricity is not readily available at the tank site, a sola panel/battery system will need to be installed to power the transmitter.	М е- у р г	10	C	Our two 15,000 gallon storage tanks are over 30 years old. Because the tanks were allowed to be installed without shut-off valves, it has been impossible to isolate individual tanks for maintenance. Several small leaks have developed and been repaired, but it is time for a complete refurbishing of the tanks inside and out, and uggrading to code with proper shut-offs and man- access side doors. Concurrently, the direct wired connection between the tank float switch and pump relay has been compromised (gophers, earth movement?). I would like to replace the problematic connection with a radio controlled remote switch.	15,000	19	60 05	Monterey	u	2009
1693 2700624	2700624-001	LEAFWOOD COMMUNITY WA		Replace storage tank with a steel tank. Possibly add a chlorination system.	М	10	с	Replace old, concrete storage tank.	35,000	23	66 05	Monterey	Ш	2006
1694 2700656	2700656-002	MORO COJO MWA		Storage tanks and wells need to be repaired and/or replaced.	Μ	10	С	System has structural and sanitary hazards and may have a problem with cross-connection control.	13,000	19	67 05	Monterey	Ш	1998
1695 2300730	2300730-003	Westport County Water District	Rebuild and Refound 100K ga Redwood Watertank	Our Plan is to take down the tank, the staves appear to be sound, store them in damp condition. Re-found the tank with a system of a concrete perimeter and interior posts, build a new floor, re-erect the staves, re-plumb and build a new roof with access and stainless steel ventilation screen. We will then sanitize the re-build tank and reconnect it to the system.	м.	10	с	Westport County Water District has since the mid 1970's stored its finished water in a 100,000 gallon redwood water tank The floor has begun to leak past the point of control with approved caulking products. Thanks to a Prop50 grant for a 100,000 gallontank that should be on line November 2009 we will have no interuption in service nor any need of boil water notices to rate payers.	80,000	69	70 03	Mendocino	II	2009
1696 2701034	2701034-001	APPLE AVE WS #02		Replace sections of the distribution system which may contain the contamination.	М	10	с	Sections of the distribution system need to be replaced.	50,000	18	75 05	Monterey	Ш	1998
1697 1000063	1000063-002	NEW AUBERRY WATER ASSOCIATION		Replace circuits and service lines	М	10	С	Power to wells is not reliable	10,000	36	80 23	Fresno	Ш	1999
1698 1000063	1000063-003	NEW AUBERRY WATER ASSOCIATION		Construct new storage tank	м	10	С	Storage tanks is deteriorating	50,000	36	80 23	Fresno	111	1999
1699 1000063	1000063-001	NEW AUBERRY WATER ASSOCIATION		Construct Two new wells	М	10	С	Both well is old and deteriorating	20,000	36	80 23	Fresno	III	1999
1700 1500508	1500508-001	TWIN PINES MOBILEHOME PARK	Second Well for the Water System or inter-tie project for more reliable source capacity	FUNDS NEEDED TO DRILL A SECOND WELL OR CONSOLIDATE WITH NEARBY WATER SYSTEM. THE GOAL IS TO ENSURE SERVED PEOPLE OF A RELIABLE DOMESTIC WATER SUPPLY.	м	10	С	With only one well as a source of water supply, this public water system is deemed to have unreliable source capacity.	200,000	40	92 19	Kern	ш	2008
1701 4500084	4500084-001	MCARTHUR MOBILEHOME PARK		Install additional well, storage tanks and pumps to provide the reliability required by the Waterworks Standards.	М	10	С	No backup source for existing low capacity well. System not fulfilling Section 64560(a)(6) (minimize the effects of power supply failure) of the Waterworks Standards.	50,000	41	99 02	Shasta	I	1998
1702 1502690	1502690-002	DUNE III Water Co., LLC	Loop system	Construct 8400 linear feet of water line.	М	10	С	System not looped, inadequate piping, not connected to possible additional backup sources.	180,000	32	100 19	Kern	Ш	2007

1703 1900975 1704 0900102 1705 1000260 1706 5200503	1900975-003 0900102-001 1000260-001 5200503-003	WHITE ROCK LAKE RV PARK GOLD BEACH PARK SANDY CREEK VILLAGE MHP Mineral County Water District	White Rock Lake Well / Water Tank replacement	As a part of our commitment to comply, we are requesting grant funding to replace the water tanks which are old, and have suffered some corrosion due to extreme cold in winter, and extreme heat in summer. Temps reached 100-105 consistently for over a three week period when we had positive coliform tests. Morrison Well Maintenance indicated that many wells were experiencing the same type of test problems due to high summer temperature readings. I would also like to be able to replace some piping, and add an additional pump, and upgrade the electrical system for the new tanks as they were put in many years ago. I sincerely feel that the immediate replacement of the tanks will resolve the coliform positive tests. I have quotes available for the 2 tanks, \$8,018 from Triple J Tanks phone 661-399-3943. There will be additional hookup and installation charges verbal quotes \$2,000.00 to 3,000.00 from Morrison well maintenance. Written quotes pending. Will have quotes on an additional pump, pipe replacement and electric upgrade pertaining to new water tanks. A.S.A.P. We do need extra time to work on pipe replacement as it is a large job, and will take some time and planning. It will be optional, only if the New Tanks resolve all coliform positive test issues going forward. Current word count, click Here Needs second well and additional storage to meet demands reliably. CONSTRUCT A NEW WELL AND UPGRADE THE DISTRIBUTION SYSTEM. Drill second well and add more storage tanks	м , м м	10 10 10 10	C C C	Received County of Los Angeles Public Health Ltr: dated February 19,2009. Indicating that June 2008, and July 2008, the White Rock Lake Water System was in violation: 2CCR, Title22, Chapter15, Article3, Section66426.1(b)(2) I will be checking with issuing agency as the violation referenced is the June 2007, & July 2007 and it appears, that the 2008 violation's references are a typing error. Boil water order posted on 07/14/07. Boil water lifted, after White Rock Lake water samples tested negative for coliform. Morrison Well Maintenance had been hired (State liscensed and recommended) and serviced our water system, and have been maintaining it per state requirements. They also installed a new chlorination system. I am requested to attend a hearing on March the 18,2009, and the purpose of the hearing exact quote. "As a result, a representative of White Rock Lake RV Park Water System is hereby requested to appear at an Administrative Hearing regarding this violation. The representative will need to explain because why this matter should not be referred to the District Attorney's Office for further legal action. etc.Again the Date of violation is listed on this letter as June and July 2007, nothing indicative of a June and July 2008 violation. Because we had complied in 2007, and did everything we were requested to do per Richard Lavin the DHS representative that services our Previous well flooded; new well completed, but needs additional work. NEED A NEW WELL, AND REPLACE OLD DISTRIBUTION SYSTEM.	20,000 100,000 15,000 50,000	50 50 47 134	100 16 100 09 100 23 109 21	Los Angeles El Dorado Fresno Tehama	IV I III	2009 1998 1998 2000
1707 3600123	3600123-001	Hi Desert MWC		Construct new hydro tank	M	10	c	Old hydro tank needs replacement	38.000	32	109 21	San Bernardino	V	1998
1708 2000593	2000593-001	OAKHURST MOBILE HOME ESTATES		Install a backup power unit.	М	10	C	No backup power available. System lack reliability.	10,000	73	114 11	Madera	ш	1999
1709 5400940	5400940-001	SIERRA KING HOMEOWNERS ASSN		Provide additional storage and a backup well. Additional storage needed to ensure adequate contact time during high water demand periods.	м	10	С	Inadequate storage resulting in shortages requiring temporary reduction in water usage. Also have documented coliform contamination of the well requiring continuous disinfection treatment (which has been installed)	70,000	40	120 12	Tulare	ш	2003
1710 5000010	5000010-001	TID/ LA GRANGE WATER SYSTEM	Domestic Water Distribution Mainline and Service Replacement	A new distribution system has been designed and approved by the Stanislaus County D.E.R. in which will bring all water conduits upto current construction materials by the use of PVC C900 pipe and fittings, to be located within the existing street sections. 6200 linear feet with 39 gate valves for proper isolation.Current fire department ordinances met and the installation of 10 hydrant locations.175 new service laterals to be supplied and connected to existing coaches and/or pedestals for future coaches.The existing water main is to be abandoned and left in place.An approved set of plans and engineers take off and estimate are available upon request for review.	M 2 2	10	с	Pinewood Meadows Mobile Home Park is served by a public water system (well) and serves low-income, affordable housing families. The existing domestic distribution system and lateral services were constructed approximately 40 years ago using buried steel conduits. The systems age is cause for increasing deteriation and repairs, as well as sustaining significant pressure issues due to substancial mineral and deposit build up which is constricting the pipe at an average of approx 80% blockage. The mainline discovered is currently a 4" conduit with laterals no more than 2" in service, therefore with the existing deposits creating dramatic pressure issues and costly repairs for attempts to maintain state guidelines for end users. Pipe integrity is compromised from deteriation and has experienced numerous breaks which require complete system shutdown due to no existing isolation, bac-t and flushing to bring back on line. A technical report can be provided for further description upon request.	1,318,500	77	120 10	Stanislaus	Ш	2009
1711 5200585	5200585-001	MINERAL HOMEOWNER S ASSN		Replace distribution system pipes.	М	10	С	Ancient undersized distribution system with many leaks	300,000	112	125 21	Tehama	I.	1998
1712 2701658	2701658-001	ARROYO CENTER WC		Replacement of distribution system facilities, e.g. pipes, valves	, М	10	С	Old, leaky and under-sized pipes and valves in distribution system [No documentation provided]	30,000	65	130 05	Monterey	Ш	1999

1713 2701658	2701658-002	ARROYO CENTER WC		Add about 40,000 gallons of storage	М	10	С	Inadequate water storage [No documentation provided]	30,000	65	130 05	Monterey	П	1999
1714 1500401	1500401-004	METTLER COUNTY WATER DISTRICT	Mettler New Well & Wate Meter Replacement Project	r The proposed project would call for a design and construction of a test well then developing a production well and water lines to connect to the community water system. The well site will be on land donated by the Water District. This will provide an alternate water sypply to the community when the old fails, is out for repars, or contaminated. The project also will replace to and failed water meters in the community which have stopped functioning making it hard for the District to fairly and proportionately charge customers on actual water use.	M	10	c	Mettler is a disadvantaged community located several miles from other community water systems. Their only well is about 15 years old and is their only source of water supply for the community. If the pump fails, collapses, or becomes contaminated; the community will be without water. A second or back-up well is recommended to prevent the community from going without water during failure, maintenance to the well, and to have continuance of service for the residents in the community. A source water assessment has documented the presence of septic systems and discharge of graywater within 800 feet (Zone A) of the well and the influence on local groundwater (high nitrate levels 238 & 98 ppm in two previous community wells).	924,600	40	150 19	Kern	II	2009
1715 2210901	2210901-002	MPWD-Coulterville CSA 1		INSTALL A PRESSURE SYSTEM FOR THE HIGHER ELEVATION CUSTOMERS AND INSTALL ALL NEW METERS AND VALVES.	M	10	с	HIGHEST PORTION OF THE DISTRIBUTION SYSTEM RUNS OUT OF WATER DURING THE SUMMER MONTHS. CORRODED AND LEAKING VALVES AND OLD METERS THAT NEFD TO BE REPLACED	200,000	98	165 11	Mariposa	Ш	1998
1716 4700551	4700551-002	Copco Lake MWC	Copco Lake Mutual Water Company	Replacement of at least 500' of water mains. Replace liners in storage tanks and the complete replacement of one 30,000 storage tank. Install new chlorinating system. Install low water and security alarm with standby generator. Install security fence and gates.	M	10	с	The drinking water system was constructed in 1965. Water is obtained from wells and treated with chlorine gas. Dam removal proposals could impact the water companies ability to provide services should the lands now covered with water be subdivided. There is 500' of water mains need replacement. One storage tank is to old for refurbishing and need replacement. Other 2 storage tanks are also very old and either need replacement or new liners.	100,000	63	181 01	Siskiyou	I	2009
1717 5500080	5500080-002	TWAIN HARTE VALLEY MWC		INSTALL 4,752 FEET OF 6 INCH DIAMETER PVC PIPFLINFS.	м	10	С	OLD WELDED STEEL PIPELINES NEED TO BE REPLACED.	35,640	106	196 11	Tuolumne	Ш	1998
1718 2000551	2000551-001	MD#07 MARINA VIEW HEIGHTS		INSTALL AN ADDITIONAL 100,000 GALLON STORAGE TANK.	м	10	С	THE SYSTEM'S TWO WELLS BARELY KEEP UP WITH SYSTEM DEMANDS DURING THE SUMMER.	100,000	74	200 11	Madera	ш	1998
1719 5500053	5500053-001	LEISURE PINES MUTUAL WATER CO	Increase Well Capacity	INCREASE DEPTH OF EXISTING WELL FROM 325 FEET TO EITHER 600 FEET OR 1000 FEET DEPENDING ON ITS CAPACITY. INSTALL NEW PUMP, METER, AND WIRING.	М	10	С	SYSTEM LACKS WATER RELIABILITY.	60,000	85	200 11	Tuolumne	ш	1998
1720 2800516	2800516-001	TUCKER ACRES MUTUAL WATER CO.		Put in approximately 1,100 feet of new water line, sawing throught road then patching, 3 shut-off valves,	М	10	с	old galvanized pipes from well to homes on Tucker Road and Peterson Drive are leaking badly.	60,000	23	200 03	Napa	II	1999
1721 4000512	4000512-001	BELLA VISTA MOBILE LODGE	Lake Nacimiento Water Line Project	one blow-off valve, necessary permits Connect the Bella Vista Mobile Lodge water system, owned and operated by The Lewis C. Pollard Family Trust, to either Paso Robles Beach Water or Morro Rock Mutual Water Company to provide treated water that meets California Department of Public Health Safe Drinking Water Standards.	M	10	С	The Lewis C. Pollard Family Trust has been working with the San Luis Obispo County and CSA No. 10 for some time to procure a 25 acre foot per year entitlement from The Nacimiento Pipeline Project that is currently nearing completion. The Trust currently operates a community water system with 85 connections serving a population of approximately 150 people. The buy-in cost to this project for the Trust is \$610,000.00 wich must be paid up front. The annual operation and maintance costs are estimated to be \$9,000.00 to \$11,000.00 per year. The wells that we are now operating from have a high mineral content and the arsenic level in our water exceeds safe drinking water standards established by CDPH. We have been directed by the CDPH to be in compliance by December 2010. This alternate source of water would bring us into compliance.	610,000	84	200 06	San Luis Obispo	IV	2009
1722 2800516	2800516-002	TUCKER ACRES MUTUAL WATER CO.		Replace 1,100 feet of water main.	м	10	с	Old galvanized mail leaking badly	60,000	23	200 03	Napa	Ш	2000

1723 5500104	5500104-001	CASCADE ESTATES	Well water storage tank upgrade and replacement	An engineering study will be conducted to accurately design and size the storage system, meet distribution requirements and comply with applicable governmental and code requirements, once approved by applicable agencies, the larger tank will be plumbed out of the system, dismantled and removed Once removed, the base and foundation for the new storage tanks will be constructed Once complete, the new storage tank(s) will be installed, plumbed in, with an electronic control system bypassing the second existing storage tank This second tank will dismantled, removed, and the project will be complete	M	10	C	Well water is pumped from two wells into two existing storage tanks and distributed throughout a 113 manufactured housing community The storage tanks are old and need to be replaced We have been under pressure from Tuolumne County Environmental Health to replace the tanks	85,000	104	210 11	Tuolumne	Ш	2009
1724 1000061	1000061-001	MUSICK MEADOWS #2		CONSTRUCT ANOTHER STORAGE TANK AND IMPROVE	М	10	с	INADEQUATE SOURCE AND STORAGE RELIABILITY.	275,000	70	220 23	Fresno	Ш	1998
1725 5500040	5500040-001	BLUEBELL VALLEY MWC	Distribution plant upgrade	1. Replacement deteriorating 40 year old metal pipe through field 2. Replacement unpressurized 30 plus year old 2 inch class 160 pvc distribution line to 6 inch pressurized distribution to hill top residences.3. Install fire hydrants same service area4. Install valves for service ability5. Install pressurized system to maintain minimum required flow to hill top residents.6. Install back flow prevention from residences above main distribution service	Μ	10	с	Frequent repair to deteriorating metal distribution pipe. Maintaining minimum pressure supply and fire flow requirements to hill top residents. Comply with Title 10 section.140.71.4 through 260.140.71.5 and 260.140.71.7 (1.)Install back flow devises to comply with Title 17 back flow prevention 7603	800,000	90	230 11	Tuolumne	Ш	2009
1726 3600279	3600279-002	Golden State Water; Desert View	GSWC - Desert View Pipeline Replacement Project	The proposed project is to replace the existing mains in the Desert View Road, the Right of Way east of Milpas Road, the Right of Way South of Del Sol Road and in Wallace Road as identified in the recently completed master plan for the desert view system.	Μ	10	С	There are fire flow deficiencies in the Desert View system due to undersized 1950's era mains installed that range in size from 1.5 inch to 4 inch in diameter.	992,000	46	230 13	San Bernardino	V	2009
1727 5400934 1728 5000017	5400934-001 5000017-001	PONDEROSA CSD PARK HEIGHTS MUTUAL WATER CO		Replace 210,000 gallon storage tank REPLACE DISTRIBUTION SYSTEM AND UPGRADE WELL.	M M	10 10	C C	Collapsed 210,000 gallon storage tank OLD DISTRIBUTION YSSTEM AND OLD AGE WELL.	150,000 400,000	116 95	232 12 250 10	Tulare Stanislaus	III III	1999 1998
1729 3600166	3600166-002	Mill Creek MSC	Mountain Home Village Water Storage and Distribution Project	Our project entails the purchase and installation of an additional water storage tank, to bring our water company into compliance with CCR Section 64565, and a 4-inch water distribution main line, to comply with CCR Section 64628. We have a quote of \$86,750 for a 141,039 gallon steel-bolted water tank. The foundation preparation and tank installation (including plumbing materials) is quoted at \$14,000.1988 feet of our main water distribution line is deteriorated 2-inch steel pipe. We have a quote of \$88,000 (\$44,/foot) to replace this water main with 4-inch PVC Schedule 40 pipe. This quote includes labor, all materials (pipe, valves, and hydrants), and roadway repair (asphalt, equipment, and labor) in conjunction with installing the new 4-inch water main.	И	10	С	Our water company does not currently comply with Sections 64565 and 64628 of California Code of Regulations requiring current standards for water storage capacity and water main distribution lines. We have a 42,000 gallon steel-bolted water storage tank with a chlorination facility. The stored water is distributed through a main water line that, for 1,998 feet of run, is 2-inch steel pipe (the rest is 4-inch steel or Schedule 40 PVC pipe). On hot days, in spite of water conservation measures, our tank is occasionally drained to the extent that some residents we serve are deprived of adequate domestic water. Extrended electrical power outages resulting from storms, local forest fires and other causes stop operation of the water well pump.Our water storage tank becomes vulnerable to drainage, which jeopardizes both domestic water distribution and fire fighting resources.	174,500	63	315 13	San Bernardino	v	2009
1730 1500557	1500557-001	STOCKDALE RANCHOS MUTUAL WATER CC	Stockdale Ranchos-Second Well or Intertie with City of Bakersfield	As part of the project, a second well will be drilled or intertie with City of Bakersfeld will be developed.	м	10	с	Stockdale ranchos MWC has only one well. With only one source of supply, the water system is deemed to be unreliable	500,000	91	325 19	Kern	ш	2008
1731 5510007	5510007-001	DEL ORO WATER COMPANY - STRAWBERRY	<ul> <li>Del Oro Water Company -</li> <li>Strawberry District -</li> <li>Replacement of Upper</li> <li>Diamond Tank</li> </ul>	Replacement of the Upper Diamond Tank in kind.	М	10	с	The Upper Diamond Lake Tank is leaking and is beyond repair. Leakage, in addition to loss of water in a water poor area, is eroding the hillside	500,000	373	330 11	Tuolumne	III	2009

1732 5510007	5510007-002	DEL ORO WATER COMPANY - STRAWBERRY	f Strawberry District - Replace Upper Diamond Tank	The project would consist of replacement of the existing M 25,000 gallon Upper Diamond Lake Tank to a 200,000 gallon tank. The tank will be designed to meet current storage requirements as detailed in the California Waterworks Standards.	10	С	The Upper Diamond Lake Tank is leaking and beyond repair. Leakage, in addition to loss of water in a water poor area, is eroding the hillside. The existing tank is undersized and obsolete for the water system.	500,000	373	330 11	Tuolumne	Ш	2009
1733 3702754	3702754-001	RANCHO CORRIDO RV RESORT	Water storage increase for supply and fire protection	As a minimum: recommend installation of two pressure M tanks (1000 gallons each) and a back-up propane powered generator at the well head (with 24 hour propane capacity).(This would (a) eliminate the need for a dedicated transmission line, (b) provide flow during peak intervals with 20 psi or higher at the highest elevation, (c) increase fire protection capability, (d) provide flow during frequent power outages and (e) allow for maintenance without shutting down the complete system.Ideally, a minimum 40,000 gallon storage tank should also be installed and this would a substantial additional cost.	10	с	Current system has no storage and relies on what can be pumped out of the well. There is no back-up well and no generator. When outages occur, the system is at risk for introduction of contamination from low pressures. This would violate the Total Coliform Rule and specific sections of the California Safe Drinking Water Act, Title 22.	60,000	130	350 14	San Diego	v	2009
1734 3702754	3702754-004	RANCHO CORRIDO RV RESORT	Storage Tank	A minimum 40,000 gallon storage tank would be M constructed to compliment supply from a high yield well (nominal 500 gallon/minute). Plan checking, proof of seismic stability of the soil, disinfection, construction of a manway, safety access ladder, chemical testing and installation of a fire hydrant at the storage tank site are considered. The storage tank would meet AWWA Specifications and requirements of Title 22. The result would be ability to meet minimum fire protection constructs in the event of an outage.	10	с	There is no storage tank for this system and supply is dependent on the nominal 500 gallon / minute well with supply with a variable flow demand device. The frequency of outages puts this system at risk for introduction of contamination and the lack of storage hinders the capability for fire protection. This "existing community" water system is not in compliance with the California Safe Drinking Water Act - Title 22 of the California Code of Regulations because it lacks a storage capability in the event of an electrical outage.Note: A back-up well and upgraded distribution system are being addressed as a separate matter.	80,000	130	350 14	San Diego	V	2009
1735 3702754	3702754-002	RANCHO CORRIDO RV RESORT	Construction of second well for back-up.	A minimum 8 inch diameter well with a 100 foot annular M seal (to bypass nitrate bearing sources) to a nominal depth of 300 feet. A larger diameter well is desirable but would incur additional costs. The drilling is more difficult than normal appearances infer because of large subsurface boulders in the alluvium.	10	с	The existing system has no back-up well and has frequent outages. A back-up well would assure a safe and continuous water supply when the existing well might be out of service. (A generator has been recommended for emergency power to the main well and could be utilized for the back-up well too).Construction of the well would be more costly than appearance because of massive subsurface boulders in the alluvium. Funding is requested for a minimum size well and not to benefit the owner with a larger diameter and yield with public monies and if a larger capacity well is desired, the cost difference would not be from other funding.	85,000	130	350 14	San Diego	v	2009
1736 3702754	3702754-003	RANCHO CORRIDO RV RESORT	Distribution system upgrade	Construction of a replacement distribution system (abandonment of the existing 2 inch PVC pipe) with 4 inch pipe meeting AWWA C-9-00 specifications; installation of fire hydrants and other appurtanances to conform to Title 25 (Mobil Home Park Act) and Title 22 sections related to the California Safe Drinking Water Act.	10	С	The existing distribution system is only 2 inch diameter and doesn't allow a minimum flow of 130 gal./min for fire flow. Upgrading to a 4 inch diameter and AWWA C- 900 PVC would bring compliance with the California Code of Regulations-Title 22. In the event of a power outage, there is no water for fire protection. (A back-up well and new storage capacity is a separate matter).	95,000	130	350 14	San Diego	v	2009
1737 5700712	5700712-002	DUNNIGAN WATER WORKS	Dunnigan WaterWorks - New Well	Drill, construct an install necessary equipment for a new M well to a depth of approximately 1100'. Add new PG&E electric service and 850' of 4" C900 piping for connection to existing system.	10	с	Dunnigan Water Works (DWW) is a small communmity water and sewer system that depends on one well as their source for safe drinking water. The old backup well produces coliforms, is shallow and groundwater table is dropping.	325,000	68	400 09	Yolo	I	2009
1738 1500459	1500459-001	LAKE OF THE WOODS MOBILE VILLAGE	Lake of the Woods Mobile Village-Second Well/intertie with Lake of the Woods MWC	As part of this project, Lake of the Woods Mobile Village M will either drill a second well or develop an intertie with Lake of the Woods Mutual Water Company.	10	С	Lake of the Woods Mobile Village has only hardrcok well. Therefore, the water system is not reliable.	500,000	106	465 19	Kern	Ш	2008

1739 1210024	1210024-004	Westhaven C.S.D.	New tank and repair existing tank	The proposed solution involves construction of a second tank of approximately 80,000 gallons, which could be used to serve the system during replacement of the roof on the existing tank and then to supplement the system's storage capacity once both tanks become operational.Because the system is located in a highly corrosive coastal environment, both the new tank and the replacement roof are proposed to be constructed or materials having high resistance to corrosion.Recent quotes obtained by the District are as follows:\$153,429 for an 83,000 gallon glass-fused-to-steel bolted tank with aluminum roof.\$149,500 (\$130,000 +/- 15%) for an all-aluminum replacement roof on the existing tank.The additional \$97,000 in the request is for project management, engineering, piping, pumps and appurtenances.	f	10	c	The water system has just one storage tank, which has a total capacity of 100,000 gallons and a service capacity of 85,000 gallons. The system's maximum day demand in 2008 was approximately 56,000.The concrete tank, constructed in 1985, has a metal roof supported by fir trusses. Constant dampness within the roof space has led to rotting of some of the truss work. The rotting is seriously advanced in portions of the structure. Failure to address the problem is expected to lead to contamination of the treated water by debris falling from the rotting trusses and ultimately to lead to the collapse of the roof, allowing further contamination from the outside environment.Following a CDPH annual inspection in 2005, replacement of the tank roof was listed in the System Deficiency Record as "system or operational defect and/or potential health hazard - costly to correct - to be included in any long-range water improvement project". To replace this roof while continuing to provide safe drinking water from the tank seems impractical at best and more likely impossible.Otherwise, the tank is in excellent condition. It has a 60 mil PVC liner installed in 1991 and could potentially provide many more years of reliable service once the roof has been replaced. The District currently has approximately \$120,000 in capital reserves and several miles of 40-year-old, undersized water mains in need of replacement. The average water bill of the	320,000	213	490 01	Humboldt	I	2009
1740 5510027	5510027-002	TUD-Cuesta Center-Lambert Lakes	Subsurface reservoir liner: in the Cuesta / Lambert system	s This project would provide funding to purchase and installation of the liner with a floating cover.	Μ	10	c	There are two subsurface treated water reservoirs in the Cuesta / Lambert system. Although they are gunite lined and are under a roof neither of them have modified PVC liners with floating covers. Without complete liners with floating covers the treated water is subject to contamination. This contamination can be from rodents or debris from the roofing system.	76,000	200	491 11	Tuolumne	Ш	2009
1741 2701676	2701676-003	SAN LUCAS WD		Design and engineering of a new water tank.	М	10	с	Potential contamination from aging, leaking, and weakened wooden water tank	77,000	88	500 05	Monterey	Ш	1998
1742 4000222	4000222-005	AVILA BEACH COMM SERVICE DIST		Construct new storage tank.	М	10	С	Steel tank corroded, PCE contamination from failed	450,000	171	600 06	San Luis Obispo	IV	2001
1743 4000222	4000222-003	AVILA BEACH COMM SERVICE DIST		Replace corroded tanks, valves and system piping.	м	10	С	Flow restrictions from old reservoirs to distribution, corrosion problems, old valves & broken.	250,000	171	600 06	San Luis Obispo	IV	2001
1744 3600258	3600258-001	Sky Forest MWC	Kuffle Canyon water main line replacement project	There has never been a compliance problem with this main line. The problem has been providing enough flow to supply the 10 homes and other new homes that are currently being built and those that may be built in the future. In the "Problem Description" section I hopefully described the problem in enough detail for the reviewers to determine project eligibility.	M V	10	c	Replace a 1 1/2" steel main line that is approximately 75 years old. This line feeds approximately 10 homes. The line barely provides enough water for 3 homes because it is blocked with a build up of calcium and rust. This line is very fragile and runs along a heavily traveled highway. The line requires constant repair due to the rumbling of heavy trucks. This line should have been replaced years ago, but funding has always been an issue. Our plan is to replace this line with two 2" poly lines on both sides of the highway and reset all ten meters so that the house feeds are not underneath the highway. No drinking water standard has been violated. Public notification would require a Do Not Drink Order 3 days following installation and cleansing of the line.	100,000	121	605 13	San Bernardino	v	2009

1745 3600200	3600200-001	Rancheritos MWC	Phase 3, 4 and 5 Pipeline Rehabilitation Project/Storage tank installation	In the previous phase we installed approx 660 feet of new main but were not able to finish the phase to the well due to the costs of the valves and related equipment. We have an earthquake resistant tank connector which we would like to install but need the attachments to make this happen. This does not include storage tank installation or security fencings of this site. When this section of the rehabilitation is complete, we will have 2 - 1/2mile sections to rehab, and a 1/4 mile w/well tie in #2 to complete the rehabilitation of the one system. System #2 needs approx 3/4 mile of mainline rehabilitation and well site improvements. I.e Fencing and security systems. The tank we purchased two years ago is a 225,000 bolted steel tank, three 8' sections high and 40' in diameter. We plan to use 2-8' sections high soft on and an additional top and bottom to complete a second tank. This would give us 151,000 gal. tanks one at well site #1 and one at well site #3. We purchased 1/3 acre of property several years ago to increase the size of well site #1 in preparation for the installation of future equipment. The installation of tanks will make it necessary to install booster stations at each well site, as we currently use hydrophneumatic pressure tanks to operate the systems. This change would make using expensive power to keep the system under pressure. With	M , , 2-	10	C	These projects are necessary to replace water mains which were installed in 1956. We are experiencing leaks, and red water complaints. All but 2.5 miles of the 11 mile system have been replaced with C-900 PVC pipe. The Fire Department now insists we replace old 6" mains with 3" mains to address fire flow requirements. This has doubled the costs of installing mains. We currently have only about \$50K in our reserves which is needed to handle a well emergency if necessary. This leaves no money to replace aging mains. We also have purchased a 250,000 gal storage tank, but have no funds to install it in our system. The fire department would like to have the tank installed to guarantee fire flow capacities for community safety. We currently do not use chemicals to treat our water, but are just about a 6.0 earthquake from having a catostrophic system failure. With all but 20% of the system in exellent shape, it is sad we are not able at this time to complete the system. We currently operate two seperate systems, with 92 meters on one system and 157 meters on the second. We have 3 wells w/2 on the larger system and one on the smaller system. The two systems are not tied together and are about 1.5 miles apart. In the final area of need, I would like to mention the well sites are currently protected with just chain link fences. We are at the mercy of vandals and thieves with little more than bolt cutters. We would	900,000	131	655 13	San Bernardino	V	2009
1746 5610006	5610006-004	YERBA BUENA WATER COMPANY	Replacement of 56 year old Water Mains	The project consists of replacing approx 5,200 linear feet of old and undersized (3 inch and 4 inch) cast iron water mains with new Cl. 150 PVC 6 inch and 8 inch mains along with new valves, lateral lines, meters and hydrants appurtenant thereto. There will be no significant environmental impacts. The project is exempt under CEQA and excluded under NEPA since it only involves replacement of existing water lines and appurtenances. All replacement water lines will be within the existing right of way and in the same location.	Μ	10	С	Approximately 5,200 linear feet of water mains are undersized and at the end of their service life requiring increased maintenance and repair of breaks and leaks. This utility, which draws solely from groundwater wells, is the only source of water for this entire community, as MWD facilities and water are not available.	925,000	240	690 06	Ventura	IV	2009
1747 3600220	3600220-001	CSA 42 Oro Grande		Construct new second reservoir	м	10	c	Undersized storage facility	100 000	140	700 13	San Bernardino	v	1998
1748 3600220	3600220-003	CSA 42 Oro Grande		Develop new master plan	м	10	c	Master plan does not rovide for reliable water system operation	50,000	140	700 13	San Bernardino	v	2000
1749 3600220 1750 3600220	3600220-004 3600220-005	CSA 42 Oro Grande CSA 42 Oro Grande	County Service Area 42 Water Reservoir	Improve well by raising above grade Plan, design and construct a replacement .25 million gallon reservoir.	M M	10 10	c c	Well does not meet waterwork standards This is the only potable water reservoir serving the community of Oro Grande (CSA 42) The reservoir shell is severely corroded due to its age. The shell is currently leaking and may fail. As the only reservoir for the community, it can not be taken out of service for rehabilitation and need to be replaced. The community is not economically able to replace using local funds.	35,000 300,000	140 140	700 13 700 13	San Bernardino San Bernardino	V V	2000 2009
1751 0800555	0800555-005	Gasquet C.S.D.		Purchase a 100 KW 3-phase generator.	М	10	С	Does not meet Section 64560(a)(6) of the Waterworks Standards. Inability to supply water during electrical outages.	32,000	222	775 01	Del Norte	I	1998
1752 0800555	0800555-002	Gasquet C.S.D.		Build distribution system to serve these residences filtered water.	м	10	С	Unable to serve 28 residences.	250,000	222	775 01	Del Norte	I	1998

## 1753 1510051 1510051-001 LEBEC COUNTY WATER DISTRICT

# Replacement of Lebec Road Water Main

Interconnects Project

The project consists of the replacement of 3,500 feet of M 8-inch diameter pipe in Lebec Road. This pipeline is the main backbone that delivers water to the older areas of the District. The other project components include isolation valves, connections with laterals and installation of 4 new fire hydrants assemblies. The implementation of this project will greatly reduce the potential for pipeline breaks and leaks. Ultimately the project could save the District up to 10 AF per year in water losses. More importantly, potential contamination of the distribution system is reduced thereby ensuring compliance with drinking water standards. Also, outages due to breakages will be less likely to occur resulting in better water service to the customers.

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Kern County, 40 miles south of Bakersfield. The District is within the Lebec Census Designated Place, which has a Median Household Income (MHI) of \$39,063 (2000 Census data). Some of the older pipelines in the system have had multiple leaks and breakages occur throughout the year resulting in water losses and financial hardship to the District. The worst pipeline in the system is 3,500 linear feet of 8-inch diameter pipe in Lebec Road. This pipeline is the sole pipeline that delivers water to the older areas of the District. The pipe (installed in the 1970s) is polyvinyl chloride (PVC) with solvent cement-welded joints. The contract operator has noted a high failure rate of these joints probably because of poor construction and lack of joint flexibility. This joint type is now not commonly used in municipal water systems due to past failures. Push-on or mechanical joints are now commonly used and allow pipe flexibility and movement. The District has repaired leaks in this pipeline multiple times in the past year alone. The operating pressure in the pipeline is very high, ranging from 90 to 120 psi, which increases the potential for leaks and breakages. Each time the pipeline breaks, the District incurs a significant loss of water due to the high pressure and the absence of oncall District employed staff.Public health is currently at risk with any leak or breakage in the distribution

The District is located in the Tehachapi Mountains in

The Morada area water systems consists of fourteen wells feeding into nine independent distribution networks of 6-inch and 8-inch water lines. The systems serve a total of 728 connections operated and maintained by nine special districts: Morada Estates North Wilkinson Manor Wilkinson Manor Zone A Morada Estates, Morada Manor, Morada Acres, Almond Park, Gayla Manor, and Shaded Terrace. Among the nine systems, only three have backup well(s). Without interconnecting the systems together, some networks would not have continuous water service when their only well in the districts require maintenance or repair. Therefore, interconnecting all nine networks into a single distribution system will greatly enhance their service reliability. This project empowers the nine (9) Districts to improve their energy footprints. When we enter a state of emergency for energy, the districts with less efficient wells can acquire water from districts with more efficient wells via the interconnections to reduce the energy consumptions.

## 1754 3910024 3910024-003 San Joaquin County - Wilkinson Manor

Morada Emergency Water The work, in general, consists of 3 system interconnects M with bi-directional flow meters, and the retrofit of 5 existing connections with bi-directional flow meters. The proposed interconnects are as follows: An interconnect of approximately 500 feet of pipe connecting Wilkinson Manor Zone A to Morada Estates. The pipe starts at the intersection of Cole Drive and Mosher Drive, continuing south along Cole Drive, crossing the Cole Drive Bridge and ending at the intersection with Ashley Way.An interconnect of approximately 3,900 feet of pipe interconnecting Morada Manor to Almond Park. The pipe starts on Madeline Drive approximately 200 feet north of Morada Lane and continues east down Morada Lane to Alhambra Avenue, then south to the intersection of Alhambra Avenue and Garv Avenue. An interconnect of approximately 4,800 feet of pipe interconnecting Morada Acres to Gayla Manor. The pipe starts at the intersection of Hildreth Lane and Hope Lane, continuing east down Hildreth Lane, then turns south for approximately 950 feet on Alhambra Avenue, and turns west at the intersection of Alhambra Avenue and Shippee Lane continuing down Shippee Lane, turning south at the intersection of Meath Drive to intersect the Gayla Manor Water System at Meath Drive.

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1755 3600270	3600270-003	Golden State Water-Mor Del Norte	GSWC-Morongo del Norte Navajo Tank	The scope of service includes the demolition of the existing bolted steel tank, site preparation including grading for new tank, securing and transporting 0.25 MG Aquastore tank from Wrightwood, erecting tank on new foundation ring wall, and increasing the capacity of the tank to .33 MG in order to sustain local demand (including purchasing and installing missing parts to Aquastore tank and additional tank ring). The scope also includes the installation of site piping, temporary storage tanks, and all other appurtenances. The plans for the project are completed and the estimated construction start date will be in July of 2009.	M f	10	С	The existing Navajo Reservoir is too small to meet the current water demand. The existing tank is also old, and has reached the end of its useful life. Based on the current master plan, a new and larger tank is needed to supply adequate storage for current water demand and fire flow.	548,130	174	870 13	San Bernardino	V	2009
1756 3600270	3600270-004	Golden State Water-Mor Del Norte	GSWC - Morongo Del Norte - Pipeline Replacement Project	The proposed project is to replace the existing mains along 29 Palms Highway from Lanning to Piedras, Bella Vista North of 29 Palms, Sundown Trail, Bella Vista South of 29 Palms, Various Lines at 29 Palms Highway, Lanning Lane, Elm Street, Cedar Drive and the North End of Navajo Trail as identified in the recently completed master plan for the Morongo Del Norte System.	Μ	10	с	There are fire flow deficiencies in the Morongo Del Norte system due to undersized 1950's era mains installed that range in size from 2 inch to 4 inch in diameter.	2,777,000	174	870 13	San Bernardino	V	2009
1757 3610108	3610108-001	GOLDEN STATE WATER CO - LUCERNE	GSWC - Lucerne Valley Pipeline Replacement Project	The proposed project is to replace the existing mains in Custer Ave., Carson Rd., Agate Rd., Butte St., Amber Rd Mesa Rd. north of Meb Plant, Tradepost Rd., Zircon Rd., Onyx Rd., Topaz Rd., Carnelian Rd., Azurite Rd., Spinel Rd. and install new pipeline to connect to the Emerald Plant; Mesa Rd., Sapphire Rd., and Emerald Rd. as identified in the recently completed master plan for the Lucerne Valley system.	M .,	10	с	There are fire flow deficiencies in the Lucerne Valley system due to undersized 1950s era mains that range in size from 4 inch to 8 inch in diameter.	7,996,000	302	996 13	San Bernardino	V	2009
1758 1210019	1210019-002	Hydesville Co. W.D.	Transmission Main Project	1200 feet of 12-inch main (flat) and 225 feet of main (upslope). New main will provide second route from source and increase reliability.	М	10	С	Project #2: System relies on 30 year old, 6-inch main to supply water from source. Main traverses steep slope and has failed in past, isolating source. Subject to failure in earthquake.	118,000	394	1,200 01	Humboldt	I	1998
1759 1210019	1210019-001	Hydesville Co. W.D.	Loop Main Project	1500 feet of 8-inch main to loop system and increase reliability.	м	10	с	Project #1: Area of system served by deadend main is isolated in case of main breaks.	91,000	394	1,200 01	Humboldt	I	1998
1760 1210019	1210019-003	Hydesville Co. W.D.	Water Tank Seismic Retrofit	Retrofit tank and loop dead end mains on Guido Lane and Rohnerville Road.	м	10	С	The water tank is in need of seismic retrofitting, repair, and recoating. It is recommended that these repairs take place along with recoating and seismic retrofit	650,000	394	1,200 01	Humboldt	I	2002
1761 3610007	3610007-005	BASELINE GARDENS MWC		Replace pipelines	м	10	С	Old distribution system piping	600,000	424	1,300 13	San Bernardino	v	1998
1762 3610007	3610007-004	BASELINE GARDENS MWC	Intentio Connection with	Drill new well	M	10	C	No backup source of supply	300,000	424	1,300 13	San Bernardino	V	1998
1763 1910023	1910023-005	AVERIDALE MWC	LA County Water Works	connection.	IVI	10	L	because the system is isolated.	125,000	291	1,500 16	Los Angeles	IV	2007
1764 1210002	1210002-002	City of Blue Lake		Design and replace failing pumping facility; replace all failed valves in system; design and construct telemetry system and alarms	М	10	С	Booster pump station capital replacement; storage tank structural replacement; replace system valves; add telemetry	600,000	651	1,500 01	Humboldt	I	1999
1765 5410011	5410011-003	Springville PUD	Treatment Plant Study	Study to evaluate existing water treatment process, alternatives, and design of modifications. Also investigate source water delivery redundancy, alternatives, and design of improvements.	М	10	С	<ol> <li>Reliability achieving LT1ESWTR filter performance requirements. 2. Lack of redundancy in source water delivery system.</li> </ol>	60,000	369	1,500 12	Tulare	III	2006
1766 5410011	5410011-002	Springville PUD	Distribution Repair	Repair or replace portions of the distribution system.	м	10	с	Leaks in water distribution system.	1,000,000	369	1,500 12	Tulare	Ш	2004
1767 3210010	3210010-001	Hamilton Branch CSD		Replace 3" steam pipe with 6" C900 PVC pipe.	М	10	с	Much of the water system is old and water mains are 3" steam pipe installed in 1957.	200,000	495	1,624 02	Plumas	I	1998

1768 1210020	1210020-006	Fieldbrook Glendale C.S.D.	water reservoir repair and expansion	d The project includes two related activities. The first is construction of a new 400,000 gallon steel water tank, adjacent to the existing tank. The site has already been graded to accept this new tank and the project will require a minor amount of underground piping to serve the new tank.Once the new tank is on line, the existing tank will be removed from service and drained. The existing roof will then be demolished and a new aluminum dome roof will be installed.	Μ	10	c	This project includes repair to an existing 400,000 gallon redwood water tank and the addition of a new 400,000 gallon steel water tank. The existing water tank is the only water tank that serves the District and has had a series of problems due to it's age. The existing tank has a history of leaking and has been repaired several times over the last 15 years, with the most recent repair being a liner installed in 2004. Recently, the District has determined that the wooden roof structure is rotted and in danger of collapsing. This project will also correct existing deficiencies related to a lack of redundancy for water storage. The District only has the one existing water tank described above to serve the entire community. Whenever repairs or inspections need to be performed on the existing water tank, the District is without adequate storage facilities or fire protection.	900,000	531	1,670 01	Humboldt	I	2009
1769 3610060	3610060-002	SBDNO COUNTY SERVICE AREA W-1		Develop Water Master Plan for the system	М	10	с	Need a Water Master Plan developed to plan the current and future requirements of the district to provide safe, reliable water for the district users and adequately meet growth needs.	50,000	506	1,670 13	San Bernardino	v	2000
1770 5710007	5710007-005	Esparto C.S.D.	Esparto CSD upgrade to needed Capacity, Redrilling of Well#4	The progect is to drill a test well to 1000 ft of depth to see if it is possible to utilize different stratas to avoid the sand and come up with 1000 GPM or as close to that as possible. Then we will drill the Test well again to the proper 30 inch casing size and set the Well casing and perforations to the proper depths, install the electical panels and scada controls along with the Pump and electic motor. At this point the well driller will develope the well by pumping it as required to complete the project the water would be tested for all required DHS monitoring as well as the bacterialogic testing. Once all testing is complet the New Well #4 would be tied into the distribution system of the district.	Μ	10	с	The Project is for drilling a new well to reolace our Well #4 because it has the Casing perforations opened up to the point of pumping sand terribly and we have tried lining the casing with a smaller casing to provide additional sand removing gravel pact put it did not work so we are down 750 GPM for this well and we also had Well #5 do the same thing but were able to save the well by relining it but lost 150 GPM out of it. So Total that we need to get out of the proposed well is approximatly 900 GPM. The Well #5 Was worn to badly to be used again so we had to replace the pump and motor also and Well #4 is older and has had more sand issues than Well #5 so we are planning to replace the electrical panels and pump and motor also along with a sand trap just to be safe. The discharge will be either 8" or 10" depending on what the out put of the well turns out to be.	750,000	688	2,000 09	Yolo	1	2009
1771 1010039	1010039-011	Caruthers Comm Serv Dist	Water Line Looping	Install approximately 7,000 LF of new water main.	м	10	с	Water service pressure and supply not reliable.	500,000	672	2,103 23	Fresno	ш	2004

1772 3610105	3610105-003	GOLDEN STATE WATER CO - APPLE VLY NOR Apple Valley North Pipeline Replacement Project	The proposed project is to replace the existing mains in Yucca Rd. from Valley Crest Ter. to Papago Rd., and continuing on Papago Rd. to Ocotilla Rd.; Ocotilla Rd. from Papago Rd. to Chipeta Rd.; Mesquite Rd. from Papago Rd. to Chipeta Rd.; Ouray Rd. from Papago Rd. to Chipeta Rd.; Dexter Rd. from Pauhaska Rd. to Sycamore Ln.; Valley Crest Ter. from Yucca Rd. to Pahata Rd. along Tokata Rd. from Valley Crest Ter. to Tiama Rd.; Taos Rd. from Yucca Rd. to approx. 600 ft north of Waalew Rd.; Waalew Rd. from Yucca Rd. to Taos Rd.; Waalew Rd. from Walpi Rd. to Mesquite Rd.; Pauhaska Rd. from El Centro Rd. to Neenach Rd.; Motnocab Rd. and Pauhask Rd.; Neenach Rd. from South Rd. to Nalatapa Rd.; Nalatapa Rd. from Neenach Rd. to Nawakwa Rd.; Central Rd. from Neenach Rd. to Nawakwa Rd.; Central Rd. from Neenach Rd. to Nawakwa Rd.; Central Rd. from South Rd. to approx. 550 ft east of Nawakwa Rd.; Central Rd. from South Rd. to Walpi Rd. continuing on Walpi Rd. then turning to Huasna Rd. as identified in the recently completed master plan for the Apple Valley North system. The plans for these projects will be completed by June of 2009 and the estimated construction start date will be in July of 2009.	n M	10	c	There are fire flow deficiencies in the Apple Valley North system due to undersized 1940's era mains installed that range in size from 4 inch to 12 inch in diameter.	3,816,000	679	2,240 13	San Bernardino	v	2009
1773 3610105 1774 1510007	3610105-002 1510007-003	GOLDEN STATE WATER CO - APPLE VLY NOR Pipeline replacement FRAZIER PARK PUD Frazier Park Safe Drinki Water Project	Replace mainline If the project is funded the district will upgrade of the water system to meet Safe Drinking Water requirements. This project will build a new well to replace well #3, replace undersized and leaking waterlines with 6 and 8 inch waterlines, install hydrant valves, and telemetry devices and provide additional water system improvements.	M M	10 10	c c	Old, undersized mainline Frazier Park is rural, low-income community of about 2,834 people. A 2003 survey of he community documented a Median Household Income of \$26,500 for the area. The Frazier Park Public Utility District (District) provides only water to district users. The water system is composed of old, deteriorated water tanks, and rested leak, undersized and exposed water lines situated on steep, eroded dirt roads. Many waterlines are too small to provide an adequate water supply and fail to meet State Title 22 minimum pressure requirements. Pressure control devices are also needed on some lines to reduce extremely high pressures. One well, constructed in 1955 has only an 8 foot cement sanitary seal and must be replaced. The District currently has USDA loans totaling \$1,400,000 for the first phase of the project. The current average water bill is \$44.08 per month approximately equal to 2% of the Frazier Park MHI.	150,000 4,000,000	679 1,362	2,240 13 2,348 19	San Bernardino Kern	V	1998 2007
1775 3310019	3310019-003	Idyllwild Water District	Regrade site and construct two 210,000 gallon steel tanks.	м	10	С	Due to its age, condition and elevation, one of our downtown storage tanks was taken out of servie in 1995 (Rockdale). The tank must be replaced.	245,000	1,552	2,500 20	Riverside	V	1998
1776 3310019	3310019-006	Idyllwild Water District	Construct new diversion pipeline and pumping station.	. м	10	с	The District's aging creek diversion pipeline and number station are in page of replacement	120,000	1,552	2,500 20	Riverside	v	1998
1777 3310019	3310019-001	Idyllwild Water District	Rehabilitate two existing wells and drill one new well.	М	10	С	The District needs to develop additional sources of water to meet current demand during water short periods. A geohydrology study is currently I progress.	120,000	1,552	2,500 20	Riverside	V	1998
1778 3310019	3310019-011	Idyllwild Water District	Construct 5,000 feet of 6" and 8" pipeline.	М	10	с	Continue program of distribution pipeline replacement.	180,000	1,552	2,500 20	Riverside	v	1998
1779 5510005	5510005-001	TWAIN HARTE COMMUNITY SERVICES DISTRICT	INSTALL NEW C-900 6" THROUGHOUT WITH NEW SERVICES AND FIRE HYDRANTS EVERY 500'. OTHER - DESIGN AND CONSTRUCTION.	М	10	с	SYSTEM WHICH SERVES 125 PARCELS IS UNDERSIZED FOR ADEQUATE SUPPLY CAPACITY.	700,000	1,530	2,568 11	Tuolumne	ш	1998

1780 5510005	5510005-002	TWAIN HARTE COMMUNITY SERVICES DIST	RICT	INSTALL A 500,000 GALLON BOLTED TANK ON DISTRICT LOT IN LILAC TERRACE SUBDIVISION. OTHER - DESIGN AND CONSTRUCTION	М	10	С	INADEQUATE TREATED WATER STORAGE ON THE SOUTHSIDE OF DISTRICT INCASE OF MAJOR PROBLEM OR LINE DISRUPTIONS.	100,000	1,530	2,568 11	Tuolumne	Ш	1998
1781 0210001	0210001-002	Lake Alpine Water Company	Lake Alpine Water Co., Inc	. CONSTRUCT WATER STORAGE TANK	м	10	С	INADEQUATE STORAGE IN MIDDLE PRESSURE ZONE	100,000	475	2,650 10	Alpine	Ш	1998
1782 3610063	3610063-003	GOLDEN STATE WATER CO - MORONGO DI	EL Morongo Del Sur Pipeline Replacement Project	The proposed project is to replace the existing mains in Juniper Ave., Cedar Drive, Pinion Ave, and Ash Drive, Aspen Ave., Juniper Ave. South of Aspen, the Easement South of Old Mill Rd., Juniper Ave. from Vista Dr. to Buena Vista Dr., Juniper Ave. & Mojave Dr., Park Ave. and Mojave Dr., Mescalero Ave., Paradise Ave., Juniper Ave. South of Matgoneia, the Easement near Park & Juniper, Hess Btvd. South of Magnolia, the Easement near Park & Juniper, Hess Btvd. South of Magnolia, the Easement near Park & Juniper, Hess Btvd. South of South of Paradise and Adeline, the Easement south of Park Ave., the Easement along Park Btw. Ryan and Cholla, San Jacinto St., 29 Palms Highway Btw. Senilis and Adeline, South of 29 Palms at San Jacinto, 29 Palms Btw. West Drive and Park, Mountain View Road, Trial Way, Covington Dr., Juniper Ave. Btw. Tamarisk and Senilis, Juniper Ave. Btw. Cedar and Aspen, Palo Verde Road, Juniper Between Palo Verde and Macelle, Juniper Btw. Baye, Vista Dr., Pinion Ave Buena Vista to Vista to Mojave, Vista Dr., Pinion Ave Buena Vista to Vista to Tr., Hibiscus Dr., Mockingbird Lane, Rosewood Ave., Pinion Ave. Btw. Sapen and Pine, as identified in the recently completed master plan for the Morongo Del Sur System. The plans for these projects will be completed by June of 2009 and the estimated construction start date will be in July of 2009.	Μ	10	c	There are fire flow deficiencies in the Morongo Del Sur system due to undersized 1950's era mains installed that range in size from 2 inch to 4 inch in diameter.	11,381,000	823	2,716 13	San Bernardino	v	2009
1783 2610003 1784 4910028	2610003-001 4910028-008	BRIDGEPORT PUD Sweetwater Springs CWD - Monte Rio	Monte Rio 2009 Infrastructure Improvements	Construct new main, generator, and pumps This project replaces existing mains and appurtenances on River Blvd, Alder Rd., Willow Rd., and Railroad Ave, in Monte Rio with approximately 6,000 lf of 6-inch water main, to complete loop. As part of the project, 4,500 lf of parallel undersized water mains will be abandoned and water services transferred to the new larger main. This project improves water quality improvements by looping the system and providing larger, newer mains, and provides better system pressure and adequate fireflows to area residents and businesses. It will help the District reduce system losset (approximately 30% systemwide) by replacing the aging mains in this area which are prone to main breaks and probably have undetected leaking as well. This is one of the District's principal problem areas for main breaks	M M	10 10	c c	Backup systems needed This project replaces aging distribution mains and appurtenances in the Alder Road, Pebble Way, and Heller Street area of Monte Rio. The area has older, undersized mains and is plagued by recurring main breaks and low water pressure. The project will improve water quality, reduce system losses (system losses are in the 30% range), improve system water pressure and provide adequate fireflow to the area. There are no violations at this time, but the project is needed to bring this part of the Monte Rio distribution system to an adequate level, particularly to reduce the number of leaks that need immediate response, reducing the system losses, and providing adequate flows and pressures to this part of the system.	250,000 1,420,000	227 1,061	3,000 13 3,000 18	Mono Sonoma	V II	1998 2009

1785 5010021	5010021-007	Denair Community Services District	Denair Community Services District 2009 Water Tank Project	Tank Project provides for the design and construction of a 1,000,000 gailon welded steel water tank and booster pumps. The Denair CSD has worked with the Denair Unified School District to set aside the parcel required for the proposed water tank. Previous work has been completed to provide for the connection of two of the district wells to be connected to the water tank which is adjacent to one of the well sites. The project provides for the installation of a generator that will be sized to operate the booster pumps, adjacent well, and a proposed treatment system that will eventually be constructed at the water tank location. The project will provide for much needed storage and additional security in the form of treatment options, and a redundent power supply. The project also proves to be a cost effective solution because of the overall master plan design and consolidation of treatment for two wells and a redundent power source for two pump systems. The project is currently going through environmental review by Stanislaus County and will be ready to construct by June of 2009. A soils report, site plan, and landscape plan have been prepared for the project.	10	L	Denair Community Services District currently has over 1300 connections and over 3000 residents withing the service area. The District currently relys totally on ground water wells and pumps for the Districts needs. This project provides the District with storage capacity recommended and required to meet peak and fire flow demands.	1,350,000	1,294	3,225 10	Stanislaus		2009
1786 5010021	5010021-003	Denair Community Services District	Denair Community Servic District 2009 Well Site 8 Raw Water Line Project	e The Denair Community Service District 2009 Raw Water M Line Project consist of the construction of approximately 1750 linear feet of 8 inch raw water line, 2-8 inch gate valves, restoration of existing road pavement , and connection to existing facilities. The project will construct an 8 inch dedicated raw water line from existing Denair CSD Well Site No. 8 to the District Corporation Yard. The connection of well site number 8 to the proposed 1,000,000 gallon water tank location and the reconstruction of ground water Well No. 1 at the site will allow the District to maximize the value associated with the storage, treatment, and booster pump facilities by minimizing cost associated with constructing multiple facilities at both sites. The project	10	с	The Denair Community Services District relys exclusively on ground water wells to supply water for approximately 1300 users and over 3000 residents. The scattering of water wells make it necessary to construct raw water lines required to maximize storage potential of two proposed water tanks and the booster pumps, and proposed treatment facilities which will be constructed at the two tank sites.	300,000	1,294	3,225 10	Stanislaus	111	2009

site have has been surveyed and construction on the project can be be started in July of 2009 and completed

by October 15, 2009.

1787 5010021	5010021-004	Denair Community Services District	Denair Community Services District 2009 Trunk Water Line Project	The Denair Community Services District 2009 Water Main project consist of the construction of 3,060 linear feet of 12 inch PVC C-900 trunk water main and 60 linear feet of 8 inch PCVC C-900 water line through existing streets, 6 8 inch gate valves, 6 12 inch gate valves, restoration of 11,310 square feet of pavement, 2 inch blow-off, and the bore and jacking of 300 linear feet of 12 inch ductile iron pipe under an existing railroad crossing. The project will effectively replace approximately 1000 linear feet of 6 inch and 4 inch water line, and provide for a 12 inch looped water system that effectively loops the District's Community Development area. The looped system will provide for the connection of the 4 existing ground water wells. Surveying for the project has benn completed. The proposed replacement ground water wells. Surveying for the project can be started in late June of 200 and be completed by October 15th 2009.	м а	10	c	The majority of the existing Denair Community Services District water system was constructed in the mid- 1960's. The original system was constructed with 4 inch and 6 inch water mains when the district was much smaller. This existing system eventually proved to be undersized as the District community area became more fully developed. For the past 5 years the District has constructed portions of a 12 inch trunk main that is designed to loop around the main development area of the District. The Denair CSD 2009 water line project would provide for completion of the 12 inch trunk loop and would greatly increase pressures and fire flow capacities in the District. The loop would also connect the 4 existing ground water wells that the District, and provide for additional redundency and added safety.	852,040	1,294	3,225 10	Stanislaus	111	2009
1788 5010021	5010021-002	Denair Community Services District	Denair Community Services District 2009 Wel Site Generator Project	The purpose of the Denair Community Service District 2009 Well Site Generator Project is to design, purchase and install backup generators at three existing ground water well sites. The generators will supply backup power to the wells during power outages and provide insurance that water will be available during emergenc events. The existing well sites are well site No. 8, Well Site No. 9, and Well Site No. 10.All of the well sites hav been surveyed and the power system design, site design, generator purchase, and installation could occu before October 15, 2009.	M 2, Y e ır	10	c	The Denair Community Services District relies totally on ground water pumping for water supplies required for approximately 1300 customers and 3000 residents. The water wells are dispursed throughout the District and are subject shut down during power outages. This circumstance results in possible health and safety issues due to inadaquate fire flow during power outages.	105,000	1,294	3,225 10	Stanislaus	ш	2009
1789 5010021	5010021-005	Denair Community Services District	Denair Community Services District 2009 Water Treatment Facility No. 1 Project	The Denair CSD 2009 Water Treatment Plant No. 1 will design and constrcut a water treatment plan at the location of Denair CSD Water Tank No. 1. The treatment plant will be designed and constructed to elininate nitrates, and other impurities from the drinking water. The construction of the treatment plant, booster pumps, tank, and generator at Water Tank Site No. 1 will allow for increased safety, redundency, and pressure in the water system.	Μ	10	с	Denair Community Services District Well Site No. has escalating nitrates levels that are projected to exceed drinking water standards in the near future. The construction of Denair CSD Water Tank No. 1 and the connection of Well Site No. 7 and Well Site No 10 to the tank provide for the cost effective opportunity to treat the problem.	600,000	1,294	3,225 10	Stanislaus	III	2009
1790 2710018 1791 2710018	2710018-002 2710018-003	Seaside Municipal Water System Seaside Municipal Water System		Replace tops of tanks. Resurface inside of tanks.	M M	10 10	c c	Tops of two water storage tanks are rusting. Corrosion on the inside of two storage tanks - need to be recoated.	150,000 100,000	788 788	3,300 05 3,300 05	Monterey Monterey	II II	1998 1998

1792 5510009	5510009-001	GROVELAND COMMUNITY SERV DIST	Big Oak Flat	This project consists of adding a welded steel 500,000 M gallon water supply reservoir and 7,000 lineal feet of 12" PVC pipeline in the disadvantaged community of Big Oak Flat. There are 3 components in the storage reservoir; fire flow, operational, and emergency storage. the fire flow is based on a 2500 gallon per minute for a duration of 3 hours which equates to 450,000 gallons. The fire flow rate and duration was determined by the Tuolumne County Fire Marshal. The emegency storage component is the equivalent of one maximum days volume estimated to be 45,000 gallons. The operational component is estimated to be 0.3 times a maximum days flow or the equivalent of 5,000 gallons. The planning criteria for the pipeline was based on a maximum day plus fire flow velocity of 10 feet per second.	10	с	Currently, the Big Oak Flat area is served by 4" and 6" pipelines and the maximum fire flow to the area is approximately 300 gallons per minute. There is not a supply reservoir or transmission pipeline. The project fits in CDPH's Category E definition. The average household income for the area code is 525,938 and the community is classified as a disadvantaged community. The zip code tabulation area 95305 was used as the source to determine median household income. Groveland Community Services District has 209 metered customers in the area. About 150 of those meter connections are residences and the other 50+ account for commercial business.	3,000,000	3,201	3,400 11	Tuolumne		2009
1793 5510008	5510008-009	LAKE DON PEDRO C S D	Intake Float Pump Replacement	Replace the backup pump on the float with a 150HP M pump. When the pump is replaced, additional work will need to be done on the float to correct the changes in buoyancy. This will make sure we have properly functioning pumps in order to secure our water supply. With the required funding in place, this project can be started immediately.	10	C	LDPCSD draws its source water from Lake McClure which is increasingly experiencing drought conditions. For example, mid-October 2008 through mid January 2009 the lake level was below our permanent intake structure. The same was true December 2007 through January 2008. When this occurs, we must draw our source water using a float pump intake setup. This includes a float with two pumps attached to it with flexible piping that can be manually moved to changing lake levels. This setup is also currently being used as a bypass system because our permanent intake facility is currently not operating so we are completely dependant on this to supply water to our customers. The secondary pump is no longer working and is under- sized, providing less than one-half the maximum daily demand. If the primary pump were to experience difficulties or stop working, we would be unable to provide water to the 1500 households we service. These households are in two counties, and we are the only water district in the community. It could take several weeks or longer to repair or replace the primary pump which would mean the community would be without water for several weeks. Our water delivery capabilities are severely compromised during drought and bypass conditions. We are also facing our fourth	50,000	1,442	3,600 11	Tuolumne	Ш	2009

year of constrained revenues due to the economic downturn in our isolated, rural community which has

1794 5510008	5510008-008	LAKE DON PEDRO C S D	Emergency Intake Phase II	Purchase and install a new power cable. The options for the cable are being evaluated by our engineer and contractor, but can be resolved in a very short time frame. Reinstall the pump that was rebuilt. The specifications for this are ready to go. Additional items of this project include installation of bracing, pulling of pump wires after the pump installation, the installation and testing of control tubing and related equipment, and inspection of water intake baskets. With the required funding in place, this project can be started immediately.	rΜ	10	C	LDPCSD normally draws it water from Lake McClure through a permanent intake facility. Last year, problems arose with the facility, and it was dismantled and portions were rebuilt. After the removal of one pump, it was determined that the power cable for this pump also needs to be replaced. Due to revenues being much lower than anticipated, the district is unable to complete the project and finish reinstalling the pump and cable to complete the intake facility. This is our primary water source. Without it, our capabilities to deliver water to over 1500 households in two counties are severely compromised. We are the only water district in our community. Without the permanent intake facility in full operation, we are currently using a float intake system as a bypass which has a much lower capacity and is designed for temporary use in drought conditions (low lake level, high pressure head) and does not function well at normal lake levels. We have been able to supply our customers with water using this method during the winter, but when demand increases in summer, we will be unable to deliver as needed to our community. We are also facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of unbalanced budgets. This project is a top priority that must be completed in order to secure our water source, but funding is currently unavailable.	86,000	1,442	3,600 11	Tuolumne	11	2009
1795 5510008	5510008-004	LAKE DON PEDRO C S D		INSTALL BLOWOFFS ON DEADENDS.	М	10	С	TASTE, ODOR AND COLOR COMPLAINTS DUE TO 85 DEADENDS WITHOUT BLOWOFFS. ALSO RAPID CONSUMPTION OF CHLORINE RESIDUAL LEVELS.	63,750	1,442	3,600 11	Tuolumne	Ш	1998
1796 5510008	5510008-007	LAKE DON PEDRO C S D	Upgrade Coronado Booster Station	Replace the existing pump and add a second backup pump. This would secure the water supply to those customers serviced by this pressure zone. Plans are completed for this project. With the required funding in place, this project can be started immediately.	M	10	С	The district has a pump station at our Coronado site in the water distribution system. It currently has a single pump where as the rest of our pump stations have two pumps for both backup use and combined use during emergencies. In addition, we alternate the pumps in order to share the wear on each pump. The existing pump has been severely overworked. If this pump were to fail, the next pressure zone would be without supply and the tank would run dry. We are the only water district in our community of 1500 households. Funds are unavailable to complete this project. Our district is facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of	120,000	1,442	3,600 11	Tuolumne	111	2009

unbalanced budgets.

1797 5510008	5510008-010	LAKE DON PEDRO C S D	Intake Float Extension	Increase the float intake piping by an estimated 100 feet. This will allow us to chase the lake level to its lowest level at this position in the lake. This will help secure our water supply. With the required funding in place, this project can be started immediately.	Μ	10	c	LDPCSD draws its source water from Lake McClure which is increasingly experiencing drought conditions. For example, mid-October 2008 through mid January 2009 the lake level was below our permanent intake structure. The same was true December 2007 through January 2008. When this occurs, we must draw our source water using a float pump intake setup. This includes a float with two pumps attached to it with flexible piping that can be manually moved to changing lake levels. This setup is also currently being used as a bypass system because our permanent intake facility is currently not operating so we are completely dependant on this to supply water to our customers. Utilizing the float, we have the ability to chase the lake level down approximately twenty feet below the permanent intake structure. If the lake drops any further than that, we will no longer have a water source for our community. We service 1500 households in two counties and are the only water district in the community. Our water delivery capabilities are severely compromised during drought conditions. We are also facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of unbalanced budgets. This project is a top priority to secure our water source, but funding is currently unavailable.	29,000	1,442	3,600 11	Tuolumne	Π	2009
1798 5510008	5510008-006	LAKE DON PEDRO C S D	Alamo Tank Generator Upgrade	Install a concrete slab and the generator. Build the pump house. Complete a small amount of site work in order to perform the installation. Plans are completely done for this project. With the required funding in place, this project can be started immediately.	Μ.,	10	с	The district has a pressure booster system at our Alamo site in the water distribution system. We are the only water district in our community of 1500 households in a rural, isolated area. At this site when power is disrupted, our customers serviced by this booster system are without water. A generator for this site was purchased. The site also needs to have the booster system pump house, a small building, rebuilt that was blown over. Funds are unavailable to complete this project. Our district is facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of unbalanced budgets.	31,000	1,442	3,600 11	Tuolumne	Ш	2009
1799 5510013	5510013-014	TUD - Columbia Water System	Columbia Clear Well	This project would repair the roof structure and replace the interior coating.	≌ M	10	c	The Columbia clearwell has roof structure and interior coating problems. Some of the roof rafter supports have deteriorated and need to be reconstructed in order to prevent a roof collapse. The interior coating is a coal tar based product that has passed its useful life. The coating failure has contributed to the structural failure on the roof system. There are two clearwells. One is 500,000 the other is 150,000. The clearwell in need of repair it the larger of the two.	150,000	1,548	3,646 11	Tuolumne	Ш	2009
1800 1910117	1910117-002	MONTEBELLO-CITY, WATER DEPT.	Permanent Interconnections For Northern System With Adjacent Potable Water Purveyors	Project : This project is to obtain one or more permanen interconnections with the one or more of the adjacent potable water purveyors, namely San Gabriel Valley Water Company and California Water Service Company for the City of Montebello Northern Water System. Benefits: The benefit to the City of Montebello Northerr Water System is to have an assured reliable water supply to provide minimum water service to all of the customers of the Northern Water System, when the usual supply sources are curtailed.	nt M /, n	10	с	Existing Condition: The City of Montebello Northern Water System only has a connection with the Metropolitan Water District of Southern California (MWD) for its sole source of potable water supply. When the hydraulic grade in the MWD system drops and or demand for water is high in the Northern System, some classes of water service have to be curtailed. The Northern Water System needs to obtain one or more interconnections with the adjacent potable water purveyors. No public notification is required.	792,000	1,627	3,944 22	Los Angeles	IV	2009

1801 1910117	1910117-001	MONTEBELLO-CITY, WATER DEPT.	Permanent Interconnections For Southern System With Adjacent Potable Water Purveyors	Project :This project is to obtain one or more permanent M interconnections with the one or more of the adjacent potable water purveyors, namely City of Commerce and South Montebello Irrigation District, for the City of Montebello Southern Water System. Benefits:The benefit to the City of Montebello Southern Water System is to have an assured reliable water supply to provide minimum water service to all of the customers of the Southern Water System, when the usual supply sources are curtailed.	10	с	Existing Condition:The City of Montebello Southern Water System only has water well and a connection with the Metropolitan Water District of Southern California (MWD) for potable water supply. On occasion when the water well has to be serviced and or the MWD system is out of service, the Southern Water System has only limited reservoir water capacity to rely on. The Southern Water System needs to obtain one or more interconnections with the adjacent potable water purveyors. No public notification is required.	528,000	1,627	3,944 22	Los Angeles	IV	2009
1802 1910117	1910117-003	MONTEBELLO-CITY, WATER DEPT.	Rebuilding City's MWD Connection - Northern Water System	Project :The solution to this situation has two options. M Option I is to have MWD enlarge the existing connection. Option II is to obtain a connection with the San Gabriel Valley Water Company (SGVWC), which serves potable water to adjacent areas in the City of Montebello. The purchase of potable water from the SGVWC, which only distributes groundwater to its customers would appear to be more economical then to increase the size of MWD's connection and imported water supply. Before proceeding with either Option I or Option II, the City would need to confirm arrangements with both MWD and SGVWC as to the terms and costs of the respective options. Benefits:The City's Northern Water System definitely needs an increased water source. Either option would be viable to obtain the needed additional water supply to meet additional needs at all times of demand.	10	c	Existing Condition:The City's Northern Water System has a sole source of water for the approximately 1,200 metered service customers. This water supply source is a connection with the Metropolitan Water District of Southern California (MWD). The connection has a limited capacity flow size which can not meet the daily water supply needs during the summer peak time. The Northern Water System has two storage reservoirs with a total capacity of 6,500,000 gallons, which are relied on to meet peaking needs. The MWD connection is undersized for the number of customers and on occasions the use of the reservoir capacity is insufficient, such that a major use of water for irrigation purposes has to be temporary terminated.	1,320,000	1,627	3,944 22	Los Angeles	IV	2009
1803 4010018	4010018-002	Golden State Water Company - Nipomo	Nipomo - New Via Alta Mesa Well	Drilling and equipping a new well would provide M sufficient supply to rectify the lack of Maximum Day Demand (MDD) supply.	10	С	System has inadequate Maximum Day Demand (MDD) supply, as per Title 22 California Regualtions related to Drinking Water, section 64554.	1,500,000	1,493	4,937 06	San Luis Obispo	IV	2009
1804 4010018	4010018-003	Golden State Water Company - Nipomo	Nipomo - Vista Well with Treatment and Boosters	A new well would provide sufficient supply to rectify the M lack of Maximum Day Demand (MDD) supply. The wells in this area are traditionally high in Hydrogen Sulfide, iron, and manganese, so traditional oxidation/filtration treatment for these compounds would need to be installed; and additional booster pump capacity and yard piping would be needed to connect the new source of supply to the distribution system.	10	С	System has inadequate Maximum Day Demand (MDD) supply, as per Title 22 California Regualtions related to Drinking Water, section 64554.	4,000,000	1,493	4,937 06	San Luis Obispo	IV	2009
1805 4010018	4010018-004	Golden State Water Company - Nipomo	Nipomo - 1.0 MG Vista Reservoir	A new 1.0 MG tank would alleviate the inadequate M Maximum Day Demand (MDD) storage and supply issues.	10	С	System has inadequate Maximum Day Demand (MDD) storage and supply, as per Title 22 California Regualtions related to Drinking Water, section 64554.	2,100,000	1,493	4,937 06	San Luis Obispo	IV	2009

1806 3610009	3610009-003	BIGHORN - DESERT VIEW WATER AGENCY	Bighorn Reservoir upgrades	Recoat interiors and exteriors for 8 water storage tanks, upgrade sanitary and security and seismic deficiencies to comply with DPW Water Works Standards and OSHA and Homeland Security.	Μ	10	C	The Bighorn Desert View Water Agency possesses 8 welded s steel tanks. June 2003 the Districts' tanks were inspected Documentation was compiled regarding logistical accessibility, structure proximity, safety compliancy, foundation integrity, sanitary compliancy, security compliancy and heavy metal content in the interior and exterior coatings. All tanks appear to have been constructed in accordance with the version of the AWWA D.100 Welded Tank Construction Standard that was in effect at the time of construction All tanks appear to have been coated in accordance with the applicable version of the AWWA D.102 standard.INTERIOR COATING CONDITION:All tanks possess one of the following two interior coating systems: Coal Tar Cutback on Roof and Shell / Coal Tar Enamel on Floor- Solvent Based Epoxy on All Interior Surfaces Hot Dipped GalvanizingThe coal tar based system is in place on Tanks B-1, B-2, B-3, B-4, and C-1. This system was most likely applied at the time of original construction in 1977 – 1979 on Tanks B-3, B-4, and C-1. Tanks B-1 and B-2 appear to have been recoated with the coal tar system in the early to mid 1990's. The natural aging and embrittlement of these coatings is resulting in significant concentrations of failure and the onset of base metal degradation. Tank B- 4 exhibits the greatest concentrations of coating failure and is the only tank that possesses aggressive corrosion	600,000	1,903	5,000 13	San Bernardino	V	2009
1807 2410012	2410012-004	HILMAR COUNTY WATER DISTRICT	Hilmar County Water District pipeline replacement project	Hilamr County Water DistrictThe proposed project would be to go intothe Irwin area and replace existing pipelines to upgrade the size of the pieline and to remove and replace the blue brute material that has been failing in recent years. The project would require the contractor to place a new distribution main and then connect over the individual services from the existing pipeline.	м	10	с	Hilmar County Water DistrictThe souhtern portion of the district has an area referred to as Irwin. This portion fo the community was constructed in the late 1950's and the water distribution piping is undersized and some of the piping is standard steel pipe with threaded fittings. In the late 1960's a portion fo the piping was replaced with plastic pipe referred to as Blue Brute, this pipe material has had several failures at the bells and along the spring line of the pipe.	2,584,000	1,566	5,000 11	Merced	Ш	2009
1808 2410012	2410012-001	HILMAR COUNTY WATER DISTRICT		Construct a one million gallon water storage tank.	м	10	с	The water system lacks adequate storage capacity.	1,250,000	1,566	5,000 11	Merced	ш	2003
1809 0510009	0510009-001	Blue Lake Springs Mut Wtr		REPLACE UNDERSIZED MAINS WITH NEW, LARGER MAINS	м	10	С	UNDERSIZED MAINS	4,000,000	1,659	5,100 10	Calaveras	ш	1998
1810 1910108	1910108-002	BELL GARDENS-CITY, WATER DEPT.	Replacement of Undersized Older Water Mains – Phase-1	Project :This project to replace undersized older water mains – Phase-1 has been separately submitted so as to hold each project construction cost at less than \$1,000,000 each, so as to improve the awardability. Benefits:Water supply distribution will be improved so that available flows will provide adequate service without a reduction in pressure and the quality of delivered water.	Μ	10	С	Existing Condition:The City of Bell Gardens Water System serves 30% of the area of the City. The system was purchased from the Park Water Company, a public Utility in 1990. The best information available indicated that the Park Water Company had not replaced the original water mains that the Company installed many years prior to selling to the City. The age of the water system distribution mains is significant. The City has from available funding sources replaced some of the older smaller diameter water mains to improve the water distribution water system service. There remains significant pipe footage of older substandard water mains to be replaced to properly meet the needs of the Bell Gardens residential unit is high and therefore the water usage per metered customer is high. No public notification is required.	950,400	1,589	5,247 15	Los Angeles	IV	2009

1811 1910108	1910108-001	BELL GARDENS-CITY, WATER DEPT.	Replacement of Undersized Older Water Mains – Phase-2	Project :This project to replace undersized older water mains – Phase-2 has been separately submitted so as to hold each project construction cost at less than \$1,000,000 each, so as to improve the awardability. Benefits:Water supply distribution will be improved so that available flows will provide adequate service without a reduction in pressure and the quality of delivered water.	Μ	10	c	Existing Condition:The City of Bell Gardens Water System serves 30% of the area of the City. The system was purchased from the Park Water Company, a public Utility in 1990. The best information available indicated that the Park Water Company had not replaced the original water mains that the Company installed many years prior to selling to the City. The age of the water system distribution mains is significant. The City has from available funding sources replaced some of the older smaller diameter water mains to improve the water distribution water system service. There remains significant pipe footage of older substandard water mains to be replaced to properly meet the needs of the Bell Gardens residents and businesses. The City population residential unit is high and therefore the water usage per metered customer is high. No public notification is required.	950,400	1,589	5,247 15	Los Angeles	IV	2009
1812 1910108	1910108-006	BELL GARDENS-CITY, WATER DEPT.	Installation of SCADA System For Improved Management /Operation	Project :Install a complete modern state of the art SCADA System to interconnect and monitor the operating water facilities and provide a record of the condition of the City Water system. Benefits:Provide Bell Gardens water system with record of the daily water system record of operation and to alert the personnel of problems.	Μ	10	c	Existing Condition: The City of Bell Gardens Water System has an active water well, an inactive water well, and a connection with Metropolitan Water District of Southern California (MWD) of imported water supply systems. The personnel is responsible for the operation and maintenance of the system and therefore must visit daily every water facility site and physically check on the system operation and take hand notes of operations. To improve the efficiency of the operation and for keeping the management responsible for providing continuous water service of informed of the operation, SCADA System needs to be installed. The SCADA System will also provide a continuous record of the operating conditions. The SCADA System would have the ability to alert operating personnel of any problems of operation on a 24/7 and 365 day basis. No public notification is required.	198,000	1,589	5,247 15	Los Angeles	IV	2009
1813 1910108	1910108-005	BELL GARDENS-CITY, WATER DEPT.	Permanent Water System Interconnections With Adjacent Potable Water Purveyors	Project :This project is to obtain two or more permanent interconnections to one or more of the adjacent potable water systems, which serve the adjacent cities of Commerce, Downey, South Gate and Bell, and in the City of Bell Gardens. Benefits:The benefits to the City of Bell Gardens owned water system and possibility to the interconnected water systems will be to have a back up water supply resource to assure a continuous water supply to the customers of the City of Bell Gardens Water System and possibly in time of need Bell Gardens can supply water to adjacent water purveyors.	Μ	10	c	Existing Condition: The City of Bell Gardens Water System has one water well as its major source of potable water. The system has a connection with the water system of the Metropolitan Water District of Southern California (MWD) connection, which supplies imported water and is a supplemental water supply source. In the past when there have been disruptions of service from the water well and or the MWD connection, the water system has relied on an emergency temporary interconnection with the adjacent water purveyor in the City. To assure that the water system has a permanent auxiliary supply it can rely on, the City is looking at obtaining two or more permanent interconnections to the adjacent water systems that can be turned on in emergencies, such as, when the City's well or the MWD's connection are out of service. No public notification is required.	528,000	1,589	5,247 15	Los Angeles	IV	2009

1814 5510010	5510010-007	TUD - Crystal Falls Water System	Mono Vista Tank Replacement	This project would construct a new three million tank on M district land near the existing tanks. It would significantly increase the storage from 525,000 to 3,000,000.	10	с	The Mono Vista tanks are part of the Crystal Falls water system. The tanks are old and deteriorating. They are beyond repair and are in need of replacement. Like all of the tanks in the Crystal Falls system, they were designed and built by others and turned over to the District when the system was consolidated with TUD. The storage in the system is not adequate to meet demands for the number of existing customers in the system during the annual 7 day PG&E outage.	4,300,000	2,232	5,301 11	Tuolumne	111	2009
1815 2410003	2410003-002	GUSTINE CITY	Water Well, Water Storag	Project consists of constructing one municipal water t well, a one million gallon above ground water storage tank with booster pump facility, and well head treatment for nitrate at one existing well. Construction of the proposed improvements will bring the City's water system into compliance with Title 22 Standards and will provide the existing users with safe water and a more reliable distribution system. The proposed well will replace Well No. 1, resulting in immediate benefits in water production and water quality, and ensuring compliance with Title 22 Primary Standards. Construction of the 1 million gallon storage tank will greatly improve the system's ability to operate within an adequate pressure range and will provide storage necessary for sustained fire flows. Well head treatment of Well No. 6 for nitrates will stabilize the well's water quality and enable the City to continue using it. Without the treatment, it is very likely that nitrate levels will continue to rise at a rapid rate and will exceed the MCL in the near future.	10	C	The City of Gustine (City) currently utilizes groundwater to meet 100% of the City water demand. The existing system includes four wells (Nos. 1, 4, 5 and 6) and a small (75,000 gallons) above-ground storage tank. The two newer wells (5 and 6) are operated on a full time basis while Well No. 4 is used during the summer to supplement demand. Well No. 1 is only used as a standby because of poor water quality and physical condition. Well No. 5 is the highest production well and has Total Dissolved Solids (TDS) readings above the upper range of the California Code of Regulations (CCR) Title 22 Secondary Standards. Well No. 6 is presently over 50% of the Maximum Contaminant Level (MCL) for nitrate and is steadily rising while Well No. 1 exceeds the MCL for nitrate. Well No. 4 produces considerable amounts of sand. Presently, the City's water system strains to meet the existing demand and lacks redundancy. Computer modeling has shown that the City would currently be unable to meet sustained fire flows, due primarily to deficiencies in storage. Finally, if either Well No. 5 or 6 has to be taken off the system, the City may not be able to meet demand.	4,700,000	1,756	5,311 11	Merced	Π	2009
1816 0310003	0310003-002	AWA Sutter Creek		REPLACE THE WATER MAIN. OTHER = DESIGN AND M CONSTRUCITON	10	с	TRANSMISSION MAIN TO AMADOR CITY SERVICE AREA BREAKS EACH YEAR LEAVING TOWN DEALING WITH OUTAGES.	85,000	1,654	5,458 10	Amador	Ш	2006
1817 2410006	2410006-004	DELHI CWD	Letteau Ave/Flower Street Water Lines	The project includes construction of about 2,500 feet of M 10" diameter water line, valves, and fire hydrants, and also includes three connections to existing water lines.	10	с	Installation of about 2,500 feet of water main to provide a loop to a dead-end portion of the District's existing water distribution systems. The loop will also improve overall system pressures.	350,000	2,254	5,548 11	Merced	ш	2009

1818 1910018	1910018-003	Bellflower Municipal Water System	Water System Reconstruction Phase 2 {Systems 5 & 6}	PIPELINE IMPROVEMENTS/REPLACEMENTS (47% OF SYSTEM)This program provides for the replacement of approximately 45,000 linear feet of undersized pipelines and includes replacement of fire hydrants and meter assemblies. This project represents the remaining pipelines, which have been in service for up to 65 years and are identified as deficient under current fire flow standards (City Resolution No. 07-21). This Project represents approximately 35,000 linear feet of 4-inch asbestos-cement pipeline. The conditions of these pipelines are expected to be good; however, fire flow requirements cannot be met. (Fire hydrants and meter assemblies are included as separate WSIP projects; therefore, are excluded from the estimated construction cost.)FIRE HYDRANTS – Propose new hydrants at 300-foot spacing; 74,418 If estimates 248 fire hydrants. Most of the BMWS fire hydrants are older models in need of replacement. Existing hydrants were installed at the time the pipeline was constructed-, therefore, some of the hydrants are up to 65 years old with a spacing exceeding current-day fire protection standards. These include 4 - inch risers with a single outlet, which cannot provide the flow capacity of the current fire hydrant models with 6-inch risers and multiple outlets.WATER METERS AND SERVICE – Replacement of 60 percent of existing BMWS services. All residential services affected by pipeline relocation	10	C	BACKGROUND - In January 2007, the City acquired the assets of the Peerless Water Company for the sum of \$5.8 million. On March 21, 2007, the California Department of Health Services (DHS) made their first site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2006 deadline. The plan must be implemented by October 1, 2007 (paragraph 2.6.2.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulation (paragraph 3). i. Wells	5,500,000	1,819	5,967 16	Los Angeles	IV	2009
1819 1910018	1910018-006	Bellflower Municipal Water System	Water System Reconstruction Phase 3 {Systems 8 & 9)	PIPELINE IMPROVEMENTS/REPLACEMENTS (39% OF SYSTEM)This program provides for the replacement of approximately 45,000 linear feet of undersized pipelines and includes replacement of fire hydrants and meter assemblies. This project represents the remaining pipelines, which have been in service for up to 65 years and are identified as deficient under current fire flow standards (City Resolution No. 07-21). This Project represents approximately 35,000 linear feet of 4-inch asbestos-cement pipeline. The conditions of these pipelines are expected to be good; however, fire flow requirements cannot be met. (Fire hydrants and meter assemblies are included as separate WSIP projects; therefore, are excluded from the estimated construction cost.)FIRE HYDRANTS – Propose new hydrants at 300-foot spacing; 74,418 If estimates 248 fire hydrants. Most of the BMWS fire hydrants are older models in need of replacement. Existing hydrants were installed at the time the pipeline was constructed,-, therefore, some of the hydrants are up to 65 years old with a spacing exceeding current-day fire protection standards. These include 4- inch risers with a single outlet, which cannot provide the flow capacity of the current fire hydrant models with 6-inch risers and multiple outlets.WATER METERS AND SERVICE - Replacement of 60 percent of existing BMWS services. All residential services affected by pipeline relocation	10	C	BACKGROUND - In January 2007, the City acquired the assets of the Peerless Water Company for the sum of \$5.8 million. On March 21, 2007, the California Department of Health Services (DHS) made their first site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2006 deadline. The plan must be implemented by October 1, 2007 (paragraph 2.6.2.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulations (paragraph 3). i. Wells	5,000,000	1,819	5,967 16	Los Angeles	IV	2009

1820 1910018	1910018-002	Bellflower Municipal Water System	Water System

1821 1910018

1910018-005

Bellflower Municipal Water System

Water System

{Phase 1,2, & 3}

Reconstruction Planning

Reconstruction – Phase 1 {Systems 1,2,3,& 4}

PIPELINE IMPROVEMENTS/REPLACEMENTS (14% OF THE M SYSTEM): Replacement of approximately 45,000 linear feet of undersized pipelines and includes replacement of fire hydrants and meter assemblies. The majority of all other existing BMWS pipeline is 6-inch and 8- inch which may have several more years of operating life. Approximately 10,000 linear feet of 2-inch and 3-inch pipelines are located in backyards and/or sorely deficient of fire flow capacity (City Resolution No. 07-21), which have been in service for up to 65 years. These distribution pipelines are located adjacent to backyard property lines and include meters on backyard private property. In these instances, relocation will provide (1) for increased fire flow capacity, and (2) the opportunity to locate meters within public rights-of-way to ease meter access by City water staff for reading and maintenance. FIRE HYDRANTS - Propose new hydrants at 300-foot spacing; 74,418 If estimates 248 fire hydrants. Most of the BMWS fire hydrants are older models in need of replacement. Existing hydrants were installed at the time the pipeline was constructed,-, therefore, some of the hydrants are up to 65 years old with a spacing exceeding current-day fire protection standards. These include 4- inch risers with a single outlet, which cannot provide the flow capacity of the current fire hydrant models with 6-inch risers and multiple outlets.WATER METERS AND SERVICE -

The following project will design for the following: м 10

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PIPELINE IMPROVEMENTS/REPLACEMENTS Replacement of approximately 45,000 linear feet of undersized pipelines and includes replacement of fire hydrants and meter assemblies. The majority of all other existing BMWS pipeline is 6-inch and 8- inch which may have several more years of operating life. Approximately 10,000 linear feet of 2-inch and 3-inch pipelines are located in backyards and/or sorely deficient of fire flow capacity, which have been in service for up to 65 years. These distribution pipelines are located adjacent to backyard property lines and include meters on backvard private property. In these instances, relocation will provide (1) for increased fire flow capacity, and (2) the opportunity to locate meters within public rights-of-way to ease meter access by the City.FIRE HYDRANTS - Propose new hydrants at 300foot spacing; 74,418 If estimates 248 fire hydrants. Most of the BMWS fire hydrants are older models in need of replacement. Existing hydrants are up to 65 years old with a spacing exceeding current-day fire protection standards. These include 4- inch risers with a single outlet, which cannot provide the flow capacity of the current fire hydrant models with 6-inch risers and multiple outlets.WATER METERS AND SERVICE -Replacement of 60 percent of existing BMWS services. All residential services affected by pipeline relocation

site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2006 deadline. The plan must be implemented by October 1, 2007 (paragraph 2.6.2.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulations (paragraph 3). i. Wells BACKGROUND - In January 2007, the City acquired the assets of the Peerless Water Company for the sum of \$5.8 million. On March 21, 2007, the California Department of Health Services (DHS) made their first site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2006 deadline. The plan must be implemented by October 1, 2007 (paragraph 2.6.2.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulations (paragraph 3). i. Wells

500,000

BACKGROUND - In January 2007, the City acquired the

assets of the Peerless Water Company for the sum of

Department of Health Services (DHS) made their first

\$5.8 million. On March 21, 2007, the California

2.000.000 1.819 5,967 16 Los Angeles IV 2009

> 1,819 5,967 16 Los Angeles IV 2009

1822 4910004	4910004-010	Sweetwater Springs CWD - Guerneville	Guerneville 2009 Infrastructure Improvements	The project is two separate elements to improve the aging, leaking Guernville distribution system. The first element is replacing 1,600 lf of existing main and appurtenances in Riverlands Road, including two ties at Drake Road to create a loop. This will remove aging distribution main reducing the leakage and breaks in the system in this area and looping the system to provide better water quality, system water pressure, and fire flow. The second element is replacing 300 lf of existing main between Hwy 116 and the booster pump at Old Monte Rio Road. This will have similar benefits: providing better water quality, system water pressure, and fire flow. It fits in with past projects that replaced the water main in Old Monte Rio Road. It is important to note that the Guerneville distribution system has water losses in the 30% range - all projects are aimed at helping reduce that level and also allow staff to work proactively in identifying system losses instead of reacting to surfacing leaks.	10	C	This project replaces 1600 lineal feet of existing main and appurtenances in Riverlands Road, looping that part of the distribution system, and 300 lf of existing main between Hwy 116 and Old Monte Rio Road looping that part of the distribution system. The project addresses aging infrastructure, leaks, inadequate water pressure and water quality. There are no current violations with the system, but it does have inadequate infrastructure with unacceptable system water losses (approximately 30%).	414,000	2,497	6,000 18	Sonoma	Π	2009
1823 5010008	5010008-007	Hughson, City of	Water System Improvement - Pipeline Replacement and Improvement	The City will install approximately one mile of pipelines M ranging from 8-inch to 12-inch diameter to improve system pressure and to create looping to the area west of the Santa Fe Rail Road. In addition, three miles of small diameter pipeline replacement would increase all pipelines equal or smaller than 6-inch in diameter to 8- inch diameter pipelines.	10	с	The existing water distribution system has very old (greater than 30 years) and small diameter water distribution pipes that are not in very good condition. In addition, there are a number of dead end lines. These small old diameter pipelines are concentrated in the older sections of the City. These areas of the distribution system can not deliver water supply at adequate water pressure due to increased water demands. To improve water system capacity and water quality, 3,000 feet 12-inch water main from Well No. 6 would be installed. The pipe alignment would be east on Pine Street, south on Euclid Ave. and west on Whitmore Ave. Pipeline improvements are also proposed to create a looped system around the west of Santa Fe Rail Road area. These improvement will enhance water quality by reducing the potential for disinfection	5,626,000	1,779	6,082 10	Stanislaus	Ш	2008

byproducts generation (total trihalomethanes and haloacetic acid 5), and improve system pressure.

1824 3610107	3610107-002	GOLDEN STATE WATER CO - APPLE VLY SOL	U' Apple Valley South Pipeline Replacement Project	The proposed project is to replace the existing mains in Wren St. to Saratoga Rd.; Rambling Rd. to Valencia St.; Rambling Rd. south of Valencia Rd.; Kiowa Rd. to Kiowa Pl.; Marmoset Rd. to Merino Ave.; Merino Ave. To intersection of Merino Ave. and Lancelet Ave.; Lancelet Ave. approx 500 ft south of wren to intersection of Merino Ave. and Lancelet Ave.; Caribou Ave. to Kiowa Rd.; Kiowa Pl. to Kiowa Rd.; Caribou Ave. to Kiowa Rd.; Kiowa Pl. to Kiowa Rd.; Caribou Ave. to Kiowa Rd.; Kiowa Pl. to Kiowa Rd.; to paprox 400 ft west of Merio Ave., Del Oro Rd. to Itoya Vista Rd.; various lines in Itoya Vista Rd.; Mohawk Rd. to Balsa St.; Tussing Ranch Rd. to Navajo Rd.; Wren St. to Quinnault Rd.; Tussing Ranch Rd. to Vren St.; Balsa St. to Balsa Ct. Jamul Rd. to Tussing Ranch Rd.; Tecopa Rd. to Tussing Ranch Rd.; Manhasset Rd. to Panoche Rd.; Toltec Rd. to Manhasset Rd.; Gochiti Rd. to Tussing Ranch Rd.; Nambe Rd. to Micmac Rd.; Sauk Rd. to Sauk Ct.; Bear Valley Rd. to Toltec Dr.; Minnetonka Rd. to Nomwakett Ln.; Lone Eagle Rd. to Lucilla Rd.; Franceska Rd. to Lucilla Rd.; Powhatan Rd. to Topock Rd. as identified in the recently completed master plan for the Apple Valley South system. The plans for these projects will be completed by June of 2009 and the estimated construction start date will be in July of 2009.	M ; 	10	C	There are fire flow deficiencies in the Apple Valley South system due to undersized 1940's era mains installed that range in size from 3 inch to 12 inch in diameter.	10,791,000	1,894	6,250 13	San Bernardino	v	2009
1826 4810004 1827 3610015	4810004-002 3610015-001	City of Rio Vista CRESTLINE VILLAGE CWD - DIVISION 10		replace deteriorated mains and appurtenances. Construct four new storage reservoirs for a total of 3.35	M	10 10	c c	Sections of distribution system is deteriorated. Insufficient and old storage facilities	2,000,000 2,700,000	3,274 4,900	7,376 04 7,400 13	Solano San Bernardino	II V	1998 1998
1828 1910160	1910160-007	TRACT 349 MUTUAL WATER CO.	Well replacement, new storage tank & pump station	MG to meet ww stds. Drill new well southwest corner of the facility and destroy the existing old well. Installed storage reservoir approximately 1MG capacity. Build new pump station adjacent to well and storage reservoir.	Μ	10	С	Existing well being used was drilled in 1928 and showing sign of end of life. The existing storage tank or stand pipe does not have the storage capacity requirements for operational equalization, fire suppression reserve and emergency supply. The existing booster pump cannot provide adequate fire flows for most of the service area.	2,500,000	908	7,500 07	Los Angeles	IV	2009
1829 4010005	4010005-003	OCEANO COMM SERVICES DIST.	Waterline Replacement	OCSD proposes to replace the aged, damaged, and undersized existing water lines with new PVC lines, installed with adequate separation from existing sever lines, where possible. Where adequate separation is not possible, OCSD will install the lines with the following special conditions:1. Maintain a separate trench from the existing sewer trench zone. 2. Use Class 200 PVC water pipe compliant with AWWA C900 requirements and ASTM D- 1869 and E-477 requirements. 3. Trench bottom will be compacted 90% relative compaction. 4. Pipe bedding will be 4 inches thick, consisting of X" to X" river run gravel. 5. Construction inspection will require photographs of each step taken during installation. In the event of another earthquake, the method of installation described above will limit the possibility of cross- contamination in areas where adequate separation is not possible. The flowing projects will replace the lines that offer the greatest risk. 1. A" steel line, installed in 1952, from the alley north of Cienega Street from the existing 12" pipe east of 19th Street to the existing 8" pipe in 17th Street.2. A 4" steel line, installed in 1952, from the alley north of Cienega Street to the 8" pipe in 17th Street.3. A 4" ACP line, installed in 1952, in the alley west of Pacific Blvd., from Mendel Drive to Truman Drive. 4. A 6" ACP line on Pier Avenue, installed in 1974,	M t	10	C	Various water lines in OCSD's water system pose a safety concern, given the combination of their age (and subsequent frequent leaking), material type (steel and ACP), and close proximity (within 10' in many places) to OCSD sewer lines. Given the age (most lines were installed in 1952), size (some are as small as 1" and 2"), and material (steel and ACP) of the lines in question, there are numerous fire flow deficiencies throughout the district that result in negative pressures under fire flow conditions creating potential for contamination. This risk is furthered by the earthquake that hit Oceano and the surrounding area in December of 2003, damaging many of the sewer and water lines in the OCSD system. While all of the indentified leaks and breaks have been repaired in the interim, the overall integrity of both the sewer and water systems is still in question. Current replacement projects continue to expose unnoticed water and sewer line breaks in proximity to each other create a clear risk of cross-contamination and thereby public health risk. Many of the lines within the water system do not meet current AWWA Standards.	1,200,000	1,987	7,600 06	San Luis Obispo	IV	2009

1830 5010006	5010006-002	City of Modesto, DE Waterford	Water Main and Service Replacement - Waterford	The Waterford Water System will require the replacement and upsizing of water mains and service. Water mains and services will be moved out of the easement areas and installed in the street for easy access. Fire hydrants will also be installed. Adequate water flows will result due to appropriate sized water mains. This will improve water quality and bring sufficient water pressures and volumes for fires and household use. With new piping, water conservation will improve by eliminating water leaks. A total of 52,000 feet of water mains will be upgraded. There are 1,154 meter services that will be replaced during the infrastructure improvements. All meter services will comply with State mandates.	M	10	c	The Waterford Water System infrastructure is aging and in desperate need of major upgrades. Staff spend many hours fixing leaks, maintaining system, and spending money on property damage to customers due to leaks. The water system has insufficient water quantity due to limited water delivery restricting new growth, including residential, industry and school expansions. With the low pressure issues, outdated water mains and services, the Waterford area has limited fire protection; especially during peak hours. There are over 52,000 feet of water main that needs to be upgraded to meet the needs of this community and provide adequate volumes of water for building, industry, schools and fire protection. Well pumping is restricted due to wellhead treatment for DBCP and taste and odor. Also one of six wells cannot be overdrawn due to manganese contamination.	4,570,000	2,214	7,897 10	Stanislaus	III	2009
1831 4910002	4910002-003	Cloverdale, City of	City of Cloverdale - Water Distribution System SCAD/ Improvements	This project will involve the installation of SCADA A monitoring equipment to the nine sotrage tanks and the water treatment plant. A modern SCADA system would provide remote data information sensors and transmitters on all the storage facilities and pump stations throughout the City water distribution system. The SCADA system will allow an operator to monitor all water storage levels and pump station operations from the Water Treatment Plant or remotely. Water tank levels can then be anticipated and responded to before reaching a critical point (empty tanks) and improve the overall safety and reliability fo the City Water system. Fire suppression supply would also be preserved.	Me	10	с	Several of the nine existing storage tanks in the municipal lack remote low water level dial-up alarms. Visual inspection of these storage facilities is required to verify water levels. Upon visual inspection, several of the storage facilities have been found to be completely empty. A SCADA (Supervisory Control And Data) system would collect data from various sensors mounted on the stroage tanks and send the data to a central computer which would be used to manage and control the water storage levels. The lack of a SCADA system prevents the knowledge of system outages and the lack of realtime storage data puts the City in an "at risk" mode for adequate fire suppression.	137,340	3,114	8,200 18	Sonoma	II	2009
1832 2710007	2710007-002	Gonzales, City of	2009 Johnson Canyon Water Main Improvement	The general project description: This project includes furnishing all labor, materials, tools, and incidentals required for the construction and installation of approximately 6,600 lineal feet of 12" PVC water main, valves, fittings, trenching backfill & restoration. The SCADA system will allow the City to remotely monitor the entire system, place any or all wells into hand and run them manually, or disable any well from running, or operate any well in automatic mode based on tank leve (with individual on/off setpoints, with or without time- of-day override). The proposed system will easily allow future expansion for the City to include lift stations, future storage tanks, and/or the City's wastewater plan without the need to purchase additional software. The following scope of work shall include all labor and materials (installation of the panels, conduits, and antennas at each wellsite, tanksite, and City Hall),Supph one(1) Master 1 watt ISM spread spectrum RTU unit, Omni directional annena and cable Supply five(5) Slave 8ADI/9D0 1 watt ISM spread spectrum RTU units with battery back-up power supplies, 20" anntena cables, and Yagii antennasFRM to nstall neccesary current switches/transformers and control wiring at each of 4 wellsites to allow monitoring/control of well pumps and chlorine pumpsSupply one(1) level transducer for Tank #1 - (provisions for 2 additional tanks included)Supply one(1) Dell dual hard drive server	r I Y	10	c	Our City Goal for this project is that our water system continue to be safe, reliable, and energy efficient. Our operational challenges were storage and deliver supply lines. Recently, we increased our storage from one million gallon to seven million gallon of storage capacity, so storage has been addresses. Now our immediate focus is on the main truck line to the new tanks, the existing supply line is not large enough and limits our pumping capabilities. The other is water system control through automation. Our present telemetry system is ancient and only provides control 2 of the 4 city wells. In fact we have been having problems with the system the last couple weeks. The telemetry system is a low voltage contact system that runs via phone lines and the phone company has given us notice that it no longer recognizes this system. The addition of additional water main capacity along with SCADA will permit the city to alter its pumping schedule thus not only lowering operating costs, but is more environmentally attuned.	855,000	1,916	8,803 05	Monterey		2009
1833 3310017	3310017-001	South Mesa WC		Replace reservoir with steel tank or rebuild reservoir walls.	М	10	С	Cracks in conrete reservoir number 3. Stability of reservoir questionable.	500,000	2,934	9,018 20	Riverside	V	1998

1834 5510001	5510001-009	TUD - Sonora/Jamestown Water System	Greenley Water Tank Recoating	The project would take the tank off line, remove the existing coating and recoat the tank interior.	м	10	с	The Greenley treated water storage tank, at three million gallons, is the largest storage tank in the Sonora / Jamestown system. It provides treated water and fire flow storage to the Sonora and Jamestown areas. The coal tar based interior coatings are failings which is causing deterioration of the steel tank structure. The coatings, which were applied in the mid 1970's, do not meet current State requirements for new treated water tank coatings.	450,000	4,342	10,294 11	Tuolumne	III	2009
1835 1510018	1510018-013	ROSAMOND CSD	RCSD Replacement Water Mains: Oak, Elm & Orange Streets	RCSD would like to replace the 4" asbestos/cement lines with 8" PVC C-900. The approximate length to be replaced is 5,236' of PVC. When the lines are replaced, the system will be well looped to service the three residential tracts where the current lines are now. The waterlines will be replaced to lay in the street centerline, rather than under residential trees. This project will also reduce the District's water losses.	M ; ,	10	с	The water lines on Oak, Elm and Orange are 4" asbestos/cement. The lines were laid in the early 1960's. The pipes are very old, leak and consistently need repairing. After the lines were laid, residents planted trees above the water lines. The roots have caused line breakage and interruption of service. Also at the time the lines were placed, they were not well- looped. This project is categorically exempted from CEQA compliance.	705,000	4,593	10,633 19	Kern	III	2009
1836 1510018	1510018-014	ROSAMOND CSD	RCSD Well #11 Drill and Improvement	The Project site is located ¼ mile south of the intersection of Gaskell Road and future 30th Street West, on the west side of future 30th Street West and will be placed on 1 ¼ acre of land. The APN is 243-021- 13. Well #11 is anticipated to produce 1,600 gpm of groundwater drilling to a probable depth of 500+ feet. The well casing will be stainless steel and will have an outside diameter of 16 inches. The conductor casing diameter will be 30 inches, and the bore hole diameter will be 30 inches. The anticipated pump motor size will be 260-250 HP. The pump motor will be sized to produce an average water production/extraction rate of 1,200 gpm with an average discharge pressure of 105-110 psi. The well will have water injection capabilities. Water lubrication will be used for the bearings. An all weather enclosure for electrical controls and variable speed drive will be installed to adjust the pump's rate of flow. The well will be monitored by an existing SCADA system. RCSD Well #11 is located in a flood plain. The entire project site will be over excavated and backfilled with the native soil in 8 inch lifts to 95% relative density A foundation slab and footings will be placed around the concrete pump pedestal to accommodate a building enclosure. The finished floor elevation of the slab will be 42 inches or higher, if required by Kern County engineering standards, above the minimum	M - of d y.	10	c	RCSD needs to drill a well to extract groundwater for a town with a population of over 16,000. RCSD has been purchasing about 40% of water used by consumers from Antelope Valley East Kern Agency (AVEK). The amount alloted to RCSD by AVEK has been substantially reduced due a major cut-back from the Bay-Delta area and drought. RCSD considers this an emergency drilling as the well needs to be operational by late summer.	823,793	4,593	10,633 19	Kern	111	2009

1837 1510018	1510018-010	ROSAMOND CSD	RCSD Well #10 Drill and Improvement	Rosamond Community Services District (RCSD) is located at the northern end of the Antelope Valley, California. Rosamond is bisected by the north-south State Route 14. Rosamond Blvd. is east-west, with the town's eastern end of the boulevard terminating at Edwards Air Force Base. The Project site is located 1/4 mile south of the intersection of Gaskell Road and future 40th Street West, on the east side of future 40th Street West and will be placed on 11/4 acre of land. The APN is 243-021-11. Well #10 is anticipated to produce 1,600 gpm of groundwater drilling to a probable depth of 500+ feet. The well casing will be stainless steel and will have an outside diameter of 16 inches, the conductor casing diameter will be 30 inches. The anticipated pump motor size will be 200-250 HP. The pump motor will be sized to produce an average water production/extraction rate of 1,200 gpm with an average discharge pressure of 105-110 psi. The well w have water injection capabilities. Water lubrication wi be used for the bearings. An all weather enclosure for electrical controls and variable speed drive will be installed to adjust the pump's rate of flow. The well w be monitored by an existing SCADA system.RCSD Well #10 is located in a flood plain. The entire project site will be over excavated and backfilled with the native site in 8 inch lifts to 95% relative density. A foundation sla	M h s, r till II iil	10	c	RCSD needs to drill a well to extract groundwater for a town with a population of over 16,000. RCSD has been purchasing about 40% of water used by consumers from Antelope Valley East Kern Agency (AVEK). The amount alloted to RCSD by AVEK has been substantially reduced due a major cut-back from the Bay-Delta area and drought. RCSD considers this an emergency drilling as the well needs to be operational by late summer.	773,973	4,593	10,633 19	Kern		2009
1838 1510018	1510018-011	ROSAMOND CSD	RCSD Tank #6 Constructio	In Future Tank #6 will be located adjacent to Tank #3 on ground already prepared for another 2 mg tank. RCSD will use existing piping to fill and discharge as necessary. The Reservoir can be used in conjunction with Tank #3 (water levels rise and fall simultaneously) or can be used independently; i.e., provide service whi Tank #3 is down. Tank #6 will be monitored by an existing SCADA system. The District would then have double the storage capacity of the town's principle tan This is especially important if the District has to suppor a large firefighting effort, provide water in a supply emergency such as the interruption of AVEK water supply, and can more easily provide water to Tank #5 t	M ) le k. rt	10	с	Rosamond Community Services District (RCSD) has determined that additional potable water storage volume is needed for the increasing District water demands based on a growing population, currently around 16,000. RCSD plans to build a 2 mg tank, Tank #6. At this time, the District owns and operates five potable water reservoirs with two of the tanks having 2 mg capacities and the remainder being 1 mg or smaller. The site for future Tank #6 is located at the northern end of 30th Street West in the Rosamond Hills where Tank #3 is currently operating. Roughly half of the town of Rosamond has developed to the east of 30th Street, and half to the west. It is anticipated that development	2,010,000	4,593	10,633 19	Kern	111	2009

to the west will eventually surpass development to the

east and additional storage tanks will be required to be constructed to the west. Tank #3 was constructed in 1989 on a hill side that had to be literally blasted out of dense volcanic rock. The site was prepared for two 2 mg tanks, although only one tank (#3) was built.

the north while still assisting Tank #3 to supply water to

the lower elevation customers.
1839 1210016	1210016-005	McKinleyville C.S.D.	MCSD Emergency Water System Intertie	The McKinleyville CSD is proposing two system upgrades to plan for the potential failure of the water transmission line beneath the Mad River in the event of an emergency. The first phase would be to install an A- frame and suspension cable across the Mad River directly above our existing pipeline. The dead-heads to hold the weight of the frames, cable and suspended pipe and the related valving would need to be constructed. Only the concrete abutments would need to stay on site, the A-frames, cable and piping could be kept in storage until an emergency event occurred. While the existing transmission pipe beneath the river is 18" in diameter, the suspended pipe would be 12 inches in diameter. This restriction is due to the weigh of the water and pipe being suspended. This would allow for an emergency supply of water of about 400 GPM, that coupled with rationing, would provide for potable drinking water and maintain fire flow until the undercrossing could be repaired. The second phase of the project would be to install a twelve" pipeline across the Mad River via the Highway 101 bridge. This bridge is currently under replacement and we have received an encroachment permit from CalTrans to place a an emergency 12" water pipeline within the bridge. Fitting and valves will need to be placed in the MCSD Distribution sytem to allow for connection of a temporary above ground pipe that could be extend for The MCSD water pumping station has four twenty-hp pumps and one forty-hp pump with capacity to pump m 3.3 MGD. Due to growth and increased demand we meter peak days of 3.7 MGD. These have been isolated events in mid-summer and have not lasted more than a few days. We are able to meet supply on average days, but should we have a week or more demand above our supply ablity we will be drainging our reservoirs to levels that will not deliver sufficient system pressure and affect fire flow. Our current reservoir storage of 5.25 MG is used to buffer the shortage of delivery. At time we are having our reservoirs toro pelow 50%	м	10	c	McKinleyville Community Services District receives water from our regional supplier, the Humboldt Bay Municipal Water District. Our single source of supply is through an 18' water transmission main buried beneath the Mad River. We are in a seismic region with potential for a 9+ magnitude earthquake. Additionally, we are subject to extreme flood conditions as seen from past events. Either of these two scenarious could result in a failure of our transmission line under the Mad River.Should a pipeline failure occur the McKinleyville area would have to immediately go to Emergency Water Rationing and would be limited the amount of water within our storage reservoirs. It is unknown how soon the transmission main could be repaired depending upon weather conditions and the type of event. Public health, property loss, fire flow and potatble water delivery would be threatened in the event of a water transmission loss.	2,400,000	5,042	15,132 01	Humboldt		2009
1841 1910223	1910223-001	GSWC-SOUTH SAN GABRIEL		1980's for this purpose. This tank is on our Capital REPLACE UNDERSIZED MAINS OVER A 2 YEAR PERIOD	М	10	С	3500' OF WATER MAINS LESS THAN 4" IN DIAMETER. THESE MAINS DO NOT COMPLY WITH TITLE 22, SECTION	350,000	4,836	16,078 07	Los Angeles	IV	1998
1842 2710011	2710011-007	Soledad, City of	Water Main Rehabilitation Project	h The project will start by repositioning the water main along Monterey st to gain separation between the Water Main and the Gas Main (a safety hazard). This will require reconecting services latterals to the new Main along the sixteen block repositioning. At the same time the blow-offs at the deadend locations will be installed, which will exacerbate potentential health hazards.	м	10	C	In the older sections of the City there have been multiple line breaks and between West st and eighth st along Monterey st at every intersection a four inch gas main is on top of the water main and in contact. There are also twelve deadends in the water system without blowoffs, which need to be installed to eleminate stale water conditions.	4,900,000	4,951	16,146 05	Monterey	Π	2009

1843 2710011	2710011-005	Soledad, City of	Seismic Retrofiting of Reservoirs	Seismic control valves will be purchased and installed on the tank farm system and intergrated with the potable water SCADA system.	м	10	с	Four above ground storage tanks, totaling four million gallons of water, are in a posisition that flooding of homes is likely in the event of an earthquake large enough to damage the tanks.	500,000	4,951	16,146 05	Monterey	II	2009
1844 2710011	2710011-006	Soledad, City of	City of Soledad Vulnerability Assessment Improvements	The funds requested would supply materials, construction and labor to address these critical security issues. Under the rules of the federal vulnerability assessment program (VSAT), the City is unable to describe these critical security measures in detail, as they are considered secret and vital to national security The City is willing to provide more detailed information in a secure manner that would not compromise the secrecy mandated by the federal government.	М У 9.	10	с	In 2007, the City of Soledad prepared and reported to the Federal Government through the vulnerability assessment program, the vulnerabilities of the City's water system. The critical issues and insufficiencies were identified and a plan to address the issues was created by the City and submitted to the government at that time. The City lacks the funds to address these critical security issues.	61,000	4,951	16,146 05	Monterey	II	2009
1845 5010014	5010014-001	Oakdale, City of		REPLACE 2" AND 4" MAINS WITH 8", 10" AND 12" PIPE. OTHER = DESIGN AND CONSTRUCTION	. M	10	С	OLD, SMALL DIAMETER MAINS LEAKING	10,000,000	6,805	19,250 10	Stanislaus	Ш	2006
1846 3610073	3610073-003	HI DESERT WD	Hi-Desert Water District Capital Replacement Program	Mainline tranmission pipelines/Mainline distribution pipelines/Updated replacement hydrants/Control Valves pressure reducing valves, blow off valves/Updated monitoring system.Replacement pump station/Upgrade customer service connectionsPaving for street surface	M 5, 25	10	C	The District has its Capital Replacement Program identified, for which there is a lack of funding. The District has historically replaced District pipeline and infrastructure using internal work crews with a contribution, through capital charges on water rates for supplies and materials. An accelerated program would increase the use of outside contractors (job creation) as well an increase six fold the use of materials (economic stimulus). This accelerated program would allow the District to finally catch up on its identified system deficiencies and program future replacement programs in accordance with an accepted replacement program methodology and schedule. It would also allow the District to be able to replace its infrastructure in a timely manner, by allowing the backlog of projects to be reduced. Some Plans and specifications are being finalized while others would be completed and would be ready for May 2009. Also, these projects will have CEQA certification by the Hi-Desert Water District Board by May 2009. Pre-qualification of contruction crews could take place between now and May 2009 and the project put out to bid by June 2009 for award July 2009. Construction would commence from July 2009 into first quarter 2010, thereby providing an immediate economic stimulus. The size of these work packages would benefit the local Morongo Basin construction community. which has heen hard hit by the contruction	2,000,000	9,532	19,696 13	San Bernardino	V	2009
1847 3610120	3610120-008	Phelan Pinon Hills CSD	telemetry system	construct telemetry system	м	10	С	control system needed to reduce costs by allowing for	50,000	6,267	20,681 13	San Bernardino	v	2000
1848 1910022	1910022-004	CALIF STATE POLYTECHNICAL UNIV - POMC	ON Emergency Water InterTie	This project would be to Design, Engineer and Construct an Inter Tie in with the City of Pomona Water System which would allow Cal Poly to maintain potable water t portions of the Campus which may not be available due to an emergency shut down of the current MWD source	ct M to e :e	10	с	The Cal Poly Water System has two impacted wells due to Nitrates and Perchlorate . There is only One additional source of Water which is purchased through a MWD Supply . The University would have to shut down if the MWD supply was halted due to Emergency Conditions . This would create an exeptional hardship to the American Red Cross who has a Regional Center located on the south west campus .	450,000	7,575	23,500 22	Los Angeles	IV	2009
1849 3610008	3610008-001	BIG BEAR CITY CSD		Construct new transmission main	М	10	с	Old transmission main in Van Dusen Cyn	225,000	6,356	25,000 13	San Bernardino	v	1998
1850 3610008 1851 3610008	3610008-004	BIG BEAR CITY CSD		Construct new well	M	10 10	C C	Source is in potential flood zone High fluoride source that has subsidence and	250,000	6,356	25,000 13 25,000 13	San Bernardino	V	1998 1998
1031 2010008	3010008-003			Construct new well	141	10	C C	production problems	223,000	0,550	23,000 13	Jan Demarulilo	v	1339
1852 3610008	3610008-002	BIG BEAR CITY CSD		Study potential sources of contamination	м	10	С	Occasional bacti problems from wells	100,000	6,356	25,000 13	San Bernardino	v	1998

1853 1510006	1510006-011	East Niles CSD	Kern Citrus Pump Station Improvements	This project involves replacing three existing pumps, motors, control panels, suction and discharge piping. Also included is a masonry block structure to protect against the variable weather conditions and improve onsite security measures. This pump station is the entry point to the distribution system for a tank site that receives groundwater from five sources, three of which are exceeding the MCL for Arsenic. Fifty (50%) percent of the Districts total water demand and ninety five (95%) percent of the Districts groundwater must move through this pump station to be delivered to the customers of the District.	м	10	с	The existing Kern Citrus Pump station was last updated in the mid 1960's excepting one replacement motor and electrical panel. The three original pumps have exceeded their useful life. The suction piping has been maintained well beyond its life and is in dire need of replacement. Corrosion has taken its toll over the last 45 years and replacement is the only viable option left.	1,100,000	7,338	25,500 12	Kern	III	2009
1854 3310044	3310044-011	Rubidoux Community SD	Goldenwest 6 MG Tank	The proposed project consists of clearing, grading, and M fencing of the tank site and access road, constructing a tank foundation, preparing the tank site, constructing a 6 MG welded steel water storage tank and appurtenances, installing onsite connection piping, coating and painting the tank, and landscaping the site.	м	10	с	The purpose of the project is to construct a 6 MG welded steel water storage tank, and thereby to improve system operating conditions and reliability by increasing equalization storage, fire protection storage, and emergency storage. The District's proposed Goldenwest 6 MD tank construction project is necessary to augment the District's existing water distribution system so that it can continue to provide safe and reliable service to residents of its service area in accordance with its 1999 Water Facilities Master Plan. The District is obligated to furnish domestic water to its service area that meets standards set by the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH).	4,700,000	6,206	26,177 20	Riverside	v	2009
1855 3310044	3310044-008	Rubidoux Community SD	Pacific Avenue 12" and 16 Water Pipeline	" The proposed Pacific Ave 12" & 16" Water Pipeline N project involves the installation of approximately 4,100 LF of 12" PVC and approximately 750 LF of 16" DIP within the Pacific Avenue public right-of-way. This project was identified in the District's Water Master Plan to replace the undersized and failing water distribution pipelines in Pacific Ave. The proposed project will also include the replacement of the associated appurtenant facilities (valves, fire hydrants, flow meters, etc). The proposed project will eliminate excessive water loss, and eliminate the threat to health, safety, welfare, and economy in the affected project area.	м	10	с	The proposed Pacific Ave 12" & 16" Water Pipeline project involves the installation of approximately 4,100 LF of 12" PVC and approximately 750 LF of 16" DIP within the Pacific Avenue public right-of-way. This project was identified in the District's Water Master Plan to replace the undersized and failing water distribution pipelines in Pacific Ave. The proposed project will also include the replacement of the associated appurtenant facilities (valves, fire hydrants, flow meters, etc). The proposed project will eliminate excessive water loss, and eliminate the threat to health, safety, welfare, and economy in the affected project area.	950,000	6,206	26,177 20	Riverside	v	2009
1856 3310044	3310044-002	Rubidoux Community SD		Construct 3-1,500 gpm wel pumping plants and a 4,500 N gpm nitrate treatment facility	М	10	С	The district's draft 1997 water facilities master plan identifies a water production deficiency of 4,400 gpm based on current conditions	7,900,000	6,206	26,177 20	Riverside	v	1998
1857 3310044	3310044-010	Rubidoux Community SD	24" Mission Blvd Pipeline (Carrera to GW Tank)	The proposed project involves the installation of A approximately 7,600 LF of 24" CML&C Steel pipe within the Mission Blvd public right-of-way (between Carrera Ct and Sedona Dr) and within the Sedona Dr public right-of-way (between Mission Blvd and the GW Tank site). The proposed project also includes the installation of fire hydrants and other appurtenances.	м	10	с	The purpose of the 24" Mission Blvd Pipeline (Carrera to GW Tank) project is to install approximately 7,600 LF of 24" diameter pipe to improve system operating conditions and reliability by constructing a transmission water main from the terminus of the existing transmission system to the proposed Goldenwest (GW) tank. The proposed pipeline is necessary to augment the District's existing water transmission system so that it can continue to provide safe and reliable service to residents of its service area in accordance with its 1999 Water Facilities Master Plan. The District is obligated to furnish domestic water to its service area that meets standards set by the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH).	1,500,000	6,206	26,177 20	Riverside	v	2009

1858 3310044	3310044-012	Rubidoux Community SD	Crestmore Road 24" Wat Pipeline	ere The proposed Crestmore Rd 24" Water Pipeline project involves the installation of approximately 1,500 LF of 24" CML&C Steel Pipe within the Crestmore Road public right-of-way (between 34th St & Mission Blvd). This project was identified in the District's Water Master Plan to replace the undersized and failing water distribution pipeline in Crestmore Rd as well as to provide an additional link between the existing water transmission/distribution system and our local groundwater well supplies. The proposed project will also include the replacement of the associated appurtenant facilities (valves, fire hydrants, etc). The proposed project will eliminate water loss, and eliminate the threat to health, safety, welfare, and economy in the affected project area.	10	c	The proposed Crestmore Rd 24" Water Pipeline project involves the installation of approximately 1,500 LF of 24" CML&C Steel Pipe within the Crestmore Road public right-of-way (between 34th St & Mission Blvd). This project was identified in the District's Water Master Plan to replace the undersized and failing water distribution pipeline in Crestmore Rd as well as to provide an additional link between the existing water transmission/distribution system and our local groundwater well supplies. The proposed project will also include the replacement of the associated appurtenant facilities (valves, fire hydrants, etc). The proposed project will eliminate water loss, and eliminate the threat to health, safety, welfare, and economy in the affected project area.	570,000	6,206	26,177 20	Riverside	v	2009
1859 3310044	3310044-007	Rubidoux Community SD	Rubidoux Community Services District Emergency Interconnections	The Rubidoux Community Services District (District) is a M multi-County public agency located in western Riverside and San Bernardino Counties. The District has approximately 6,350 active connections of which over 6,000 are single family residents. Domestic water sources come exclusively from 6 (six) local ground water domestic wells. Further, the District constructed and operates well head treatment facilities for the removal of contaminent constituents which plague our local water supplies. More specifically, the District owns and operates a 4.5 MGD Nitrate removal treatment facilitiy and a 4.3 MGD Manganese filtration and removal treatment plant.	10	c	Security Project	2,000,000	6,206	26,177 20	Riverside	v	2007
				Economically, the District is challenged with an annual household income of \$36,502.00, and an unemployment rate of 11.35 percent. The District desires to minimize intentional or unintentional disruption of water service to our community. The District, as lead applicant (with co-applicants West Valley Water District & the Jurupa Community Services District), believes emergency interconnections within our service areas greatly improves the reliability and redundancy of our local water supplies in a cost- effective manner to a population of 117,243. The District has an annual demand of approximately 6,700 AF or 4,150 gpm. Each of the 5 (five) proposed									

1860 5	5610011 5610011-013	Santa Paula Water System	New 4mg Reservoir & Cross Town Pipeline	The project will construct a new 4 million gallon partially buried reservoir and install a new dedicated water transmission line from Steckel Treatment Plant to the proposed reservoir. The reservoir will be a circular concrete reservoir with an inlet and outlet manifold to allow for the proper mixing. The project will also construct solar panels to supply power for level transducer, intrusion alarm, valve position, minor site lighting and radio telemetry equipment. The will be an Edison service to back up the solar system. The site will require grading and fill to prepare for the tank and access road. There will be a security fence made of 1- inch mesh installed around the site. The project will also install a new 16- inch PVC water transmission main from Steckel Treatment Plant to the Main Reservoir. The pipeline will have gate valves every 1000 feet and be installed with air-vac and drain valves. The main will be connected to the distribution system at various locations to allow for taking the main reservoir off line and to allow for more efficient flushing. The project will also address all paving and right of way issues.	y M	10	C	Currently the City of Santa Paula has only one main reservoir that was constructed in 1887. This is the only supply for the 200 zone. The entire high elevation zones booster pumps use this reservoir as a source of water. Constructing a new 4 million Gallon reservoir will make the system more reliable and allow the City to take the existing reservoir oil line for the required maintenance. The new reservoir will also give the city adequate storage for the system. The water system currently uses the distribution system as the transmission system. For treated water to be pumped to the main reservoir from the Steckel treatment plant it must be pumped through the distribution network of varying size pipes. This causes constantly changing velocities and pressure fluctuations in the distribution system. This set up puts unnecessary back pressure on the pumps and requires the pumps to operate longer while also to filling the reservoir. A direct transmission main would allow the treatment plant to operate efficiently and allow for an increased turn over in the reservoir. The turn over will be increased due to the plant directly filling the reservoir. In addition, all of the system demand would come from the reservoir and not the plant trying to meet the demand and fill the reservoir at the same time	8,500,000	7,150	29,281 06	Ventura	IV	2009
1861 5	5610011 5610011-006	Santa Paula Water System		Purchase propoert, design, construct and inspect construction of a 2.75 MG reservoir in the 200 Pressure Zone	м	10	с	Insufficient storage capacity which does not meet Water Works standards.	2,200,000	7,150	29,281 06	Ventura	IV	1998
1862 5	5610011 5610011-014	Santa Paula Water System	Well 15 Construction	The project will drill a new well 700 feet deep in the Santa Paula Basin. The proposed well will have the screens set between 200 to 700 feet. The project will install a new pump and motor with a new electrical service. There will be a motor control center and PLC with Radio Telemetry system. This well will have an onsite package treatment plant similar to the current well 12 configuration. This new well will provide the City with the redundancy on the east side that it currently lacks. This well was recommended by the 2005 Master Plan.	М	10	с	The City operates one of its wells (1B) which does not pump to the main treatment plant. It pumps directly into the distribution system after it is chlorinated. The well is not near the main well field and is located on leased land. California Department of Public Health supports the City replacing this well that utilizes a proposed on site treatment plant. Another city well runs 24/7 and has an onsite treatment plant. If this well fails or is in need of maintenance, the City is forced to use Well 1B.	3,000,000	7,150	29,281 06	Ventura	IV	2009
1863 5	5610011 5610011-012	Santa Paula Water System	400/600 Zone Booster Pump Station	The project will replace the existing booster pump stations with a new building that will house the new 400 and 600 Booster Pump Stations. Each station will consist of three new pumps and motors with Variable Frequency Drives (VFD's). This set up will allow the City to have adequate flow to meet fire flow demand and take advantage of different electrical rates to reduce operating costs. The new station will be equipped with proper valves; PLCs, sample ports, security components and a radio telemetry system. The project will replace sections of undersized 8-inch water mains with 12-inch diameter pipelines to improve flow and system reliability. The project was recommended in the City's 2005 Master Plan.	м 5	10	с	The existing booster station was constructed in the 1930's. It is not sized for the current demand requirements of the water system zones it serves. The existing configuration of the station does not allow for pump and motor replacement. In addition, the capabilities of the pumps do not allow the City to take advantage of time of use electrical rates which would save the city money. The pumps would not be able to keep the system pressurized if there was a large fire event and do not allow for good system management.	1,500,000	7,150	29,281 06	Ventura	IV	2009
1864 5	5610011 5610011-007	Santa Paula Water System		Purchase property, design, construct, and inspect construction of a 0.50 MG reservoir in the 400 East Zone.	М	10	с	Inadequate storage capacity which does not meet the Water Works standards.	400,000	7,150	29,281 06	Ventura	IV	1998
1865 4	4110003 4110003-001	City of Burlingame		Contruct an 8 mile pipe line connecting the 3 cities to the Harry Tracy WTP. Combine storage form 12 MG to 23 MG. Storage capacity would meet DOHS -8 - hour demand requirement.	М	10	с	Water supply may be unreliable and storage does not meet Department of Health Services 8-hour requirement.	15,000,000	8,966	29,867 17	San Mateo	II	1998
1866 3	3610043 3610043-001	GOLDEN STATE WATER CO - BARSTOW		Replace mainline	М	10	С	Undersized mainline	100,000	9,233	30,469 13	San Bernardino	v	1998

1867 1910004	1910004-005	GSWC - ARTESIA		REPLACE WATER MAINS IN CRITICAL AREAS	м	10	с	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	800,000	11,319	34,772 15	Los Angeles	IV	1998
1868 1910004	1910004-004	GSWC - ARTESIA		CEMENT LINING WATER MAINS IN CRITICAL AREAS.	м	10	с	OLD CAST IRON PIPES WITH BIO-GROWTH AND POTENTIAL NITRIFICATION PROBLEM.	400,000	11,319	34,772 15	Los Angeles	IV	1998
1869 1910042	1910042-001	PICO RIVERA - CITY, WATER DEPT.	SCADA Upgrade for the Pico Rivera Water Supply, Storage, and Distribution Systems	The City of Pico Rivera recently completed a comprehensive Water Master Plan (July 2009) of its water supply and distribution system, which evaluated the City's ability to meet State and Federal drinking water regulations and provide a reliable water system to its customers. As result of the study, the City must complete several major capital and operational improvement projects over the next several years. In January 2009, the City adopted a three-year water rate case to support current operations, but only a limited amount of pay-as-you go capital projects. Critical to maintaining and upgrading our water system is the ability to obtain certain Grant Funds to construct the necessary high priority projects in a timely manner. The SCADA Upgrade Project was recommended in the 2009 Water Master Plan and is critical to providing safe and reliable water service. The City must operate at any one time, 10 supply wells, 3 water booster pump statio (which include 3 pumping units per station), and three distribution reservoirs, in addition to a secondary suppl source from a neighboring agency. Because of the location of the water wells, booster pump stations, and storage tanks throughout the City, it is imperative that water system operations can adequately communicate (from a central location) with each facility and receivee (from a central location) with each facility and receive altime pressure and water level information. It is imperative that the City have a reliable and modernized interview.	M n ly	10	c	The City's current SCADA system is antiquated and many components are not reliable, subjecting the City to potential vulnerabilities should major water supply equipment failure occur. The City is extremely concerned that a critical water supply may not be available and operable during a fire flow event, due to the outdated and unreliable SCADA system. In the past several months, the City continues to have repeated outages of the SCADA system, effecting its water supply management and its ability to make necessary daily water operational decisions. The City must have an upgraded SCADA system to improve water system operations and to better respond to its customer's needs. An upgraded SCADA system will also provide for the necessary real-time data to efficiently manage its 24- hour pumping operations.	650,000	9,335	39,000 07	Los Angeles	IV	2009
1870 1910042	1910042-003	PICO RIVERA - CITY, WATER DEPT.	Stand-by Power Upgrade Project for Water Treatment Plant Sites and Supply Wells	The City of Pico Rivera recently completed a comprehensive Water Master Plan (July 2009) of its water supply and distribution system, which evaluated the City's ability to meet State and Federal drinking water regulations and provide a reliable water system to its customers. As a result of the study, the City must complete several major capital and operational improvement projects over the next several years. In January 2009, the City adopted a three-year water rate case to support current operations, but only a limited amount of pay-as-you go capital projects. Critical to maintaining and upgrading our water system is the ability to obtain certain Grant Funds to construct the necessary high priority projects in a timely manner. The Stand-by Power Upgrade Project was recommended in the Water Master Plan and is critical to providing safe and reliable water supply wells, 3 water booster pump stations and chlorination systems at three treatment plant sites. The Water Master Plan identified the need for three new, permanent disel generator systems at each of the three water treatment plant sites, to operate the two source wells, the chlorination system, and the booster pumps for fire protection. In addition, a permanent disel generator is recommended at Well No. 5 to increase the water system reliability and assure fire flow capabilities during	R	10	C	The City is vulnerable to a major seismic event in the Los Angeles and San Gabriel Basins and periodic rolling black-outs during hot weather ("Santa Ana Conditions"). The entire water supply to the City must be continuously pumped and therefore it is critical that major supply wells and booster pumps stations be equipped with permanent stand-by power in the event of a major loss of power to deliver adequate water service. Without a highly redundant emergency power source, fire protection is lost and the health and safety of the community is at risk. Furthermore, a seismic event could disrupt or cause the shut off of the natural gas distribution systems serving the City, thereby rendering the City's only current stand-by power natural-gas generators useless	2,300,000	9,335	39,000 07	Los Angeles	IV	2009

1871 5010028	5010028-008	Ceres, City of	Standby Generators	This project will add a new 450kW generator to provide I standby power to reservoir booster pumps and relocate the 250kW generator for standby power at the well pump. The new generator would power four booster pumps, allowing staff to supply enough water to the distribution system at peak hours and maintain minimum pressure. By relocating the 250kW generator to the well pump, staff can take advantage of the generator's useful life and provide for back up power to one of the city's largest wells.	м	10	c	At one of the city's largest wells, there is currently a 250kW generator for the reservoir booster pumps and none for the well pump. This provides inadequate backup power during an outage. As the heart of the city's water system, it is imperative to ensure the operation of enough of the booster pumps at the reservoir to meet peak summer demand. The existing generator can only power two of the existing six booster pumps. It also provides no power to the well, which represents 15% of the city can supply less then 6% of normal water production. This could cause a direct threat to water quality and insufficient water for potable and fire needs.ten) plus our reservior.	250,000	10,617	40,943 10	Stanislaus	III	2009
1872 5010028	5010028-010	Ceres, City of	Leak Detection and Valve exercise	The purchase of leak detection equipment will allow the staff to quickly locate leaks and audit the system. With a range of 500 feet per reading correlators will allow two staff to audit the entire system in a week. This type of evaluation would take two manyears with our current equipment. A valve actuator tool would allow single person line shutoffs, routine valve exercise program and identification of valves in need of service by recording torque values.	М	10	c	We can assume the water system is losing water through leaks. As we convert to a metered system we will be able to start identifing water loss and need to locate subsurface leaks. With just a microphone we have been unable to locate pipes until the leak has sinkholed or significant. As the infrastructure ages, valve exercise will become more important. As leakage increases, the ability to shut down working (regularly exercised) valves will become more important. Current staffing levels do not allow a manual valve exercise program due to the requirment for two men and 1/2 hour per valve. inibility to identify leaks and shut valves in a timely manner risks water quality contamination and water supply shortfalls, both a significant threat to the water system.	90,000	10,617	40,943 10	Stanislaus	Ш	2009
1873 1910144	1910144-003	SAN GABRIEL COUNTY WD	SGCWD Mainline Project	The 2010 Pipieline Replacement project will be " replacing 2700' of Pipe. All replacement pipe will be 8" ductile iron pipe. We will be replacing 1250' of 4" steel pipe that was installed in 1924 on Norwood place between California St. and Strathmore Ave. we will be replacing 400' of 4" steel and cast iron pipe that was installed in 1927 on Walnut St. between Dewey Ave. and Norwood Place. We will be replacing 400' of 4" steel pipe that was installed in 1931 on Allenreed Ave. south of Hellman Ave. And lastly we will be replacing 650' of 3" steel pipe that was installed in 1923 on Emerson Place west of San Gabriel Blvd. All of the work is going to be done in the city of San Gabriel. With the installation of new 8" ductile iron pipe we will greatly improve fire flows and fire protection in the area. We will also be installing blow offs at the end of Allenreed and Emerson Place which will help with water quality. As of now these two streets do not have blow-offs.	м	10	C	The problem with our lower system has to do with the age of the pipeline,( the pipeline line in the area is at least 78 years old and some of it is 86 years old), lack of blow-offs, fire flows and fire protection. We are looking to correct these problems without having to raise the water rates in this disadvantaged area. Also I took the TMF capacity tune up and we recieved a score of 48% for an infrastruture score. We need to upgrade, and the next five years the Alameda corridor is coming through and we are going to have to use our money that we normally use for mainline upgrades for offsets and valve installations.	450,000	8,943	45,000 07	Los Angeles	IV	2009

1874 3610038	3610038-006	RIALTO-CITY	Riverside Avenue Water Main Replacement Phase I	Replacement of an old water distribution main that N I provides water from two reservoirs that holds 10 million gallons of potable water to our 48,000 residents. Phase II is the placement of 24" water main in length of 1/4 mile.	Λ	10	c	The Riverside Avenue Water Main was constructed in 1955 and has experienced numerous line breaks. This mainline has reached its life expectancy and needs to be upgraded and replaced in order to maintain water quality standards prescribed by Department of Health Services and Regional Water Quality Control Board. Phase II is from Baseline Road to Walnut Avenue. The project will ensure the City can continue to provide water during peak day demand and for fire protection. It will also provide continued protection to the system and city streets. The need for replacement ws identified in the Master Water Plan	900,000	11,923	48,418 13	San Bernardino	v	2009
1875 3610029	3610029-019	MONTE VISTA CWD	Saratoga Park Pipeline Replacement Project	The work includes the replacement of 28,000-feet of M mostly degraded, main break-laden, bare steel pipeline distribution system in the Saratoga Park area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	Л	10	с	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	3,250,000	11,595	51,014 13	San Bernardino	V	2009
1876 3610029	3610029-016	MONTE VISTA CWD	San Bernardino Corridor Pipeline Replacement Project	The work includes the replacement of 52,000-feet of M mostly degraded, main break-laden, bare steel pipeline distribution system in the San Bernardino Corridor area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	Л	10	c	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	6,000,000	11,595	51,014 13	San Bernardino	v	2009
1877 3610029	3610029-022	MONTE VISTA CWD	Central Pipeline Replacement Project	The work includes the replacement of 34,000-feet of Mostly degraded, main break-laden, bare steel pipeline distribution system in the Central Avenue area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	л	10	c	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	4,000,000	11,595	51,014 13	San Bernardino	v	2009
1878 3610029	3610029-018	MONTE VISTA CWD	Northeast Zone 2 Pipeline Replacement Project	The work includes the replacement of 36,000-feet of M mostly degraded, main break-laden, bare steel pipeline distribution system in the Norteast Zone 2 area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-buid-build or design-build project, having recent and relevant experience with both delivery methods.	Л	10	с	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	4,250,000	11,595	51,014 13	San Bernardino	V	2009

1879 3610029	3610029-021	MONTE VISTA CWD	Reservoir 18 Water Quali Improvements and Seism Upgrade Project	ty The project involves addressing the water quality and M ic turnover issues by introducting mixers, check valves, and new directional piping so that "first-in" water will be "first-out" water. The reservoirs' seismic issues will be addressed by providing tank anchors and expanding the ring walls so as to better fortify the facility from uplift and overturning moments incurred during seismic activity.	10	с	Reservoir 18 (consisting of 3 tanks at the site) has water quality turnover issues which result in degradation of the chlorine residual to near 0.20 mg/L. Additionally, the facility is about 40 years old and by far does not meet current seismic code requirements. Reservoir 18 is a critical storage facility, as it is located in the highest zone of the District's system and is the only source of storage in that zone to meet maximum daily demands and provide for adequate fire flows when needed. The District would be severely challenged to meet its basic water supply mission without maintaining and addressing the needs of the facility.	850,000	11,595	51,014 13	San Bernardino	v	2009
1880 3610029	3610029-015	MONTE VISTA CWD	Mills Corridor Pipeline Replacement Project	The work includes the replacement of 37,000-feet of mostly degraded, main break-laden, bare steel pipeline distribution system in the Mills Corridor area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	10	C	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	4,400,000	11,595	51,014 13	San Bernardino	v	2009
1881 3610029	3610029-028	MONTE VISTA CWD	Sunrise Park Pipeline Replacement Project	The work includes the replacement of 24,000-feet of Mostly degraded, main break-laden, bare steel pipeline distribution system in the Saratoga Park area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	10	С	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	2,900,000	11,595	51,014 13	San Bernardino	v	2009
1882 3610029	3610029-026	MONTE VISTA CWD	Essex Park Pipeline Replacement Project	The work includes the replacement of 38,000-feet of Mostly degraded, main break-laden, bare steel pipeline distribution system in the Essex Park area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	10	C	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	4,500,000	11,595	51,014 13	San Bernardino	v	2009
1883 3610029	3610029-020	MONTE VISTA CWD	Mission District Pipeline Replacement Project	The work includes the replacement of 43,000-feet of mostly degraded, main break-laden, bare steel pipeline distribution system in the Mission area with new class 350, cement mortar-lined ductile iron pipeline, which has an anticipated useful life of 80-plus years. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	10	C	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	5,000,000	11,595	51,014 13	San Bernardino	V	2009

1884 3610029	3610029-017	MONTE VISTA CWD	Rose Avenue Pipeline Replacement Project	The Work includes removal of existing abandoned 8- inch steel water line on San Jose Street to Central Avenue, removal and replacing of existing interfering portions of 6-inch waterline and street curb and gutter per plans and specifications, abandoning in place of the existing 6-inch waterline on Rose Avenue, construction of approximately 1340-L.F. of 6-inch restrained joint Class 350 Ductile Iron Pipe, valves, appurtenances, and tie-ins, construction of a total number of 40 service connections, construction of total number of 5 Fire Hydrants, and the construction of approximately 300- L.F. of 8-inch restrained joint Class 350 Ductile Iron Pipe valves, appurtenances, and tie-ins.	M 	10	С	The work involves the replacement of highly tuberculated, corroded, and aging pipeline infrastructure. This project will greatly improve water quality and water supply reliability.	230,000	11,595	51,014 13	San Bernardino	v	2009
1885 3610014 1886 3610014	3610014-009 3610014-010	CITY OF COLTON CITY OF COLTON		Construct 3 MG reservoir, transmission lines Replace 38k ft of line	M M	10 10	C C	Inadequate Storage Central zone Old distribution system	2,775,000 2,790,000	10,150 10,150	51,350 13 51,350 13	San Bernardino San Bernardino	V V	1998 1998
1887 3610014	3610014-008	CITY OF COLTON		Construct 2 MG reservoir	М	10	с	Inadequate storage West zone	2,025,000	10,150	51,350 13	San Bernardino	v	1998
1888 3610014	3610014-011	CITY OF COLTON		Replace and resize lines	М	10	С	Old steel transmission lines	800,000	10,150	51,350 13	San Bernardino	V	1998
1889 3310049	3310049-002	Western MWD	Dekay Avenue and Gilley Street Pipelines Replacement	The proposed project is located in both Dekay Avenue and Gilley Street at March Air Reserve Base. Within Dekay Avenue approximately 2,000 feet of pipeline between A Street and B Street, in Q Street, between Adams Avenue and B Street, and in W Street from A Street to Gilley Street is proposed for replacement. The project consists of the replacement of existing cast iron pipeline (varying from 6 to 8 inches in diameter) with a new 8 inch PVC pipeline in the aforementioned rights-o way. Within Gilley Street the proposed project is located between W Street and Adams Street. The project consists of the replacement of approximately 2,000 lineal feet of existing 8 inch cast iron pipeline witl a new 8 inch PVC pipeline in the aforementioned rights- of-way.Replacement of the aging cast iron pipe will improve public safety by removing structurally vulnerable pipelines, maintain service to approximately 100 existing customers, improve system efficiency (decrease amount of water lost to leaks and decrease	M 	10	С	Both the Dekay Avenue and Gilley Street potable water pipelines consist of aging cast iron pipe (estimated to be over 65 years of age). These pipelines, more than 4,000 lineal feet, are extremely corroded and are experiencing pitting. More than 14 leaks were repaired on these two pipelines in 2008. Corrosion has resulted in loss of strength of the pipe walls and the pipes are vulnerable to bursts and failure. Outage of these pipelines would disrupt service to approximately 100 existing customers as well as potential future customers that could depend on these water lines. In addition, these pipelines have significant tuberculation as well as biofilm growth and require frequent flushing to maintain the necessary disinfection residual. The recurrent leaks, coupled with the frequent flushing, require a great deal of maintenance time and waste large volumes of water.	1,200,000	19,311	60,895 20	Riverside	v	2009

the amount of water used in pipeline flushing) and ensure that Western Municipal Water District is able to deliver water in compliance with drinking water

standards.

## 1890 3310049 3310049-003 Western MWD

Chino Desalters Phase 3 Chino Desalters Phase 3 Expansion Project -Μ Expansion Project - Chino Implementation of this project will serve to clean-up the local groundwater basin for improved water quality and increased potable water production. The project will reduce the demands on imported surface water and further diversify the local potable water supply system. Components of the project include:1. New groundwater extraction wells for the Chino I DesalterThe constructed facilites will aid in solving the water problem by providing raw water supply to facilities that: A. Treat brackish groundwater with reverse osmosis to demineralize the water and remove harmful and unwanted water guality constituents. B. Treat brackish groundwater with ion exchange to remove high nitrate concentrations.C. Create an additional local source of potable water versus importing water.D. Implement OBMP recommendations.E. Prevent further degradation of water quality in adjacent watersheds that receive water from the Chino Basin region.F. More efficiently use local groundwater supplies to meet water demands. The overall project involves desalination of brackish groundwater for potable water use to serve the needs of the local community.

1891 3310049 3310049-001 Western MWD

> Expansion Project -Brackish Water Desalination

Chino Desalters Phase 3

Creek Wellfield

Chino Desalters Phase 3 Expansion Project -Μ Implementation of this project will serve to clean-up the local groundwater basin for improved water quality and increased potable water production. The project will reduce the demands on imported surface water and further diversify the local potable water supply system. Components of the project include:1. Expansion of the existing 10 mgd Chino II Desalter to 20.5 mgd (RO & IX)The constructed facilites will aid in solving the water problem by: A. Treating brackish groundwater with reverse osmosis to demineralize the water and remove harmful and unwanted water quality constituents. B. Treating brackish groundwater with ion exchange to remove high nitrate concentrations.C. Creating an additional local source of potable water versus importing water.D. Implementing OBMP recommendations.E. Preventing further degradation of water quality in adjacent watersheds that receive water from the Chino Basin region.F. More efficiently using local groundwater supplies to meet water demands. The overall project involves desalination of brackish groundwater for potable water use to serve the needs of the local community.

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The Chino Desalters Phase 3 Expansion Project is part of the ongoing Chino Basin groundwater Optimum Basin Managment Program (OBMP), including the Peace Agreements. This project helps to (1) increase the local potable water supply to meet rapid population increases. (2) decrease dependence of imported Colorado River water, (3) clean-up the groundwater aquifer contaminated with constituents such as nitrate. TCE, TCP, arsenic, perchlorate, and high total dissolved solids and (4) provides hydraulic control for the area to manage groundwater levels and capture and treat brackish groundwater that would otherwise contaminate the Santa Ana River and other downstream aquifers towards Orange County. This project implements the recommendations of the OBMP and the Wildermuth Environmental groundwater report for managing the basin and improving groundwater quality. The OBMP recommends increasing desalter groundwater pumping from the lower Chino Basin to 40,000 AFY. By implementing the Phase 3 projects, the 40,000 AFY groundwater pumping goal will be acheived. Water Quality Standards Exceeded in the brackish groundwater:1. Nitrate (concentrations exceeding 250 mg/l as NO3) The primary MCL for nitrate is 45 mg/l as NO32. TDS (concentrations exceeding 1,300 mg/l)The secondary MCL for TDS is 500 mg/l (recommended maximum concentration)3. TCE (concentrations The Chino Desalters Phase 3 Expansion Project is part of

2,000,000

19,311

60,895 20

Riverside

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2009

the ongoing Chino Basin groundwater Optimum Basin Managment Program (OBMP), including the Peace Agreements. This project helps to (1) increase the local potable water supply to meet rapid population increases. (2) decrease dependence of imported Colorado River water, (3) clean-up the groundwater aquifer contaminated with constituents such as nitrate, TCE, TCP, arsenic, perchlorate, and high total dissolved solids and (4) provides hydraulic control for the area to manage groundwater levels and capture and treat brackish groundwater that would otherwise contaminate the Santa Ana River and other downstream aquifers towards Orange County. This project implements the recommendations of the OBMP and the Wildermuth Environmental groundwater report for managing the basin and improving groundwater quality. The OBMP recommends increasing desalter groundwater pumping from the lower Chino Basin to 40,000 AFY. By implementing the Phase 3 projects, the 40,000 AFY groundwater pumping goal will be acheived. Water Quality Standards Exceeded in the brackish groundwater:1. Nitrate (concentrations exceeding 250 mg/l as NO3) The primary MCL for nitrate is 45 mg/l as NO32. TDS (concentrations exceeding 1,300 mg/l)The secondary MCL for TDS is 500 mg/l (recommended maximum concentration)3. TCE (concentrations

10,000,000 19,311 60,895 20 Riverside 2009 ١.

1892 1910092	1910092-009	MONTEREY PARK-CITY, WATER DEPT.	Monterey Park Bradshawe Reservoir Replacement	The project consists of designing and constructing two M new steel reservoirs to replace the outdated systems. These new reservoirs will be modern and seismically approved.	10	c	The City's two Bradshawe reservoirs were built in 1948 and 1958 and are now cracked and outdated. The replacement of these reservoirs will increase storage capacity to meet the city's water demand. More importantly, the new reservoirs will meet seismic standards. Besides the obvious benefit of adding storage capacity, the City will be able to reduce it's electricty usage and carbon footprint. These reservoirs will allow us to pump our wells at night, during off-peak hours, while still meeting the water demands of our customers. This practice will reduce the draw of electricity in the region and help to mitigate against rolling blackouts.	3,000,000	13,045	64,000 07	Los Angeles	IV	2009
1893 3610064	3610064-007	EAST VALLEY WD	Live Oak Water main replacement	The construction plans call for 1,019 feet of 8-inch M Ductile Iron pipe to be installed in a city street, and 17 homes to be connected to this main. The construction plans for this project are 80% complete. The CEQA for this project is underway and should be completed by March 1, 2009. The project would ensure a leak free supply of water to the affected 35 homes. This project site is within 1/2 mile of the San Adreas Fault and would also help mitigate the damage to this water main in the event of an earthquake on this section of the San Adreas Fualt.	10	С	The water main on Live Oak between Summit Drive and Terrace Drive in the City of Highland is a 6-inch water main that was constructed in the early 1950s. This water main supplies drinking water to approximately 35 homes and one water reservoir (District Plant 137). This water main has had numerous leaks in the last two years and is in need of replacement. This main is within 1/2 mile of the San Andreas Fault.	325,000	21,827	68,000 13	San Bernardino	v	2009
1894 3310021	3310021-011	Jurupa Community SD	JCSD Groundwater Production Wells	This project will continue implementation of the Jurupa M Community Services District (JCSD) Water Master Plan through development of four additional groundwater production wells in several identified areas to provide water for forecasted future demands. This project will create 80 new jobs.	10	C	Continued implementation of Jurupa Community Services District's (JCSD) Water Master Plan projects through the development of four additional groundwater production wells is critical to meet future potable water demands. Groundwater is considered the primary and most cost effective means of meeting increased water demands. Through previous analysis, JCSD identified several potential well sites within the northwestern portion of the service area. JCSD is nearing completion of property acquisition and the environmental process including biological resource investigations.	12,000,000	24,684	68,297 20	Riverside	V	2009
1895 3310021	3310021-013	Jurupa Community SD	Emergency Electrical Generators for JCSD Wells	This project will equip all JCSD well facilities with backup M generators in accordance with the US Government Accountability Office (GAO) Critical Infrastructure Protection Report to make the District less dependent on outside resources in the event of incidents involving technological and physical components. This project will create 6 new jobs.	10	С	There is a need to equip all Jurupa Community Services District (JCSD) well facilities with backup generators in accordance with the US Government Accountability Office (GAO) Critical Infrastructure Protection Report. JCSD needs to be less dependent on outside resources in the event of incidents involving technological and physical components.	1,300,000	24,684	68,297 20	Riverside	v	2009

## 1896 1910079 1910079-005 LYNWOOD-CITY, WATER DEPT.

Installing of SCADA System Project :Install a modern day up to date SCADA System M that is in constant communication with all elements of the City of Lynwood water system. Benefits:Better operational control of water system elements and facilities around the clock on daily basis and both at the Central Yard and remotely. Will be able to perform pre programmed functions and allow operation of system by on duty and off duty personnel. The SCADA System will have alarm generation capability to keep system operations and supervisors to be aware at all times of status and conditions of the water system therefore providing better water quality and complying with water quality standards. 10

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1897 1910079 1910079-004 LYNWOOD-CITY, WATER DEPT.

 Second Pressure Relief
 Project :Install a new Cla-Valve reducing valve battery (3 M

 Valve
 valves) in a vault in vicinity of reservoir on Bullis Road

 Installation/Remodeling of
 with appropriate space and convenient access and

 Existing Valve Installation
 remodel existing Cla-Valve vault on Imperial Highway at

 Bullis Road to include space for 3 valves of varying size to minimize cavitation effect. Benefits:New additional reducing valve installation and remodeling of existing reducing valve installation and remodeling of existing reducing valve installation will reduce maintenance requirements and will facilitate more control over goal to provide constant water pressure in the City Water System.

which serves over 95% of the area of the City and its 10.600 metered services, has six operating water wells. a MWD water supply connection, a subterranean storage reservoir of two million gallon capacity, a booster pumping station and three system regulator valve installations. The water system has had a SCADA system which was installed over 20 years ago, according to the City Utility Services Division Staff. A recent review of the existing SCADA system indicated it is out of date and can not be modernized. A modern day SCADA system is needed to provide for full management of the operations of the water system. A modern day SCADA System will permit the City Utility Services Division to properly operate the elements of the facilities of the water system on a 24/7/365 basis from a central location at the Public Works Department Yard as well as allow field personnel to have timely information on the operation of one water well or other facilities sites as well as of the entire water system at any time. Any necessary adjustments in the operation can be made remotely with a modern SCADA System during all hours of the day and all days in the week even though the normal work day of the Utility Services Department is 10 hours a day for 4 days a week (Monday through Thursday). The up dated SCADA System could perform pre-programmed functions to

Existing Condition: The City of Lynwood Water System,

Existing Condition: The City of Lynwood Water System has presently six operating water wells, which pump into the closed water system. Should the pumping result in the system pressure exceeding a set level and the existing two million gallon capacity subterranean storage reservoir is not full, a single existing pressure relief valve operates to adjust the pressure by backfilling the reservoir. The single existing valve, a Clavalve, which is located in a vault, has to be annually rebuilt due to cavitation on the valve when operating. To rebuild to valve the work has to be done at nighttime and the installation has to be shut down during the repair. This requires significant personnel to manually regulate the water system pressure. The plan is remodel the existing valve chamber vault to accommodate multiple valves to minimize cavitation. To allow a smoother adjustment of the water system pressure, a second new pressure reducing multiple valve installation is to be constructed at another location in the water system at grade with a series of valves with improved access for operation and maintenance. No public notification is required.

231.000	9.035	73.212 22	Los Angeles	IV	2009
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9,035 73,212 22 Los Angeles IV 2009

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810.000

1898 1910079	1910079-001	LYNWOOD-CITY, WATER DEPT.	Trailer Mounted Emergency Generator & Well/Booster Pump Equipment	Project :To overcome to a limited degree, the electrical M power failures situation, the City believes that by owning a trailer mounted gasoline/diesel fuel engine driven emergency generator that either the major well source and/or the reservoir booster pumping station could be made operational pending SCE restoring electrical power service. The generator would be sized to service the 250 horsepower electrical motor for water well no. 19, the largest electric motor. As a part of the project the electrical panels at each of the existing water well sites and at the booster pumping station would be modified to facilitate the fast hook up (Posilock) and use of the emergency generator. Benefits:This emergency generator would allow the City to operate one water well and/or the booster pump station in a time of electrical power outage of the SCE Company to provide a minimum water supply to the City Water System.	10	c	Existing Condition: The City of Lynwood Water System relies for 80% of its needed potable water supplies on pumping of 6 water wells. Each deep well pump is driven by electric motors. The electrical service is provided by the Southern California Edison Company (SCE). The City Water System has one subterranean storage reservoir of two million gallon capacity. To deliver water from the reservoir the City has a multiple pumping unit station. All wells and the pumping station use electric motors to drive the booster pumps. Only 20% of the City's water supply is imported water from the Metropolitan Water District of Southern California (MWD). As can be seen the City Water System is largely dependent on SCE, which electrical service has had on occasion interruption of power services. No public notification is required.	271,000	9,035	73,212 22	Los Angeles	IV	2009
1899 3610052	3610052-001	VICTOR VALLEY WATER DISTRICT		Construct needed facilities to ensure compliance with M Waterworks Standards.	10	с	Old steel distribution system lines, new wells needed, new storage reservoirs (2) needed.	2,900,000	22,257	81,418 13	San Bernardino	v	1998
1900 1910001	1910001-010	City of Alhambra	Garfield Reservoir Tank 1 Coating and Reroofing	Garfield Reservoir Tank 1 has a holding capacity of 1,000,000 gallons of water, which is used to supply water to the northern part of the City. The residence time of the water in the tank and the condition of the steel is critical to the quality of the water. An epoxy coating will be applied to the interior after removal of the corroded section of steel from the walls and floor. After the application of the epoxy, new cathodic protection will be installed to reduce the amount of future corrosion of the steel. The wood roof system will be removed to the wood planking, and any damaged or corroded planks will be replaced before application of new roofing material. This will ensure a solid, leak- proof system to maintain the quality of the water in the tank. Additionally, repairs and/or replacement of any screening material between the roof tiers will be done, as well as replacement of any metal flashings and copings around the roof perimeter to also ensure that birds or other animals cannot access the interior of the	10	С	A recent inspection revealed that the condition of Tank 1 at Garfield Reservoir was severe enough to warrant recoating of the interior steel walls and floor. This tank was constructed in 1955. The interior of the tank is exhibiting corrosion over 70% of the surface, which can potentially affect water quality. In order to maintain compliance with drinking water standards to provide safe drinking water, the recoating of the tank will protect the steel for 25-30 years without the need for further major repairs and/or renovation. The roof is original to the reservoir tank, composed of wood which is over 50 years old. Replacement of the roof will also ensure water quality through solid, sturdy coverings over the tank itself. This project will complete the systemized preservation of the City's eleven steel reservoir tanks.	500,000	17,740	92,158 16	Los Angeles	IV	2009

tank.

1901 1910001	1910001-009	City of Alhambra Garf Pum Reha	rfield Reservoir Booster np Station nabilitation	The proposed project includes replacing the building, pump equipment, electrical motor control center, and installing an emergency power generator. This facility was origianlly constructed in 1955 and has not had any major upgrades since that time. The existing pumps, with capacities of 1,521 gpm and 1,888 gpm, are undersized for the demand of sending water to the Northern Pressure Zone, which is to be maintained at 40 to 117 psi. Two new pumps (and possibly one back up pump) will run more efficiently and with less mechanical stress. The existing motor control center (MCC) is electrically and mechanically inefficent. This new booster facility will utilize Southern California Edison's (SCE) "Savings By Design" program and premium-efficiency electrical components to reduce electrical costs and be programmed to pump on off- peak hours when demand is lowest.	Μ	10	c	This booster station facility is one, of only two, sources of supply for the northern pressure zone of the City. The elevation variance in the northern zone is a minimum of 430 feet to a maximum of 585 feet, with pressure ranges of 40 to 117 psi. If this facility fails to perform either adequately, or not at all, the northern pressure zone will have to rely on only one source of supply water (from the Marengo Reservoir) to an entire area with approximately 7,000 service connections. This situation would be extremely critical during the summer months when demand is highest. The system reliability is an important consideration, and since there are only two pumps at this location which operate continuously 24 hours a day to meet the current water demands, the need to reduce the risk of pump malfunction is paramount. The current inlet piping also needs to be modified to allow independent introduction of water from each of the three reservoirs. There is no provision for emergency stand-by power.	1,750,000	17,740	92,158 16	Los Angeles	IV	2009
1902 3310012	3310012-010	Elsinore Valley MWD Lake and	eland Village Reservoir I Pump Stations Project	The proposed project consists of a new storage tank and two pump stations. The proposed Adelfa Pump Station will convey water to the proposed 800,000 gallon steel Adelfa Reservoir. The proposed Encina Pump Station will convey water to the existing Encina tank. Elisnore Valley Municipal Water District's Board of Directors adopted the Mitigated Negative Declaration on April 27, 2006 and filed the Notice of Determination on May 3, 2006. The engineering documents have been finalized, the project has been advertised for construction bids, and is ready for construction upon funding and project award.	М	10	c	Elsinore Valley Municipal Water District's Water Distribution Master Plan identified the Lakeland Village water service area as deficient in water storage capacity and its ability to meet fire demands. The purpose of the project is to improve water reliability, water supply, and fire protection in the Lakeland Village community of Riverside County, which is adjacent to the Cleveland National Forest. Lakeland Village is located within Riverside County's Economic Redevelopment Area and the service area has been identified as disadvantaged by the Santa Ana Watershed Project Authority (SAWPA). To meet the system deficiencies, the project would increase the storage and pumping capacities in the service area by constructing a new 800,000 gallon steel reservoir and two new pump stations.	4,200,000	36,817	121,420 20	Riverside	v	2009
1903 3710006	3710006-006	Escondido, City of		Rehabilitate reservoir rather than new. Replace inlet/outlet lines.	м	10	C	A-3 reservoir (1MG) is 60 years old and does not meet current standards. Area transmissions are of same	750,000	25,828	140,000 14	San Diego	v	1998
1904 1910070	1910070-048	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Aver Wes	enue M-8 & 70th Street Ist Water Main	The proposed project consists of installing approximately 2,600 linear feet of 18-inch diameter ductile iron water main along the future Avenue M-8 right-of-way, from the Antelope Valley-East Kern Water Agency turnout near Avenue M-8 and 70th Street West to the District's water storage facility at Avenue M-8 and 75th Street West. This would prevent large water pressure fluctuations.	M r	10	С	The existing water system experiences large pressure fluctuations due to a water supply deficit in District 40 and the need for new turnouts to accept more Antelope Valley-East Kern Water Agency water. Because of this, State Water Project water is not efficently utilized.	675,000	46,878	144,215 16	Los Angeles	IV	2009
1905 1910070	1910070-052	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Wat	ter Storage Tanks at E Site - Phase I	The project consists of constructing five 3-million-gallor water storage tanks at 41956 5th Street East in Palmdale to serve the Los Angeles County Waterworks District No. 40, Antelope Valley. This project will improve storage capacity to meet customer demand.	n M	10	с	The existing water system typically experiences a shortage of storage capacity to meet customer demands during the warm summer months and periods of temporary shortage of treated water from the Antelope Valley-East Kern Water Agency.According to the District No. 40 Antelope Valley Draft Master Plan prepared in March 1997, the 2555 pressure zone of District No. 40 Region No. 4 currently has a storage capacity deficit of 38.8 Million Gallons (MG) in order to satisfy fire flow storage requirements and the District's one-day storage under maximum day demand need.	15,000,000	46,878	144,215 16	Los Angeles	IV	2009

1906 1910070	1910070-049	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue K Transmission Water Main - Phase IV	The project consists of installing approximately 5,300 M linear feet of 36-inch diameter steel water main on Avenue K between 20th Street East and 30th Street East in Lancaster. The project will increase the capacity of the Lancaster water system to meet the current domestic and fire protection water demands.	10	С	Parts of the existing water distribution system experiences large pressure fluctuations due to aged and undersized pipelines.	3,500,000	46,878	144,215 16	Los Angeles	IV	2009
1907 1910070	1910070-050	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue K Transmission Water Main - Phase III	The project consists of constructing approximately M 10,600 linear feet of 30-inch diameter steel water main on Avenue K between 30th Street West and 10th Street West in Lancaster. The project will increase the capacity of the Lancaster water system to meet the current domestic and fire protection water demands.	10	С	Parts of the existing water distribution system experiences large pressure fluctuations due to aged and undersized pipelines.	3,500,000	46,878	144,215 16	Los Angeles	IV	2009
1908 1910070	1910070-046	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue M and 62nd Stree West 3.2 MG Tank	t The project is to construct a 3.2 MG water storage tank M and appurtenances at a District-owned site located southeast of the intersection of 62nd Street West and Avenue M in the City of Palmdale as recommended by the District No. 40, Antelope Valley, Draft Master Plan. The 3.2 MG tank will help reduce the deficit storage capacity for the system. The tank site will be enclosed by block walls and landscaped with trees and shrubs to mitigate any visual or aesthetic effects. The proposed tank will connect with the existing 36-inch water main located along Avenue M to 60th Street West to feed the east side of the "Lancaster loop" within the 2555 pressure zone.	10	c	According to the District No. 40, Antelope Valley, Draft Master Plan prepared in March 1997, the 2555 pressure zone of District No. 40 Region No. 4 currently has a storage capacity deficit of 38.8 Million Gallons (MG) to satisfy fire flow storage requirements and the District's one-day storage under maximum day demand need. Currently, there are only two gravity storage tank sites in the 2555 zone: Avenue M and 7th Street West with 7.6 MG of storage and Avenue M and 5th Street East with 9 MG of storage.	2,900,000	46,878	144,215 16	Los Angeles	IV	2009
1909 1910070	1910070-044	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Water Storage Tanks at M5E Site - Phase II	The project consists of constructing two additional 3- million-gallon water storage tanks at 41956 5th Street East in Palmdale to serve the Los Angeles County Waterworks District No. 40, Antelope Valley. This project will improve storage capacity to meet customer demands.	10	с	The existing water system typically experiences a shortage of storage capacity to meet customer demands during the warm summer months and periods of temporary shortage of treated water from the Antelope Valley-East Kern Water Agency. According to the District No. 40 Antelope Valley Draft Master Plan prepared in March 1997, the 2555 pressure zone of District No. 40 Region No. 4 currently has a storage capacity deficit of 38.8 Million Gallons (MG) in order to satisfy fire flow storage requirements and the District's one-day storage under maximum day demand need.	6,000,000	46,878	144,215 16	Los Angeles	IV	2009
1910 1910070	1910070-041	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue K Transmission Water Main - Phase II	The project consists of constructing approximately M 8,000 linear feet of 36-inch diameter steel water main along Avenue K between 5th Street East and 20th Street East in Lancaster. The project will increase the capacity of the Lancaster water system to meet the current domestic and fire protection water demands.	10	С	Parts of the existing water distribution system experiences large pressure fluctuations due to aged and undersized pipelines.	3,500,000	46,878	144,215 16	Los Angeles	IV	2009
1911 1910070	1910070-045	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue J and Trevor Pump Station	D The project will involve the replacement of two smaller, M less reliable pumps with four larger capacity pumps. The two existing pump houses, pumps and appurtenances will be demolished and replaced with one larger pump station, four larger capacity pumps, existing pipeline tie-in improvements, the electrical upgrade to support the new pumps and appurtenances.	10	c	An upgrade of existing pump station facilities located at Avenue J and Trevor Avenue is needed to improve the reliability of the existing water supply system by replacing two aging and outdated pumps with four new pumps. The four pumps will work together to maintain a more reliable water supply system. Increasing the number of pumps will improve the useful lives of the pumps by reducing loading on each pump, as well as providing redundancy when a pump is shut down for maintenance or due to pump failure. The upgraded facilities will also support the two new wells that are currently being constructed at the proposed site.	2,300,000	46,878	144,215 16	Los Angeles	IV	2009

1912 1910070	1910070-053	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Avenue M West Wate	1 & 60th Street The proposed project consists of installing approximately 6,600 linear feet (1.25 miles) of 36-inch diameter transmission main connecting the existing 36-inch main at Avenue L and 60th Street West to the Antelope Valley-East Kern Water Agency (AVEK) turnout 4-53, located at the District-owned site at Avenue L-12 and 60th Street West, and to the location of the future 3.2 MG reservoir at Avenue M and 62nd Street West by way of Avenue M and 60th Street West. In addition, a metering building will be built at the AVEK turnout 4-53 site. This project will increase the capacity of the Lancaster water system to meet the current domestic and fire protection water demands.	M t	10	с	The existing water distribution system experiences low water pressure, especially during times of peak demand. This limits the capacity to meet the current domestic and fire protection water demands.	2,300,000	46,878	144,215 16	Los Angeles	IV	2009
1913 1910155	1910155-015	GSWC - SOUTHWEST GSWC - D MG Reserv Pump Stat	oty Plant 1.77 The proposed project is to construct a 1.77 million voir and Booster gallon (MG) welded steel reservoir and booster pump station at the existing Doty Plant located 14124 South Doty Avenue in the City of Hawthorne which is within our Southwest District. The reservoir will provide 1.77 MG of storage that can be used for domestic and fire demands in the system in the area of the Doty Plant. The reservoir will fill from the new treatment plant and will deliver water via the new pump station to the distribution system. The booster pump station will consist of four 100 Hp pumps to provide water from the reservoir to the distribution system. The pumps will be housed in a pump building. The pump building will be constructed of blocks and will have four skylights which will allow for pump access and maintenance.	M	10	с	There is insufficient storage capacity in the zone 250 of the Southwest District. The California Public Utilities Commission (CPUC) and California Department of Public Health (CDPH) currently provide no specific requirements for storage volume. Therefore, recommended standards published by the American Water Works Association (AWWA) were considered in the development of this storage project.AWWA Manual of Standard Practices M32 (AWWA, 2005) suggests that a minimum operational storage volume between 10 percent and 30 percent (or more for a small system or in arid areas) of the average Maximum Day Demand (MDD) is appropriate for potable water distribution systems. This project was evaluated based on 25 percent of MDD volume being required for operational storage. A component of operational storage is emergency storage which is a dedicated source of water that can be used as a backup supply in the event a major supply source is interrupted. This can be provided by water from a second independent source, by water stored in reservoirs, or a combination of both. Ten State Standards recommends that emergency storage total between 12 and 24 hours of average day demand (ADD) volume (GLUMRB, 2003). Because the Southwest System contains fire storage, GSWC determined that 12 hours of ADD volume is appropriate. The system-wide supply and storage analysis results for the existing	3,582,000	51,205	168,686 16	Los Angeles	IV	2009
1914 1910155	1910155-005	GSWC - SOUTHWEST	CONSTRUCT A NEW WELL IN A UNCONTAMINATED AQUIFER	м	10	с	2 PRODUCTION WELLS AT THE CHADRON SITE ARE THREATEN DUE TO A KNOWN LEAKING UST ON THE SITE WHICH WAS REMOVED IN 1990.	1,000,000	51,205	168,686 16	Los Angeles	IV	1998
1915 1910155	1910155-016	GSWC - SOUTHWEST GSWC - So Dalton We Project)	buthwest System - This project is for the drilling, development, and ell No. 2 (Prop.50 equipping of a new well with a capacity of 1,000 gallons per minute (gpm) and all appurtenant equipment such as a disinfection facility, a chemical storage facility, a motor control center, and all necessary valving and piping. The source of water for this project is groundwater from the West Coast Basin. The well will be approximately 1,000 feet deep with a vertical turbine pump and with sodium hypochlorite and ammonia to provide chloramination for disinfection.	e	10	с	GSWC has applied for Proposition 50 Fund for this project. The Dalton plant is located in the south-central portion of the Southwest System. Its facilities include a non-operational 2.0 million gallon underground reservoir, a non-operational booster station with two pumps, and an active well (Dalton Well No. 1) that supplied the system directly using a vertical turbine pump. The Southwest District is heavily dependent on the Metropolitan Water District of Southern California (MWDSC) water supply due to the lack of reliable local wells. Currently, the Southwest System purchases over 60% of its supply from the West Basin Municipal Water District (WBMWD), a member agency of MWDSC. A new well that make beneficial use of the local groundwater will reduce the current demand on the supply from MWDSC and, thus, will reduce demand on the Colorado River water supply.	3,216,800	51,205	168,686 16	Los Angeles	IV	2009
1916 1910155	1910155-014	GSWC - SOUTHWEST	EQUIP THE WELL, INSTALL REMOVAL TREATMENT OR DRILL A NEW WELL AT A DIFFERENT SITE	м	10	С	SEA WATER INTRUSION AT OCEAN GATE WELL (CURRENTLY INACTIVE)	1,100,000	51,205	168,686 16	Los Angeles	IV	1998

1917 1910155	1910155-001	GSWC - SOUTHWEST		REPLACE WATER MAINS IN CRITICAL AREAS.	М	10	С	OLD CAST IRON PIPES WITH BIO-GROWH AND NITRIFICATION PROBLEM	3,575,000	51,205	168,686 16	Los Angeles	IV	1998
1918 3610034	3610034-004	ONTARIO, CITY OF	Age Deficient Water Main Replacement in and near Rosewood Court	Replacement of the Age Deficient Water Mains entails providing all the necessary labor, materials, equipment and services. The project includes installing two thousand and four hundred (2,400) linear feet (LF) of 8- inch PVC water main, water services, fire hydrants, gate valves, fittings, and other appurtenances in Rosewood Court and in nearby alleys and streets.	M 2	10	С	Several pipe segments in and adjacent to Rosewood Court are over fifty (50) years old and are deteriorating. In order to improve the quality of the distribution system and assure adequate water delivery to the customers, these deteriorating pipe segments need to be replaced.	495,000	34,006	172,701 13	San Bernardino	V	2009
1919 3610034	3610034-005	ONTARIO, CITY OF	Equip Well #43	Equipping Well #43 entails providing all the necessary labor, materials, equipment and services to equip the well. The work at the well site includes the construction of the well enclosure building including the vertical turbine pump, motor, and associated piping; onsite hypochlorite generation and feed system; standby power generator building including the diesel generato and associated equipment and piping; electrical; HVAC; plumbing; yard piping, and valving; field survey, staking and project layout; site work; foundation preparation; asphalt paving; landscaping; site fencing; connection to existing utilities; testing; and disinfection and startup.	M r	10	c	A well in the 1212 Zone has had maintenance problems and has become unreliable; therefore a replacement well needs to be constructed in order to maintain existing water production levels.	2,877,000	34,006	172,701 13	San Bernardino	v	2009
1920 5010010	5010010-006	Modesto, City of	Downstream Improvements - Claratina & Virginia Corridor Transmission Mains	This project will install water distribution system improvements needed to accommodate the increased production capacity of the Modesto Regional Water Treatment Plant Expansion. The Tier 1 phase includes new transmission and distribution piping and flow control stations and a new storage tank and booster pump station. These new facilities will enable the City's water system to better meet peak demands, maintain sufficient service pressures, improve water quality, and offsets wells out of service.	м	10	c	The Modesto water system which includes Salida, Empire and surrounding County islands is in need of increased water supply. Due to failing wells from ground water contamination, the original system has been losing needed water production. Surface water is available to the City of Modesto from the Modesto Irrigation District (MID) system. Currently the City purchases 30 mgd from MID. The City and MID have contracted to double this delivery of surface water to Modesto from the Modesto Regional Water Treatment Plant. The existing water system cannot transport additional surface water adequately through the system. Transmission mains, storage tanks, pressure reducing valves, and booster stations need to be constructed.	12,550,000	68,497	212,000 10	Stanislaus	ΙΙ	2009
1921 5010010	5010010-005	Modesto, City of	Purchase and Install New Generators - Tanks 7 and 8	The existing back-up power generators at Tank 7 and 8 3 will be replaced with larger generator units. Contractors will remove the existing generators and redesign the electrical panels, foundations and conduits to accommodate the new generators.	M 5	10	с	Tank 7 and 8 are important storage facility in the South Modesto Water System. Recently, to increase pressures because of growth, the booster stations on these tanks were upgraded. The upgrades included larger motors to pump water and increase system pressure. The larger motors require a larger back-up electrical system in case of power outages. Tank 7 and 8 existing generators are not adequate to operate the new motors in a power outage. This endangers the South Modesto area if fire flows were needed during a power outage.	495,000	68,497	212,000 10	Stanislaus	Ш	2009
1922 5010010	5010010-007	Modesto, City of	Install New Well - Mildred Perkins	A well site has been selected in the Mildred Perkins Park property. This location is ideal for a large production well to supply water to the Northwest Modesto area. The well has been drilled and tested an meets CDPH standards for quality drinking water. The design for this well is completed. The development will require full construction of the above ground pumping facilities.	M	10	с	The City is losing wells on the Northwest area of the City due to uranium contamination. Contaminated wells exceed the MCLs for uranium and Gross Alpha. Because of the loss of large production wells, the water supply in this area of the City has become taxed during the summer months. The existing operating wells must work at capacity to meet demands and keep the water supply adequate. New wells are needed in this area to meet minimum pressure and fire flow regulations. Development of this site needs to proceed soon for additional water supply this year.	1,300,000	68,497	212,000 10	Stanislaus	III	2009

1923 5010010	5010010-011	Modesto, City of	Water Main and Service Replacement - Airport District	The Modesto Water System has an area called the Airport District. This section of town will require the replacement and upsizing of water mains and service. Water mains and services will be moved out of the easement areas and installed in the street for easy access. Fire hydrants will also be installed. Adequate water flows will result due to appopriate sized water mains. This will improve water quality and bring sufficient water pressures and volumes for fires and household use. With new piping, water conservation will improve by eliminating water leaks. A total of 17,000 feet of water mains will be upgraded. There are 503 meter services that will be replaced during the infrastructure improvements. All meter services will comply with State mandates.	Μ	10	c	The Modesto Water System has an older residential and industrial area called the Airport District. This section of town has infrastructure that is aging and in desperate need of major upgrades. Staff spend many hours fixing leaks, maintaining the system, and spending money on street repairs and property damage to customers due to leaks. The water system has insufficient water quantity due to limited water delivery restricting new growth, including residential, industry and school expansions. With the low pressure issues, outdated water mains and services, the Airport District area has limited fire protection; especially during peak hours. There is almost 17,000 feet of water main that needs to be upgraded to meet the needs of this community and provide adequate volumes of water for building, industry, schools and fire protection. There are no wells in this area and the entire water supply is dependent on older mains to carry water from other parts of the system.	1,600,000	68,497	212,000 10	Stanislaus		2009
1924 5010010	5010010-008	Modesto, City of	Strengthen and Replace Water System - I Street Main	Design work to replace this water main has been completed. A contract will be issued for relining the existing water main under the railroad tracks. The new main will be tied into the existing system on both sides of the railroad tracks. This work must be done without disturbing the railroad schedule. It is very important to complete this work before summer when we expect high water demands in the downtown area.	м	10	C	The "I" Street water main connects the west and east sides of downtown Modesto. The main developed a leak underneath the Union Pacific Railroad (UPRR) tracks. This rail is a main connection through the Central Valley. To prevent damage the railroad, the main was shut down. Since this main inactive, water movement between the east and west sides of town is greatly restricted. The water main needs to be repaired so that the full supply of water can be used in case of fire or other emergencies. The system was originally designed to carry water in either direction, as needed.	435,000	68,497	212,000 10	Stanislaus	Ш	2009
1925 5010010	5010010-009	Modesto, City of	State Route 132 Water Main Replacement	Design is complete and bids are ready to be requested for full replacement of this 12" main within the State Route 132 corridor. This will include coordinating with State construction, traffic control, replacing services along the State route and temporary pavement.	м	10	С	Modesto has many old steel water mains within State highways. These mains are high maintenance due to leaking of the aging pipes. The State is repaving Highway 132 through Modesto starting in 2009. Several sections of this paving project have 12" water main that is especially problematic. It is necessary to replace this water main prior to paving the highway to avoid damaging the new pavement when repairs are made. The State will place a moratorium for cutting into their new pavement for several years. This will not be possible to adhere to if a water main breaks. Replacing this water main meets the Strategic Plan for the City of Modesto Utilities Division. Also, best management practices adopted by the City require us to replace failing water mains.	1,550,000	68,497	212,000 10	Stanislaus	Ш	2009

1926 3710010	3710010-004	Helix Water District	Pipeline Project 1400 Mt. Helix	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. This Project replaces 6,490 feet of cast-iron pipe with 5,350 feet of PVC pipe on Mt. Helix. The existing cast-iron pipe was installed from 1945 to 1949. Pipeline will be replaced within several streets including Wister Drive, Sierra Viats Avenue, Fuerte Drive, Shadow Road, Redondo Drive, Helix Terrace, and several easements. The Project also includes abandonment of a pressure reducing valve vault and installation of a new pressure reducing valve vault. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. The old cast-iron pipelines on this Project will replace old cast-iron pipe with PVC pipe that is less prone to failure and more reliable. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	M	10	с	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. This Project replaces 6,490 feet of cast- iron pipe. The old cast-iron pipeline on this Project have had 3 pipe breaks in 1980 and 1999. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	1,475,000	55,497	263,642 14	San Diego	v	2009
1927 3710010	3710010-006	Helix Water District	Pipeline Project 1442 Pepper/Second/Dawnridg e	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. This project replaces 6,800 feet of cast-iron pipe with 6,800 feet of PVC pipe in the unicorporated area of the County of San Diego near El Cajon. The existing cast-iron pipe was installed in 1948 and 1949. Pipeline will be replaced within several streets including Pepper Drive, N. Second Street, Dawnridge Ave., and El Rey Ave. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. The old cast-iron pipelines on this project have had one pipe break in 1977. The Project will replace old cast-iron pipe with PVC pipe that is less prone to failure and more reliable. These infrastructure improvemetns are also needed to bring the pipelines up to the current design requirements and standards.	M	10	С	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. This Project replaces 6,800 feet of cast- iron pipe. The old cast-iron pipelines on this Project have had one break in 1977. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	1,650,000	55,497	263,642 14	San Diego	v	2009
1928 3410020	3410020-022	City of Sacramento		Isolate South Sac as single pressure zone. Modify Florin Reservoir Pump Station to increase discharge head. Construct groundwater well to help supply peak demand. Involves refinancing and construction.	М	10	C	Water pressure levels in South Sac routinely drop below the City's minimum water pressure level.	306,000	137,886	407,018 09	Sacramento	I	2006
1929 3410020	3410020-013	City of Sacramento		Provide new treated water pump station and connecting piping. Involves design and construction.	Μ	10	С	Existing treated water pump station is aged and structure settlement and pipeline leaks have occurred.	20,000,000	137,886	407,018 09	Sacramento	I	2006

1930 3410020	3410020-032	City of Sacramento	Water Pipe Relacement #2	2 Citywide replacement of water pipes which have either exceeded their useful life or are undersized due to growth. The project purpose is to ensure the reliability of the water distribution system and reduce the potential for water main breaks. At one time the downtown area had approximately 63,300 feet of riveted steel water transmission main that was placed between 1870 and 1950. These large mains are considered some of the most critical components of the City's water distribution system and are essential in providing a safe and reliable water supply to our customers. These pipelines should be replaced prior to failure. The City has experienced failures of the riveted steel mains in the past that have caused severe damage to businesses and residential properties.	Μ	10	c	Citywide replacement of water pipes which have either exceeded their useful life or are undersized due to growth.	7,300,000	137,886	407,018 09	Sacramento	I	2009
1931 3410020	3410020-016	City of Sacramento		Repair cracks and place a concrete coating on the slab and wall surfaces.	М	10	С	Concrete slabs and walls in existing basins and filters are cracked and have lost a large part of the cement matrix at the surface exposed to water.	500,000	137,886	407,018 09	Sacramento	I	1998
1932 3410020	3410020-030	City of Sacramento	Water Pipe Installation #1	Main Ave - Blackrock to Rio Linda Bl New Pipe: This project serves three main purposes, 1) it allows for a more reliable water supply to the area by providing redundancy, 2) increases the water supply to area being serviced, and 3) allows for a distribution network for future tie-ins to the system. The most critical purposes are to provide system redundancy and water supply. Folsom Boulevard Pipeline: The construction of 3920 lineal feet of 24-inch diameter water transmission main and related facilities connecting to an existing water transmission main in Folsom Boulevard will allow for the transmission of American River water to the Rosemont service area. This project will also allow for the expansion of conjunctive water management in the area.	Μ	10	c	Main Ave - Blackrock to Rio Linda Bl New Pipe:Currently, there are only three water mains that feed the entire North Natomas area. Two of these mains are smaller diameter, therefore, there is minimal redundancy to the area. Folsom Boulevard Pipeline: This pipeline will supply water to the Rosemont area which is served by groundwater that is currently impacted, threatened, and in some cases, lost, due to industrial contamination.	9,500,000	137,886	407,018 09	Sacramento	I	2009
1933 3710042	3710042-011	San Diego County Water Authority	Aeration Facilities at Lake Hodges Pump Station	Install aeration facilities at the Lake Hodges Pump Station that will increase oxygen levels in Lake Hodges, resulting in improved water quality and reduced operating costs for the region's water treatment plants.	М	10	C	The San Diego County Water Authority is connecting Lake Hodges to Olivenhain Reservoir and its untreated water conveyance system that supplies seven water treatment plants in the region. The water quality in Lake Hodges is less than optimum compared to the supply in Olivenhain Reservoir and supplied through its regional conveyance system.	130,000	102	3,140,000 14	San Diego	v	2009
1934 3710042	3710042-012	San Diego County Water Authority	Turbidity Curtains at Lake Hodges	Install turbidity curtains at the Lake Hodges Pump Station Inlet/Outlet Tower and the watershe influent. The curtains will increase the quality of the water pumped to Olivenhain Reservoir and returning to Lake Hodges as water is moved from one water body to the other. Improved water quality in Lake Hodges will result in reduced operating costs for the region's water treatment plants.	Μ	10	С	The San Diego County Water Authority is connecting Lake Hodges to Olivenhain Reservoir and its untreate water conveyance system that supplies seven water treatment plants in the region. The water quality in Lake Hodges is less than optimum compared to the supply in Olivenhain Reservoir and supplied through its regional conveyance system.	380,000	102	3,140,000 14	San Diego	V	2009
1935 3710042	3710042-010	San Diego County Water Authority	Circulation Using Solar Bees at Lake Hodges	Install SolarBees in Lake Hodges to circulate water and improve water quality. SolarBees will improve water quality and result in reduced operating costs for the region's water treatment plants.	Μ	10	с	The San Diego County Water Authority is connecting Lake Hodges to Olivenhain Reservoir and its untreated water conveyance system that supplies seven water treatment plants in the region. The water quality in Lake Hodges is less than optimum compared to the supply in Olivenhain Reservoir and suppplied through its regional conveyance system.	200,000	102	3,140,000 14	San Diego	V	2009

1936 3710042	3710042-008	San Diego County Water Authority	Quagga Mussel Control Chlorine Feed at Olivenhain Reservoir	Install chlorine feed facilities at the Olivenhain Reservoir to prevent the introduction of viable Quagga Mussel veligers into Lake Hodges from this source water.	Μ	10	с	The San Diego County Water Authority is connecting Lake Hodges to Olivenhain Reservoir. Olivenhain Reservoir has become infested with the invasive Quagga Mussel. This infestation results in significant maintenance of the reservoir and lake facilities. Water from Olivenhain Reservoir will be conveyed to Lake Hodges on a regular basis when the Hodges Pumped Storage Pump Station is completed in 2010 thereby increasing the probability of Quagga Mussel infestation into Lake Hodges.	1,500,000	102 3,1	40,000 14	San Diego	v	2009
1937 2702268 1938 2702254	2702268-001 2702254-001	NEW CAMALDOLI HERMITAGE WS PACIFIC VALLEY SCHOOL WS		Construction of 3 new tanks. Need to install new well, storage tank, and pipes.	M M	10 10	P P	Deteriorating water storage tanks. System facilities (well, storage, distribution) are in poor	12,000 30,000	1 1	25 05 55 05	Monterey Monterey	 	1998 1998
1939 4700575	4700575-001	Butte Valley Middle School	Deeper Well Needed	The District does not have the funds to pay to get the well problems solved. We just found out about this program and are hoping to be able to get some help before we are no longer able to get any water from our well. This is an agricultural community and the type of agriculture has changed. There is now mostly strawberry fields around the school which are using more water and it seems the underground water levels are dropping every year. Our initial feeling was that we would need to dig down at least 20 feet to insure that we will have a good water supply. We have been told that this would be just a band-aid fix and that we should go down at least 100 feet.A smaller casing than what the original one now is would need to go down through the original so that it was all one piece. After someone is able to come and look at the project it is possible that we could be told that a new well would be needed and the cost of making the well deeper will also depend on the quality of casing that is used.	Μ	10	Ρ	condition resulting in TCR violations. Wells are the only water available to Macdoel residents. There is no public water system available. The closest public water system is 11 miles away in Dorris, California. This well is used for our Middle School and Picard Community Day School located in Macdoel, California. We have approximately 80 students and 8 staff members who use this as their only supply for drinking water. We are having a shortage of water available as the water table level is at 68 feet and our well is at 69 feet. We need to make the well deeper so that we can have a steady supply of water for our students and staff. Our well is sometimes sucking air instead of water. We have had to stop watering our school grounds as there isn't enough water. The water is also the only source available for daily use of sanitation needs. If we do not have enough water to take care of sanitation needs we would be forced to close our two schools and there would be nowhere for our students to go as this is the only Middle School within approximately 60 miles.	20,000	1	55 01	Siskiyou	I	2009
1940 4500181	4500181-001	WHITMORE UNION ELEM SCHOOL		Install 125 gallon bladder tank on a steel frame to provide the pressure required by the Waterworks	м	10	Ρ	Insufficient water pressure. System not fulfilling Section 64566 (system pressure) of the Waterworks Standards.	10,000	1	75 02	Shasta	I	1998
1941 1500517	1500517-002	STOCO MUTUAL WATER COMPANY	Storage Tank and Pressur Tank Install	<ul> <li>e Water Storage Tank-System does not meet the fire flow requirements set forth in the Kern County Development standards - (System has pressure tank only)Booster Pumps (excluding cement pads)Well Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter (Inoperable)5/8" Water Meters (replace existing to properly quantify the amount of water being used with each connection)Back - up Generator/ATS (None)Instrumental/ControlsContingencies (15%)Engineering and Administrative Fees - Including Reports (10%)Permit and Legal FeesInstall pressure regulator and combination metering valve with check.Replace 10,000.00 gallon pressure tank.</li> </ul>	Μ	10	Ρ	This system needs the following items according to Boyle Engineering's Report (March 2007)Water Storage TankBooster PumpsWell Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter5/8" Water MetersBack - up Generator/ATSInstremental/ControlsThe systems has six connections with businesses that cannot afford such a substantial estimated cost to complete these repairs/upgrades.Install pressure regulator and combination metering valve with check.Replace 10,000.00 gallon pressure tank	600,000	6	85 19	Kern	111	2009

1942 2100545	2100545-005	WALKER CREEK RANCH EDUCATIONAL CEN	IT Walker Creek Water System Water Conservation Plan	The project is to replace the primary 100,000 gallon water storage tank and to detect and repair leaks in the distribution system.	Μ	10	Ρ	The existing primary water storage tank and distribution lines are approximately 50 years old and in need of repair. The system is currently loosing approximately 5,000 gallons per day due to leaks in the primary storage tank and the distribution system, which equates to about 1.8 million gallons per year, and approximately 30% of total annual water consumption by the system. The water loss is a growing concern, in the midst three consecutive years of drought conditions, and the water table dropping.	595,000	21	100 18	Marin	Ι	2009
1943 3901014	3901014-001	BANTA ELEMENTARY SCHOOL	Corroded water pipe replacement for safe drinking water	The distribution system will need to addressed. The project will require displacing students while construction takes place. this will be an ardous process and will deal with each wing separately.	Μ	10	Ρ	We are currently unable to provide drinking water for our students as we have coliform in our water. We know it does not emanate from the well or the new bladder system we have put in. we have been told due to the age of our buildings and pipes (Pombo Wing built in 1954 and Emhoff Wing built in 1970) that the pipes need to be replaced to eliminate the problem. Thus, we have to replace the pipes in both wings which include a full kitchen and gymnasium.	125,000	1	200 10	San Joaquin	Ш	2009
1944 1900756	1900756-004	WARM SPRINGS REHABILATION CENTER	Warm Springs Rehabukutation Center	The Water system is in need of an additional water source to meet the demands of the community, and to reduce arsenic concentrations. i.e. new ground water well.	М	10	Ρ	Water Quality from Well #1 has ARSENIC concentrations that exceed the 0.50 milligrams per liter (mg/L) National Primary Drinking Water Standard Maximum Contaminated Level. The water system has insufficient water storage for fire protection.	500,000	1	200 16	Los Angeles	IV	2008
1945 3400268 1946 3701909	3400268-001 3701909-001	WALNUT GROVE ELEMENTARY SCHOOL CUYAMACA OUTDOOR SCHOOL	Cuyamaca Well #1 Refurbishment Project	Install storage tank to increase storage capacity. We propose to use the grant funds to refurbish Well #1 to produce potable water and reconnect it to our reservoir. This will consist of replacement of the annular seal, well cap, pump and electrical components and controls, and installation of appropriate pipe between well #1 and the existing reservoir. It may also require "refurbishment" or "fracturing" of the existing well #1 and/or deepening the existing well to ensure appropriate delivery of potable water.It is felt that refurbishing this existing well would be more cost effective than siting and drilling an entirely new well.	M	10 10	P	Single well source with no storage; unreliable. The Cuyamaca Outdoor School site provides school camp opportunities for approximately 275 5th and/or 6th grade students from various schools with San Diego County. The water system was previously supported by two wells. Well #1 was removed from service due to cracks in the annular seal and well cap and problems with the well pump and the connection to the reservoir and distribution system. This reduces the site to a single water source with which to serve the school camp and the adjacent State Parks headquarters. Well #2 produces water in which Manganese was found at levels that exceed the secondary MCL of 50 ppb (i.e. 110 ppb). Therefore, it is desirable to refurbish and reconnect Well #1 to produce potable water which will be blended with the water from well #2 in our reservoir so that the average Manganese (ppb) will be reduced. below the secondary MCL. This information is posted in our annual Consumer Confidence Report.	50,000 75,000	3 19	300 09 300 14	Sacramento San Diego	I V	1998 2009
1947 1600008	1600008-002	CENTRAL UNION ELEMENTARY	Central Union School well addition	Furnish and Install (F&I) 300 GPM Groundwater Deepwell on Central Union School grounds.F&I 300 GPM Vertical Turbine pumping unitF&I Well Manifold Installation - 2F&I Hydropnuematic Tank InstallationF&I Pipeline Valved ConnectionsF&I Reinforced Concrete - 20 cubic yardsF&I Compacted Aggregate Base - 300 cubic yardsF&I Conpacted Aggregate Base - 300 cubic yardsF&I Chorination Building, Equipment and ControlsF&I Electrical Controls and EquipmentKings County Public Works Application Permit Fees	Μ	10	Ρ	Central Union School is located in rural Lemoore, Ca. Currently the school operates on one well. The single well is the only supplier of water on the school site. The well was established in 1992 and is currently at a depth of 860 feet with the pump set at 310 feet.	585,000	3	320 12	Kings	Ш	2009
1948 5700510	5700510-001	DELTA HIGH SCHOOL		Intstall 20,000 gallon storage tank. Involves design and construction	М	10	Ρ	Not enough storage capacity.	35,000	3	350 09	Yolo	I	2006
1949 4100513	4100513-001	PESCADERO HIGH SCHOOL		Feasibility study to consolidate with CSA 311 San Mateo County.	М	10	Ρ	Cracked well casing needs to be repaired.	15,000	1	400 17	San Mateo	Ш	2006
1950 5700509	5700509-001	CLARKSBURG MIDDLE SCHOOL		Install 20,000 gallon tank.	М	10	Р	Inadequate storage.	33,000	1	400 09	Yolo	I	1998

1951 2400066	2400066-002	PLANADA SCHOOL	Well water replacement with city water district water	The Planada Elementary School would connect to the Planada Community Services District water supply. The well on the school campus would continue to supply water for landscape irrigation but would no longer be connected to the drinking water system. The Services District would install a double check valve, water meter 48" water box/extension, 48" water box lid, misc. plumbing material, and labor. The District would perform the water connection to the school.	м	10	Ρ	Currently the Planada Elementary School with 550 students and 40 staff members located at 9525 E. Brodrick, Planada, CA 95365 is supplied with well water located on school property. The water from this well supplies drinking and landscape irrigation water to the campus. The water is currently tested monthly and the quality has been satisfactory. However, the well is over fifty years old and is not a deep well for the area. The potential for groundwater contamination is high. The Planada community has a population of 4000 and is surrounded by agriculture crop land making the groundwater suseptible to leaching pesticides. The Planada Community Services District supplies the Planada Community with water and the district would like to connect to the District's water supply.	10,000	1	605 11	Merced		2009
1952 0900317	0900317-001	CHIQUITA HOMEOWNERS ASSOC.	Chiquita HOA Distribution System Upgrades	We are attempting to update our system so that it meets the current public health requirements with El Dorado county.	М	10	N	Water system is currently serving 17 homes which are partly supplied with steel pipe and no back flow system currently in place. Our storage also needs updating, venting, seals, etc.	10,000	17	20 09	El Dorado	I	2009
1953 2700999	2700999-001	OAK PARK WS		Install pressure system and replace aging water mains.	М	10	Ν	System needs to install booster system and replace water mains due to lack of water pressure and aging pipes.	50,000	1	29 05	Monterey	Ш	1998
1954 2700999	2700999-004	OAK PARK WS		Replace existing potable distribution system with adequate separation.	М	10	Ν	Non-potable irrigation system is not adequately separated from potable distribution system.	40,000	1	29 05	Monterey	Ш	1999
1955 3301025	3301025-001	AZALEA TRAILS GIRL SCOUTS CAMP		Would like to construct a 20,000 to 40,000 gallon storage tank and replace approximately 2000' of 4-inch line and approximately 3000 of 2-inch line.	м	10	N	Storage capacity is inadequate. We need a second tank for increased storage. Water lines are close to or on the surface. Lines need to be buried at an adequate depth to prevent freezing.	100,000	9	50 20	Riverside	v	1998
1956 4901207	4901207-001	Sonoma County Parks-Stillwater Cove		Replace well, distribution lines, water pumps, chlorinator and tanks.	М	10	Ν	Need well, distribution lines, water pumps, chlorinator and tank replacement.	125,000	1	50 18	Sonoma	Ш	1998
1957 3700063	3700063-001	FREEDOM RANCH	well replacement with booster pump station and additional storage capacit	Construct new well source with new booster pump station and add additional storage to meet capacity y demands under the 2008 water works standards, including fire flow. New distribution line to connect to existing storage and main building. Abandon existing well.	Μ	10	Ν	Existing source well is over 40 years old and no longer passes the coliform rule. Disinfection proved fruitless, boil water order issued until chlorination system could be installed. Boil water in effect from July through September 2008. No longer in effect due to full time chlorination. Existing well source beyond its useful life.	380,000	1	60 14	San Diego	V	2009
1958 5400505	5400505-001	HARTLAND CHRISTIAN CAMP	Back up well	Locate and drill several test wells with the expectation of landing a good producing well that can be developed and tied in as a back up to our current system.	M	10	N	Limited back up capacity. We currently have only one well and an emergency back up with our neighbors that would not be sustainable for our situation.	75,000	4	140 12	Tulare	Ш	2009
1959 1000058	1000058-001	MUSICK CREEK TRACT ASSOCIATION		CONSTRUCT A NEW WELL.	М	10	N	THE TWO ACTIVE WELLS HAVE MARGINAL CAPACITY TO MEET THE DEMANDS OF THE SYSTEM, ESPECIALLY DURING DRY YEAR.	15,000	48	165 23	Fresno	Ш	1998

1960 3600534	3600534-005	De Benneville Pines Inc	Failed Water System Replacement	The planned project will replace existing 2700 feet of 2" galvanized decaying galvanized water mains that range in age from 45 to 65 years with current AWWA and NFTA code lines. The new lines and mains will vary from 6" to 2" in diameter depending on the location in the system. The project will start at the current horizontal well and utilize a 700' in length 2" HDPE (High Density Polyethylene) to supply the existing 45,000 gallon storage tank. This line must remain surface run as portions of this line are located within the San Gorgonio Wilderness located in the San Bernardino National Forest. The well is artesian. The current steel storage tank was relined with fiberglass approximately 10 years ago and has an indefinite life expectancy at this time. However, the tank was modified to allow for the installation of a 6" outlet. Additional connections are designed into the project to allow for the installation and connection of an additional tank if funds are available. The work installing the new outlet was completed in April of 2009.A temporary 2" water main will be installed so that once work on the 6" line commences in late Fall 2009 the existing 700 foot	Μ	10	Ν	Camp de Benneville Pines is a 501C3, not for profit year round camp located in the wilderness of the San Bernardino National Forest. This institution was acquired in 1961 from the Boy Scouts, who operated a facility on this site from the mid to late 1940's. Our existing water delivery system, a combination of 2" galvanized shallow buried pipes installed by both the Boy Scouts in the late 1940's and by Camp de Benneville Pines in the early 1960's has failed in part and we believe a catastrophic failure to be imminent. Due to the age of the existing lines (45-65 years in age) we are experiencing a high level of both water main breaks and leakage. These events have placed our camp population of over 6000 campers per year at risk of drinking contaminated water. We have already experienced water tests indicating organic matter in our drinking water supply. Camp de Benneville Pines is no longer in accordance with NFTA and AWWA codes and standards and we urgently need to solve this problem in its entirety before we are forced to close the camp because our water system has failed completely.A local civil engineering firm has completed plans for the	400,000	2	250 13	San Bernardino	v	2009
				section from the storage tank to the campus can be replaced without fear of destroying the existing line and interrupting service.Camp de Benneville Pines is located in the breeding zones for Southern Spotted Owls. As such, major machine work must occur only during times				replacement of our dangerously deteriorated 2" galvanized water mains with modern 6" high density polyethylene (HDPE) mains, and we have submitted this engineering design to the San Bernardino County Fire Marshall and the US Forest Service for approval. We						
1961 2710302	2710302-001	CSP-J.P. Burns Park		Replace and relocate tanks. Install security fence and monitoring equipment.	Μ	10	N	Three redwood tanks need to be replaced. Supply and signal lines from well need to be replaced.	24,000	8	800 05	Monterey	II	1998
1962 2710301	2710301-001	CSP-Andrew Molera State Reserve		Dig up and relocate existing line away from river bank. Install monitoring equipment to improve inspection of the system.	М	10	Ν	Erosion has exposed the main water line requiring that it be relocated.	12,000	21	1,000 05	Monterey	II	1998
1963 1502223	1502223-001	WILLOW SPRINGS RACEWAY		Bring electricity to water systems to replace generators	м	10	Ν	Needs new generator - currently using old diesel generator to operate well.	100,000	10	5,000 19	Kern	Ш	1998
1964 2700842	2700842-001	BAUMANN RD WS #01		Replace holding tank, construct new line to the pump, and replace pressure tank.	м	5	С	System needs new holding tank, new line to the pump, and new pressure tanks.	10,000	17	40 05	Monterey	II	1998
1965 2701278	2701278-003	RANCHO CHAPARRAL MWC		Conduct assessment to determine storage requirements, and design/construct tank, pump, fittings, and plumbing	м	5	С	Inadequate water storage to meet demand [No documentation provided]	50,000	17	48 05	Monterey	Ш	1999
1966 3301209	3301209-001	DESERT VIEW TRAILER PARK		None listed	м	5	С	Lack of storage.	100,000	40	50 20	Riverside	V	1998
1967 2700634	2700634-001	CHETMOORE ACRES WA		Install new water mains and two new 20,000 gallon storage tanks	М	5	С	Lack of water storage capacity, and water mains are aging (constructed in the 1940's).	50,000	25	50 05	Monterey	II	1998
1968 4900549	4900549-003	Sonoma County CSA 41-Freestone	Replace failed roof on underground concrete water tank	Plans were prepared for the construction of a new roof structure consisting of Alaskan yellow cedar. The county of Sonoma has submitted bid documents for construction; however there is no source of funds to complete this construction projectThe project consists of installing a temporary tank and pump system, while the existing roof is removed. The galvanized metal roofing will be salvaged and reused when the new roof trusts are completed and placed on the tank. Te dimensions of this tank is 25 feet wide; 40 feet long; and 8 feet deep. This project may be awarded in less than 60 days.	Μ	5	С	The existing douglas fir roof truss has failed and the entire roof is settling into the under ground finish water storage tank. Emergency repairs have prevented the entry of small animals. The condition is perilous, soon the roof will collapse into the water supply. The community is very small (less than 30 users) and cannot afford a new roof structure constructed with marine Alaskan yellow cedar.	60,000	30	60 18	Sonoma	II	2009
1969 1500489	1500489-001	BRITE LAKE COMMUNITY ASSOCIATION		Replace 2000-3000 ft. of water line. Replace pump and well system	М	5	С	(1) Old decaying water lines that presently deliver water. (2) Back up well to provide water service in case of mechnical breakdown	30,000	18	63 19	Kern	ш	1998
1970 2701040	2701040-001	MCCOY RD WS #05		Install tanks holding approx. 30,000 gallons and new pumping station. Install main lines from holding tanks with fire hydrants on new distribution lines.	Μ	5	С	System needs new storage tank, pump stations, and distribution mains.	150,000	24	72 05	Monterey	II	1998

1971 1900158	1900158-005	LITTLE BALDY	Transmission pipeline replacement	The proposed project is to replace the existing transmission pipelines with ~7,000 feet of 6 inch fusion welded HDPE pipe, and abandon the old leaking concrete line. The new pipeline will reduce the amount of water lost during transmission, and protect customers from potential coliform contamination exposure due to open, unpressurized lines.	Μ	5	C	The System's transmission line was installed in 1913, was constructed of 10° and 12″ unreinforced concrete pipe that is only capable of handling unpressurized flows. 7,000 feet of this remain in service from the well site in the mountain canyon down to the upper edge of the service area. The inability of this existing concrete piping to function as a pressure conduit is in itself a violation of the California Water Works Standards. The lines losses have been estimated to be greater than 30% of all of the water produced, due to a suspected break or crack in the pipe. This water loss takes place between the well field and the distribution system. This leaking transmission line is causing significant water shortage problems, and the system is unable to reliably deliver water to consumers.	300,000	27	76 16	Los Angeles	IV	2009
1972 4900843	4900843-001	Sonoma Ranch Mutual Water Company		Crill new well. Install new storage tank. Upgrade existing tanks or main pipeline. Upgrade existing controls and valves. Construct control station facility and chicration system.	м	5	с	3 existing wells provide a marginally adequate supply of water. Capacity of storage tanks is inadequate. Existing storage tanks and distr. Lines are old and in some cases inadequate	723,000	54	100 18	Sonoma	II	1998
1973 3900504	3900504-001	CLEMENTS WATER WORKS #43		DRILL SECOND WELL AND INSTALL AUXILIARY POWER.	М	5	С	SINGLE WELL SYTEM WITH NO AUXILIARY POWER	450,000	65	120 10	San Joaquin	Ш	2006
1974 1500447	1500447-001	SIERRA BREEZE MUTUAL WATER COMPAN	Y	TREATMENT SYSTEM FOR NITRATES; REPLACE DISTRIBUTION LINES. OTHER - DESIGN, STUDY AND CONSTRUCTION	М	5	С	REPLACEMENT OF DISTRIBUTION SYSTEM	300,000	73	144 19	Kern	Ш	1998
1975 2400201	2400201-003	VOLTA COMMUNITY SD	Additional Well and Storage for Volta Community Services District	We need to install a storage facility, an additional pump and well. This needs to be tied into the existing system.	э М	5	с	At the present time there is only one well and no storage, serving an elementary school and 40+ residences. The well/system is approaching 20 years old. We have a temporary connection with a neighboring processing plant that can be used in emergency situations, but no permanent reliable alternative water source. Health and Safety Code #116555 requires a "reliable and adequate supply of potable water." According to our Health Department, a single well is not considered a reliable enough source.	400,000	45	150 11	Merced	Ш	2009
1976 2700766	2700766-003	STRAWBERRY RD WS #06		Need a cement slab at well to prevent contamination. Need new 15,000 gallon tank.	М	5	С	Bacti sampling frequently tests positive for coliform	15,000	27	150 05	Monterey	Ш	2000
1977 2701257	2701257-001	GARRAPATA WC INC		Install new piping (supported in areas with steel beams in concrete), fencing, pumps, meters, storage tanks, and a new well.	M	5	С	Distribution piping and facilities need replacement.	124,900	50	150 05	Monterey	II	1998
1978 2000549	2000549-002	MD#05 MOUNTAIN RANCHES	New Well	Construct a new well and storage tank.	М	5	С	This system experiences water outages due to a lack of adequate source capacity.	944,000	35	150 11	Madera	Ш	2007
1979 1900529	1900529-001	CAMP WILLIAMS- RESORT		RETAIN SERVICES OF REQUIRED PERSONNEL TO DO REPAIRS.	м	5	С	STORAGE TANKS NEED REPAIRS, EMERGENCY BACK-UP WELL NEEDS TO BE BROUGHT ON-LINE, NEED TO INSTALL CHLORINATOR AND PUMP HOUSE, NEED TO REPAIR MAIN LINES TO INCREASE PRESSURE	10,000	67	150 16	Los Angeles	IV	1998
1980 2000851	2000851-001	MD#40 SUNSET RIDGE ESTATES		INSTALL A NEW WELL, 50,000 GALLON STORAGE TANK, AND DISTRIBUTION SYSTEM.	М	5	С	THE SYSTEM SOURCE, STORAGE, AND DISTRIBUTION FACILITIES ARE NOT ADEQUATE TO MEET THE GROWING DEMANDS OF THE SYSTEM.	200,000	50	150 11	Madera	Ш	1998
1981 4200560	4200560-003	CA CITIES WTR SISQUOC #1	Sisquoc - Foxen Canyon Well #5 and Reservoir	A new well needs to be drilled and equipped, a new 300,000 gallon storage tank needs to be erected, and al necessary piping needs to be put in place to connect them to the distribution system.	M	5	С	This small system is currently only supplied by one well, which is contrary to Title 22 California Regulations Related to Drinking Water section 64554(c). A new well is necessary to bring this system current with new regulations. Further, storage capacity is insufficient to meet Maximum Day Demand, contrary to Title 22 California Regulations Related to Drinking Water section 64554(a)(2).	2,000,000	68	200 06	Santa Barbara	IV	2009
1982 1000259	1000259-002	NEW HORIZONS MOBILE/RV PARK	New well to augment single well	Drill a new well or interconnection if possible.	М	5	с	System supplied by one well if it fails the system is out of water.	200,000	64	200 23	Fresno	Ш	2008
1983 1000299	1000299-001	THREE PALMS MOBILEHOME PARK	New well to augment single well	Drill a new well or interconnection	м	5	С	Single well system, if well fails, system is out of water	200,000	101	202 23	Fresno	Ш	2008

1984 2600620	2600620-001	MOUNTAIN MEADOWS MWC		Construct second storage tank	М	5	С	Inadequate storage to ensure continuous pressure during emergencies and/or maintenance	250,000	73	225 13	Mono	V	1998
1985 4900791	4900791-001	Western Mobile Home Park		Run 2 inch line with 3/4 inch lateral to each of the 5 homes affected.	М	5	С	Low water pressure to part of system.	10,000	73	225 18	Sonoma	П	1998
1986 5601104	5601104-001	CASITAS MUTUAL WATER COMPANY		Design to solve problem, increase pumping ability (psi), replace old lines & interconnect to form grids and loops	, M 5.	5	С	Distribution system needs upgrades to comply with Water Works standards.	150,000	84	229 06	Ventura	IV	1998
1987 0707577 1988 1000378	0707577-001 1000378-001	RIVERVIEW WATER ASSOCIATION SUNSET WEST MOBILE HOME PARK	New well to augment	Drilling deeper well and installing newer pump. Drill a new well or inconnection if possible.	M M	5 5	C C	Low water level in one well. Single well, if it fails, system is out of water.	10,000 200,000	86 162	230 04 239 23	Contra Costa Fresno	 	1999 2008
1989 2300514	2300514-003	Elk County Water District	Replace 1000' of watermain	This is part of an ongoing project that has been funded out of customer charges. Elk watermains in the target area are deteriorating steel lines aged fifty years or more. The is the last underground section in the distric to be replaced. 1000 feet is to be replaced using directional boring. Customer connections will also be replaced in the project and cross connection issues will be addressed at the same time.	M	5	С	This project is to replace existing, aged and deteriorating watermain to reduce leakage, improve reliability and increase fire protection flows.	100,000	87	326 03	Mendocino	II	2009
1990 2300514	2300514-002	Elk County Water District	Tank Replacement	Tank replacement of a 84,000 gallon aged and leaking watertank on the same site with 120,000 tank to improve system reliability and fire storage.	М	5	с	Replace aged steel leaking water tank.	200,000	87	326 03	Mendocino	II	2009
1991 1500314	1500314-002	Del Oro Water Co. (for. Country Estates)	Del Oro Water Company - Country Estates - Pipeline Project	- Construction of pipeline connecting treatment system from Cal Water	n M	5	с	This is a small water system with 88 service connections. The wells produce water that exceeds the TDS secondary standards level and is near the MCL for arsenic and nitrate. Various options have been investigated including treatment. The least expensive option is to connect to a water system that has water treatment to meet the drinking water standards, and entails the installation of approximately 6,500 lineal feet of 8 inch mainline.	1,250,000	91	364 19	Kern	III	2009
1992 2700787	2700787-001	VEGA RD WS #01		Construct new water tank and associated appurtenances.	М	5	С	Existing tanks are very deteriorated and can not be repaired, resulting in inadequate water storage	175,000	148	438 05	Monterey	II	1999
1993 5601117	5601117-005	SENIOR CANYON MUTUAL WATER CO		Replace line from tank to distribution system.	М	5	С	Read to comply with Water Works standards.	96,090	240	450 06	Ventura	IV	1998
1994 4000568	4000568-006	SAN SIMEON CSD	San Simeon Waterline Repair and Improvement	This project is intended to address water distribution system deficiencies identified in the District's 2007 Water Master Plan. The existing potable water system consists of more than 2 miles of distribution piping. Th majority of the transmission piping (approximately 8,500 feet) is 6-inch asbestos-cement (ACP) pipe. The proposed project will replace approximately 5,460 feet of 6-inch ACP pipe to improve reliability, increase separation from sanitary sewer, and improve fire protection.	M e	5	С	The District operates and maintains over 2 miles of predominately Asbestos-cement distribution piping. The majority of this pipe is undersized and does not provide adequate fire protection for the community. According to records, the District also experiences significant water loss. Additionally, much of this pipe does not maintain adequate separation from sanitary sewer, increasing the risk of cross contamination.	1,370,000	206	499 06	San Luis Obispo	IV	2009
1995 4000568	4000568-005	SAN SIMEON CSD	San Simeon Pipe Bridge Repair/Replacement	This project will replace or repair the bridge to assure water supply to residents for sanitary needs and fire protection.	Μ	5	С	The 74-foot-long open pipe utility bridge is located over the Arroyo del Juan Creek (approximately 100 yards east of the Pacific coast shoreline and immediately north of the District's sewage treatment plant). This utility bridge supports a critical District water pipelines crossing the creek. A recent structural evaluation of the bridge estimates that due to severe corrosion, if not repaired or replaced, the bridge stability will be critically jeopardized. This work must be performed to ensure safe water supply to District residents.	225,000	206	499 06	San Luis Obispo	IV	2009

1996 4000568	4000568-007	SAN SIMEON CSD	District Reservoir Outlet Pipe Upgrade	Project involves replacing approximately 850 feet of 8 inch ACP pipe with 12-inch PVC pipe to provide water supply and fire protection to the community.	8- M	5	С	The outlet pipe from the District Reservoir does not have adequate capacity as identified in the District Water Master Plan.	276,000	206	499 06	San Luis Obispo	IV	2009
1997 4000568	4000568-009	SAN SIMEON CSD	Wellfield Rehabilitation Project	San Simeon relies solely on groundwater wells for its potable water supply. Two wells located in the Pico Creek Basin provide the District with water for commercial, residential, and fire protection uses. Through careful operation and management, these wells have performed admirably since 1952 and 1967, respectively, with few problems. However, due to age and constant exposure to corrosive environment, the facilities are in need of repair and replacement. The District has identified necessary repair and maintenar improvements including mechanical equipment, pipin electrical, disinfection, access, security, lighting, and monitoring.	M , e nce ,g,	5	с	This project is intended to address reliability issues that have occurred at the wellfield due to the age and condition of the facilities.	395,000	206	499 06	San Luis Obispo	IV	2009
1998 2800521	2800521-005	CIRCLE WATER DISTRICT	Circle Oaks Water System Improvement	Replace the existing 50,000 gal redwood tank with a 125,000 gal bolted steel tank at the same hillside location. This will require demolition of the old tank, grading for the new tank footprint, fabrication on site a reinforced concrete foundation to tank manufacture specifications, installation of a retaining wall, installation of a shut-off valve, instrumentation to measure water depth and means of transmitting dept to the water treatment plant, and piping to interface the existing piping. This is estimated at \$807415 including a 15% contingency.	M ers th to	5	с	The Circle Oaks Water District was established in 1963 with redwood tanks. The tanks have deteriorated considerably and lose water through leakage. We need bolted steel tanks to replace the existing redwood tanks. The tank urgently in need of replacement is at an elevation of 1620 ft and is installed on a pad on a hill adjacent to the District. This is a redwood tank containing 50,000 gallons. We propose to replace this tank with a bolted steel tank of 125,000 gallons to provide water for customers and to satisfy fire protection regulations. The existing tank is rotted at the sides and bottom and has been lined to make it servicable. It is presently at the end of it's servicable life and must be replaced very soon to enable continued water service to customers and to protect property values.	807,415	190	500 03	Napa	Π	2009
1999 3700909	3700909-004	Julian Community Services District	Highway 78 Main Improvement and Nessl Tank	Providing funds for this project will enable the District to replace 2,800 feet of 50 plus year old, undersized steel water main out to the Julian CalFire station and residence (Battalion 5), the local continuation high school, the high school bus barn and maintenance facility, the US Post Office, provide a 50% increase in the District's storage capacity and provide a point of intertie to our neighboring water district. The old 3" steel main along Highway 78 would be replaced by thh proposed 8" C900 PVC main with 6" dry barrel fire hydrants at 500' intervals. At the approximate mid point of this main, we have planned an 1,800 foot 8" C900 PVC lateral to the proposed 240,000 gallon weld steel storage tank. located on an elevated portion of acre District owned parcel. The location of the storage tank and improved distribution main is within 3/8 mill of the western most main of our neighboring water district, the Majestic Pines Community Services Distri The District has already had the engineering complete and the plans drawn up for this project.	e led a 5 e e ct. ed	5	c	The Julian Community Services District (JCSD) serves the local CalFire Station and residence (Battalion 5), the Ray Redding Continuation High School, the Julian Union High School bus barn and maintenance facility and the Julian Post Office with a 55 year old 3" steel water main. There is a single 2" fire riser providing fire protection to these public occupancies. There is a 6" dry barrel hydrant close to these buildings, but it is located on the opposite side of the very busy State Highway 78. A major fire incident in any of these community services would close the highway for many hours and interrupt the transportation link between the neighborhoods and desert communities to the east and the town of Julian and points to the west. This area of the JCSD is also the closest to the neighboring Majestic Pines Community Services District (MPCSD). The current undersized main is approximately 3/8 mile from the Kentwood portion of the MPCSD. The JCSD currently has a storage capacity of 440,000 gallons of potable water in two welded steel tanks located along the northwestern boundary of the District. The addition of a 220,000 gallon on the southeastern boundary of the District and increase the hydraulic gradient for the entire eastern portion of the JCSD. but is in an optimum position to allow a gravity fed intertie wth the neighboring MPCSD.As history has shown over the past 6 years, the	800,000	184	578 14	San Diego	V	2009
2000 3610110 2001 3110048	3610110-001 3110048-001	ARROWBEAR PARK CWD Placer CSA - Sheridan		Replace mainline to WW stds. New wells and ground level water storage tank	M M	5 5	C C	Undersized mainline Lack of well capacity and storage	150,000 875,000	942 232	582 13 600 02	San Bernardino Placer	V I	1998 2001

2002 1900803	1900803-008	El Dorado Mutual Water Co.	New Well El Dorado	Another well would give us an emergency backup in case our existing well stopped working. A new well would also provide 3 other mutuals emergency help if we were to intertie with them.	М	5	с	We have no guaranteed emergency backup and only one well. AVEK is our only backup, and although they have always helped us out, the written agreement is that they can shut down our connection at any time.	250,000	223	648 15	Los Angeles	IV	2009
2003 2010011	2010011-001	MADERA CO SA #1-INDIAN LAKES		INSTALL A NEW WELL AND A 750,000 GALLON STORAGE TANK.	EM	5	с	THE WATER SYSTEM NEEDS ADDITIONAL SOURCE AND STORAGE CAPACITY TO MEET THE GROWING DEMANDS OF THE SYSTEM.	300,000	470	1,175 11	Madera	Ш	1998
2004 1710013	1710013-002	Callayomi County Water District	CCWD-500,000 Gallon Potable Water Reservoir Rehabilitation Project	To prevent additonal corrosion, the District will move forward with this project as soon as possible. The existing water system is not able to meet demands during the summer months with this tank out of service The interior coating will need to be applied and the tank back in use before May, 2009. On or near March 13th, the tank will need to be drained to allow the repair work to begin. To meet the tight schedule the interior work will be completed first, followed by the exterior. The surface will be properly prepared and then recoated. Upon final inspection and testing the tank will be put back on line to provide the necessary storage for the District.	M <u>s.</u> k	5	C	The Districts 500,000 gallon welded steel tank requires recoating to prevent additional deterioration. Based on a 2007 corrosion inspection report prepared for the tank, the interior is in poor condition with delamination below the water line and the exterior coating had reached its life expectancy of 20 years.	169,500	357	1,200 03	Lake	11	2009
2005 1710013	1710013-001	Callayomi County Water District	CCWD-Rabbit Hill Reservoir Improvements	The existing 125,000 gallon tank will be demolished and a 450,000 gallon tank will be installed in its place. The new tank will be a bolted steel tank in an effort to keep costs down and expedite the installation process. Also in an effort to reduce costs, the District will use their limited staff to construct the necessary piping modifications. Level controls for the new tank will be similar to those used for the old tank. The tank will float with the existing 500,000 gallon tank. To fit the larger tank on the site minor grading will be necessary and the access road will need to be realigned.	i M	5	C	The District is in need of additional storage capacity. Their system currently includes two tanks; a 500,000 gallon welded steel tank and a 125,000 gallon welded steel tank. Based on a corrosion report prepared in 2004 the 125,000 gallon tank is in need of coating repairs on the interior and exterior. The tank does not provide sufficient redundancy if the 500,000 gallon tank is taken off line for extended periods of time and the combined storage of the two tanks does not meet demand needs for the District in the near future. Therefor, repairing the 125,000 gallon tank is not feasible. Before the 125,000 gallon tank deteriorates to an unsafe limit the District needs to replace it with a larger (450,000 gallon) tank. The new tank will be placed on the same site as the existing.	395,000	357	1,200 03	Lake	Ι	2009
2006 0410003	0410003-001	Durham Irrigation District		Replace water mains and increase capacity of new well.	. м	5	с	Old watermains. Insufficient source capacity.	180,000	473	1,558 21	Butte	I	1998
2007 1910035	1910035-007	KINNELOA IRRIGATION DIST.		Design and construct one larger concrete reservoir.	М	5	С	WW standards defects. Two (2) aged concrete reservoirs are in need of replacement.	400,000	580	1,650 07	Los Angeles	IV	1998
2008 3710041	3710041-001	Majestic Pines Community SD		See attachment	м	5	с	More water source is needed to reliably meet demands. New reservoir at whispering pines site. Line looping and intertie w/Julian CSD	100,000	671	1,964 14	San Diego	V	1998

2009 0310021	0310021-009	Amador County Service Area #3/Unit 6	Well Control Systems Replacement	Motor control center panels at three groundwater wells M are in need of a high level of modification and maintenance on all electrical connections and mechanical devices. Electrical service panels need a high level of modification and maintenance on all electrical connections. SCADA needs moderate to major modifications to correct the original limited design control and alarm functionality. Low well pump shutdown alarming, mercoid switches, low well air reactor system alarming, pump cycle controls, and flow meters all will be modified and updated. The new motor control centers will not be within an enclosed building, but an open structure with a roof will be constructed to shade the motor control center from direct sunlight.	5	C	Electrical and control systems were installed in the 1970's at the Lake Camanche Village water system. The Department of Public Health noted in its 2008 inspection report for the system that well electrical and control systems at Lake Camanche were outdated and unreliable. The systems at three older wells should be rebuilt. Lake Camanche Village's source of water is groundwater from four independent and isolated wells. Furthermore, the system is located at the western end of Amador County and at the extreme westerly end of the Amador Water Agency's greater service area. A reliable electrical and control system is imperative. These upgrades significantly improve system reliability and greatly reduce risk of catastrophic failure of well control systems, and violation of Section 64602 of Title 22, California Code of Regulations. Without these improvements, a greater risk of system pressures less than 20 pounds per square inch exists. In addition, these upgrades will allow immediate notification to the operators of a well system failure, improving system reliability.	750,000	723	2,386 10	Amador	ΙΙ	2009
2010 4110020	4110020-004	Palo Alto Park Mutual Water Company	New 350,000 Gallon Wate Storage Tank	r This project will consist of an installation of a new M 350,000 gallon welded steel water tank at the yard of the existing facility in East Palo Alto, California.	5	с	The water system useage is growing and a second water storage tank is necessary for system reliability as well as fire flow protection.	543,750	652	2,500 17	San Mateo	II	2009
2011 4110020	4110020-001	Palo Alto Park Mutual Water Company	Replacement of Asbestos Water Mains	This project will consist of installation of 2,600 lineal M feet, of new 8" diameter AWWA C900 PVC pipelines in Bell Street, Green Street and Glen Way in East Palo Alto, California.	5	с	The existing water distribution pipelines in this area are asbestos cement pipe and are deteriorating quickly. As such, we are experiencing numerous leaks. These pipelines should be replaced with new pipeline of an approved material.	446,250	652	2,500 17	San Mateo	II	2009
2012 4110020	4110020-005	Palo Alto Park Mutual Water Company	Replacement Well for Failing Well No. 2	This project will consist of installation of a 700 foot deep M borehole, gravel pack, screen well casing, well pump, wellhead piping, electrical system andappurtenances at the yard of the existing facility to replace this existing well.	5	С	Well No. 2 is failing and a replacement well needs to be installed to replace the 250gpm capacity of this well.	587,500	652	2,500 17	San Mateo	II	2009
2013 5510005	5510005-009	TWAIN HARTE COMMUNITY SERVICES DIS	TR Twain Harte Secondary Water Treatment Filter	A new tank has been purchased by the services district M and needs to be installed. This will require meida placement and several connections to be added to both the tank as well as the treatment plant. Monitoring and metering equipment will also need to be procured and installed.	5	с	Our water treatment system currently has only one multi-media pressure filter installed. Because there is no redunancy the system is always subject to failure. Our water source is via an open ditch and it is critical that minimal down-time be incurred.	175,000	1,530	2,568 11	Tuolumne	Ш	2009
2014 5510005	5510005-010	TWAIN HARTE COMMUNITY SERVICES DIS	TR Sherwood tank Connections	New tank is installed but needs to be connected to the M system. New piping and an in ground vault will be used to connect to the system. This will increase district storage by 44,000 gallons.	5	С	Water District currently has a new 44,000 gallon potable storage tank installed but is having trouble funding the connection of that tank to the distribution system.	19,000	1,530	2,568 11	Tuolumne	Ш	2009
2015 5510005	5510005-008	TWAIN HARTE COMMUNITY SERVICES DIS	TR SCADA System Upgrade	Current SCADA Control system would be upgraded or M replaced to allow for thorough monitoring and control of water treatment system.	5	с	Current SCADA contol system only has limited monitoring capability. System needs to be updated to allow for full monitoring capability and control ability. This will increase water conservation efforts and ensure quality standards are met.	70,000	1,530	2,568 11	Tuolumne	III	2009
2016 5510005	5510005-006	TWAIN HARTE COMMUNITY SERVICES DIS	TR Water Treatment Clarifier Refurbishment	Re-line existing water treatment clarifier tank with new M metal to eliminate exisitng structural integrity issues.	5	С	There is currently one clarifier within the water treatment system and it is very old. In year 2005 the clarifier tank was opened and pictures taken of some large, and well developed, rust spots on the tank inner walls. The recommended repair was to mitigate the rust and weld-in new metal. The tank corrosion was never mitigated and the tank is now believed to be structurally unsound.	75,000	1,530	2,568 11	Tuolumne	111	2009

2017 5510005	5510005-007	TWAIN HARTE COMMUNITY SERVICES DIST	R Twain Harte Cedar Pines Water Tank Replacement	Existing 40,000 gallon tank does not meet seis-mic standards and presents a safety hazard to the community. The existing tank does not provide sufficient flow for fire fighting. The existing tank is the only tank in the particular water loop and does not receive scheduled prevenative maintenance because the tank can not be isolated from the potable water system. The District is considering errecting another tank on the same site and retrofitting the existing tank within standards. Another option would be to eliminate the existing tank in favor of a variable frequency pump to increase volume and pressure.	M e	5	C	Existing 40,000 gallon tank does not meet seis-mic standards and presents a safety hazard to the community. The existing tank does not provide sufficient flow for fire fighting. The existing tank is the only tank in the particular water loop and does not receive scheduled prevenative maintenance because the tank can not be isolated from the potable water system. The District is considering errecting another tank on the same site and retrofitting the existing tank within standards. Another option would be to eliminate the existing tank in favor of a variable frequency pump to increase volume and pressure.	200,000	1,530	2,568 11	Tuolumne	Ш	2009
2018 5510005	5510005-011	TWAIN HARTE COMMUNITY SERVICES DIST	R Backwash Tank	Underground piping and valving to be used to connect the tank properly.	М	5	С	Water District currently has a relatively new 50,000 gallon backwash tank that is not connected to the treatment system. This does not allow our current system to be backwashed as thoroughly as it could be.	25,000	1,530	2,568 11	Tuolumne	ш	2009
2019 2310007	2310007-012	North Gualala Water Company	Main Line Realignment in State Highway 1-Cal Trans Mandate	Relocate North Gualala Water Company's water distribution main in Calif. Department of Transportion right-of-way per mandate. Cal Trans issued encroachment permit # 0108-N-UR-0245 for this work. It is now ready for construction.	Μ	5	c	Calif. Department of Transporation (Caltrans) is replacing various failed Shoreline Highway One culvert under drains which requires that the North Gualala Water Company's main water distribution line be relocated at Milepost 3.87, Milepost 3.90 and Milepost 5.33. This is mandatory work which must be done by the North Gualala Water Company because it's facilities are in the Caltrans right-of-way by virtue of an encroachment permit. Whenever a public utility is in the Caltrans right-of-way by encroachment permit, the utility must relocate its facilities at no cost to Caltrans if Caltrans determines that there is a conflict with work it desires to perform on its highway. This project requires expenditures by the North Gualala Water Company on a project which is not on its priority list and thus takes resources from projects which would provide a vital improvement to health and safety in other locations in the Water Company's service area.	48,000	1,033	2,595 03	Mendocino	U	2009
2020 2310007	2310007-009	North Gualala Water Company	428,000 Storage tank Top Pacific Woods	The construction of one (1) 428,000 gallon storage tank at the Top of Pacific Woods Rd. project is a partial solution for the storage & distribution infrastructure.	¢ M	5	С	Insufficent storage of finished water to meet 3 day demand in an emmergency.Source water piping is across San Andreas Fault Line and in flood prone zone.A Partial solution to the Calif. Department of Public Health Compliance Order #02-03-08CO-002 issued September 9, 2008.A partial solution to Division of Water Rights Minimum Bypass Violation and draft Cease & Desist Order with Administrative Civil Liability penalties.	648,288	1,033	2,595 03	Mendocino	II	2009
2021 2310007	2310007-011	North Gualala Water Company	Generators, System Automation, and Monitoring/Reporting Equipment	Install new emergency generators at pumping stations. Design and install alarms and controls at pumping stations, remote storage tanks, and any new sources including a central monitoring system. Install meters with recording devices to demonstrate compliance with State Water Resources Control Board Orders.	n M	5	С	Per Calif. Department of Public Health Compliance Order #02-03-08CO-002 Section 116555(a)(3) which requires the utility to supply reliable and adequate potable water.Inability to supply 20 psi during power outages to various pressure zones within distribution system. Inability to monitor and control remote sites. Inability to monitor and record flows from various sources as required by State Water Resources Control Board. Lack of storage tank level alarms, pump operation alarms, and no emmergency generators available to supply power to the above items.	450,000	1,033	2,595 03	Mendocino	Ι	2009

2022 2810007	2810007-001	Town of Yountville	Water Main Replacement - Oak Circle	This project will replace about 4300 feet of existing M water main comprised of a combination of 6" and 8" pipe constructed of either ACP and thinwall PVC. All pipes will be replaced with C900 Class 200 PVC pipe. All valves, hydrants, fittings will be replaced and upgraded to current standards, and all laterals will also be replaced up to the water meter. All water meters that do not meet the current Town standard will be evaluated and replaced as necessary. Main replacement will extend to a point at least 10 feet past the street intersection, or until suitable sound pipe is found and a connection can be safely made.	5	c	Existing water main is a combination of 6" and 8" diameter constructed of ACP and thinwall PVC pipe with a system water pressure of approximately 80 to 90 PSI depending on location. This project intends to replace these pipes with new C900 pipes rated at a minimum of 200 psi to safeguard the water system, improve system performance, and reduce both the maintenance requirements and the risk of pipe breakage. While no current violations or standards are being impacted, this project will assist the Town by safeguarding the distribution system and protecting the public health by improving the strength and durability of the water distribution system.	500,000	753	3,000 03	Napa	Ι	2009
2023 2810007	2810007-006	Town of Yountville	Water Main Replacement - Yount Street from Madison to Crossroad	This project will replace about 350 feet of existing water M main comprised of a combination of 6" and 8" pipe constructed of either ACP and thinwall PVC. All pipes will be replaced with C900 Class 200 PVC pipe. All valves, hydrants, fittings will be replaced and upgraded to current standards, and all laterals will also be replaced up to the water meter. All water meters that do not meet the current Town standard will be replaced. Existing meters that meet the current Town standard will be evaluated and will be replaced as necessary. Main replacement will extend to a point at least 10 feet past the street intersection, or until suitable sound pipe is found and a connection can be safely made.	5	c	Existing water main is a combination of 6" and 8" diameter constructed of ACP and thinwall PVC pipe with a system water pressure of approximately 80 to 90 PSI depending on location. This project intends to replace these pipes with new C900 pipes rated at a minimum of 200 psi to safeguard the water system, improve system performance, and reduce both the maintenance requirements and the risk of pipe breakage. While no current violations or standards are being impacted, this project will assist the Town by safeguarding the distribution system and protecting the public health by improving the strength and durability of the water distribution system.	50,000	753	3,000 03	Napa	Π	2009
2024 2810007	2810007-002	Town of Yountville	Water Main Replacement - Yount Street, Crossroad to Cemetary	This project will replace about 350 feet of existing water M main comprised of a combination of 2", 6" and 8" pipe constructed of either ACP and thinwall PVC. All pipes will be replaced with C900 Class 200 PVC pipe. All valves, hydrants, fittings will be replaced and upgraded to current standards, and all laterals will also be replaced up to the water meter. All water meters that do not meet the current Town standard will be replaced. Existing meters that meet the current Town standard will be evaluated and replaced as necessary. Main replacement will extend to a point at least 10 feet past the street intersection, or until suitable sound pipe is found and a connection can be safely made.	5	с	Existing water main is a combination of 2", 6" and 8" diameter constructed of ACP and thinwall PVC pipe with a system water pressure of approximately 80 to 90 PSI depending on location. This project intends to replace these pipes with new C900 pipes rated at a minimum of 200 psi to safeguard the water system, improve system performance, and reduce both the maintenance requirements and the risk of pipe breakage. While no current violations or standards are being impacted, this project will assist the Town by safeguarding the distribution system and protecting the public health by improving the strength and durability of the water distribution system.	170,000	753	3,000 03	Napa	Ι	2009
2025 2810007	2810007-003	Town of Yountville	Water Main Replacement - Yountville Crossroad, Talent to Town Limit	This project will replace about 800 feet of existing water M main comprised of a combination of 6" and 8" pipe constructed of either ACP, DIP or thinwall PVC. All pipes will be replaced with C900 Class 200 PVC pipe. All valves, hydrants, fittings will be replaced and upgraded to current standards, and all laterals will also be replaced up to the water meter. All water meters that do not meet the current Town standard will be replaced. Existing meters that meet the current Town standard will be evaluated and replaced as necessary. Main replacement will extend to a point at least 10 feet past the street intersection, or until suitable sound pipe is found and a connection can be safely made.	5	c	Existing water main is a combination of 6" and 8" diameter constructed of ACP, DIP and thinwall PVC pipe with a system water pressure of approximately 80 to 90 PSI depending on location. This project intends to replace these pipes with new C900 pipes rated at a minimum of 200 psi to safeguard the water system, improve system performance, and reduce both the maintenance requirements and the risk of pipe breakage. While no current violations or standards are being impacted, this project will assist the Town by safeguarding the distribution system and protecting the public health by improving the strength and durability of the water distribution system.	100,000	753	3,000 03	Napa	Ι	2009

2026 2810007	2810007-004	Town of Yountville	Installation of Pipe End Blow Off's	This project will either install a new blow off, replace an existing existing blow off, or relocate an existing blow off at a number of locations in town. These locations include the end of Tallent Lane, Mesa Court, Webber Street, Madison Street, Heritage Way, the north end of Yount Street and other locations in Town. All blow offs will be installed per the latest Town standards.	n M	5	с	A DHS Mandate has been issued to provide a pipe end blow off at the end of Tallent Lane, Mesa Court, Webber Street, Madison Street, Heritage Way, and at the north end of Yount Street. This project will install or update the blow off in these locations.	45,000	753	3,000 03	Nара	Ι	2009
2027 2810007	2810007-005	Town of Yountville	Replacement of Water Pressure Reduction System at 2 locations	The Town has 2 existing connections to the water main feeding the Yountville Veteran's Home. This project will replace the existing water pressure regulators and bypass valves which both supply and protect the Town's water distribution system.	M s	5	C	The Town's water system is supplied from an existing connection to the water system from Rector Reservoir, which supplies water to the Yountville Veterans Home. Water pressure averages 100 to 110 psi in the main feeding the Veterans Home, and must be reduced to 80 psi in the Town's water system. The existing pressure reducers need to be replaced and upgraded to maintain pressure and protect the Town's water system from overpressure and failure both of the Town's distribution system and the many residential and commercial customers served by the Town.	40,000	753	3,000 03	Napa	Ι	2009
2028 2810007	2810007-007	Town of Yountville	Water Main Replacement - Yount Street, Mount to Finnell	This project will replace about 1200 feet of existing water main comprised of a combination of 6" and 8" pipe constructed of either ACP and thinwall PVC. All pipes will be replaced with C900 Class 200 PVC pipe. All valves, hydrants, fittings will be replaced and upgraded to current standards, and all laterals will also be replaced up to the water meter. All water meters that do not meet the current Town standard will be replaced. Existing meters that meet the current Town standard will be evaluated and replaced as necessary. Main replacement will extend to a point at least 10 feet past the street intersection, or until suitable sound pipe is found and a connection can be safely made.	M	5	С	Existing water main is a combination of 6" and 8" diameter constructed of ACP and thinwall PVC pipe with a system water pressure of approximately 80 to 90 PSI depending on location. This project intends to replace these pipes with new C900 pipes rated at a minimum of 200 psi to safeguard the water system, improve system performance, and reduce both the maintenance requirements and the risk of pipe breakage. While no current violations or standards are being impacted, this project will assist the Town by safeguarding the distribution system and protecting the public health by improving the strength and durability of the water distribution system.	150,000	753	3,000 03	Napa	Π	2009
2029 3910017	3910017-002	San Joaquin County-Mokelumne Acres		ADD WATER LINES TO LOOP ENTIRE SYSTEM. (SAYS CONSOLIDATION, BUT DOES NOT SEEM POSSIBLE.) OTHER = DESIGN AND CONSTRUCTION.	М	5	с	WATER SYSTEM NEEDS LOOPING	400,000	1,103	3,640 10	San Joaquin	Ш	2006
2030 2310008	2310008-004	Redwood Valley County Water District		Replace a 40 HP pressurization pump with a 60 HP pump to increase plant capacity from 1.5 MGD to 2.23 MGD.	М	5	С	Inadequate pump capacity which prevents district form utilizing the full treatment capacity of its water treatment plant.	15,000	1,339	3,969 03	Mendocino	II	1998
2031 2310008	2310008-002	Redwood Valley County Water District		Construct a 500,000 gal treated water storage tank.	м	5	С	Shortage of treated water storage.	365,000	1,339	3,969 03	Mendocino	П	1998
2032 2310008	2310008-003	Redwood Valley County Water District		Install 2100 LF of 8 inch main line to loop system and provide improved service characteristics.	Μ	5	с	A long run of 6 inch dead end line creates restricted flow in an area of the District distribution system with the highest demand.	130,000	1,339	3,969 03	Mendocino	II	1998
2033 1910165	1910165-001	VALLEY VIEW MUTUAL WATER CO.		Low pressure on the old main lines, possible storage tanks installation plus a chlorination system.	Μ	5	с	Replace undersized main lines and service lines, possible drilling of new well to replace well that went dry.	500,000	1,381	4,074 07	Los Angeles	IV	1998

2034 3410007	3410007-001	Del Paso Manor County Water Di	Conjunctive Use Joint Project with Carmichael Water District	This project will construct a pipeline, pump station and M well within the Del Paso Manor Water District Service area for supplemental water supply to the Carmichael Water District in the event of severe reductions in surface water resources.	5	c	The Carmichael Water District is facing the possible District wide loss of groundwater supply to a regional groundwater contamination plume originating at the Gencorp Aerojet industrial site in Rancho Cordova. The District relies on high quality groundwater to meet its water supply needs and provide a base level of water supply in a potential critically dry year exceeding historical drought conditions. A neighboring water district, Del Paso Manor Water District relies completely on groundwater for supply and is committed to expanding their supply options to include a conjunctive surface water and groundwater mix. Carmichael Water District is completing this project in cooperation with Del Paso Manor Water District.	2,120,000	1,795	4,458 09	Sacramento	I	2009
2035 2010005	2010005-002	YOSEMITE SPRING PARK UTIL CO	Mainline Replacements and 3-Series Boosters Upgrades	Mainline/Service Line ReplacementsWe intend to replace approximately 11 miles of mainline and related service lines and appurtenances ranging in size from 4" to 10" diameter. By replacing these, the most vulnerable lines, we will greatly reduce the number of failures and thereby reduce the potential for system contamination and the occurrence of discolored water events. During the installations, additional isolation valves will be included so that the size of areas affected during a shutdown will be reduced and systematic flushing events can be improved. Fire hydrants and blow-off valves will also be added to improve fire protection capabilities and system flushing efficiency and effectiveness. Additionally, the cost of repairs has driven up the cost of our water. By replacing these pipelines and reducing the number of annual repairs, we hope to eventually reduce the water rates we currently must charge.3-Series Boosters UpgradesBy increasing the size of the booster pumps, motors and piping, we will increase the capacity of each station. This increased capacity increases that have occurred over the past several years. By being able to move the water produced throughout the system without overtaxing the booster stations, we will not have to reduce production with it is needed most. Additionally, by adding SCADA to these boosters, we can increase the	5	C	Mainline/Service Line ReplacementsMainline/service line failures occur annually in our system at an average rate of 45/170 respectfully for the past 10 years. These failures create customer outages, sometime over very large areas of the distribution system and create the potential for system contamination. These failures also strip iron and manganese deposits inside the existing pipelines creating large scale discolored water events affecting customers not directly affected by the outage. Substandard materials and installation practices, combined with the lack of installation of properly spaced distribution system isolation valves during the original construction, are the primary cause of the failures. 3-Series Boosters UpgradesThe 3-Series boosters (3 stations) move water produced at a lower elevations to one of two 1MG main storage tanks for the system. This storage tanks serves approximately 50% of our customer base. It also the most difficult tank in our system to fill with water during the high usage period each year. While we have, and continue to improve our production capability, moving the water through the 3-Series Boosters is hindered because of original design limits. This forces us at times to reduce production during times of high production needs because the capacities of the booster stations have reached their maximum potential (200 gpm). When this occurs we are forced to reduce production to avoid over-	12,400,000	1,872	4,653 11	Madera	11	2009
2036 2010005	2010005-003	YOSEMITE SPRING PARK UTIL CO	Storage Tank Conversion, Common Inlet/Outlet to Top Fill/Bottom Drain	We intend to install check valves and new piping to force all incoming water to enter the tank from the top rear of the tank and force out going water to leave the tank from the current exit location at the front bottom of the tank. Additionally, we will pipe Well 36A located in close proximity to Tank #4 directly to the new fill line for this tank. Currently Well 36A pumps directly into the distribution system piping. There are four customer service connections near the tie-in point of the well creating difficulties concerning contact times. The engineering was completed in February 2000 but this project has been delayed due to internal financing constraints. This project and related engineering have already been reviewed and approved by our local CDPH office.	5	c	Storage Tank #4 (1/2MG) is the final tank in our system to be converted from a common inlet/outlet configuration to a top fill/bottom drain configuration. The current common inlet/outlet design creates the potential for storage water stagnation which could result in water quality issues such as growth of bacteria as well as taste and order concerns. This project has been mandated by CDPH since 1999. All four of our storage tanks were part of this mandate and we have successfully converted three of the storage tanks to date. Financial constrains continue to cause us to delay the conversion of this tank.	300,000	1,872	4,653 11	Madera		2009

2037 2010005	2010005-004	YOSEMITE SPRING PARK UTIL CO	Rehabilitation of Wells 31. and 35A providing iron/manganese removal	A This project involves the installation of an iron/manganese removal treatment system followed by a storage reservoir. From the storage reservoir, the water would be piped to the distribution system through one of three booster pumps. This would eliminate the excessive head pressure on the submersible well pumps allow the well pumps to reach their normal life expectancy. The reduced head pressure would also allow for increased production from these wells increasing our ability to meet customer demand. Additionally we would pipe the discharge from the booster pumps to two different pressure zones. This would increase the control over the delivery of this water and allow us to utilize the production in a more efficient manor. The system would be monitored and controlled by the addition of SCADA with alarm notification features. This project would increase water delivery safety and reliability, water quality, and reduce overall operational costs.	м	5	C	Well 31A and 35A both produce water to a pressure zone in an area where the head pressure is approximately 165 psi. Since these wells produce directly to the distribution system against this pressure, premature well failure of the pump and/or motor is commonplace. In addition, production from these wells is greatly reduced because of the excessive head pressure that the submersible pumps must overcome. Wells 31A and 35A are also both heavily impacted by iron and manganese. While we currently operated with a waiver from CDPH and use sequestering treatment to control these constituents, the levels are very high and problems related to these minerals still exist. Currently we limit production from these wells to only times of high demand. Well failures from these wells therefore only occur during the high demand periods when we need the production the most. Loss of production from these sources during times of high demand increases the potential for system outages.	800,000	1,872	4,653 11	Madera	Ш	2009
2038 4010014	4010014-008	CAMBRIA COMM SERVICES DIST	Rodeo Grounds Pumping Station Replacement	The new pumping sation will consist of two fire pumps, each rated at 2500 gallons per minute (gpm) capacity, as well as an emergency power generator. Three 735 gpm pumps will provide domestic water service. Connecting pipelines will also be increased in diameter to address related system bottlenecks that further limit fire flows. The station will be designed to the latest electrical code standards, and will include having its high-voltage electrical switchgear located in a room that is separated from the main pump room. Operation and performance of the station will be remotely monitored by a Supervisory Control and Data Acquisition (SCADA) system.	м	5	C	The Cambria Community Services District completed a lengthy water master planning process, which was ultimately adopted by its Board of Directors on September 25th, 2008. The water master plan identified several key infrastructure deficiencies within the Distict's water system that are related to improving supply as well as addressing needed public health and safety improvements. Storage volumes and fire flows needed for fire fighting purposes was based on review of the Uniform Fire Code (Table A-III-A-1) and from detailed discussions with the Cambria Fire Chief. Because much of the community borders a long urban/wildland fire interface, it is particularly vulnerable to a major conflagration. To address existing fire fighting deficiencies, the new replacement pumping station will contain fire pumps that will augment fire flows from the system's gravity storage tanks. Besides its primary fire fighting purpose, the new new station replaces an older pumping station that is located in a flood zone, contains obsolete equipment that is prone to failure, and has inherent safety deficiencies due to its outdated design.	2,262,200	3,993	6,500 06	San Luis Obispo	IV	2009
2039 4010014	4010014-006	CAMBRIA COMM SERVICES DIST	Pine Knolls Connector Pipeline	The project will install aproximately 550 feet of 14-inch diameter water main between the District's Pine Knolls storage tanks and Hillcrest Drive in Cambria, California. Work will consist of sheeting and shoring, trenching, pipeline installation, testing, and pavement replacement.	Μ	5	C	The Cambria Community Services District adopted a water master plan on Septmber 25th, 2008 that identified critical water supply and distribution system infrastructure improvements that are needed to protect health and safety. Hydraulic analyses conducted as part of the water master plan (Task 3 Report, Potable Water Distribution System Analysis, Kennedy/Jenks Engineers) identified a bottleneck within the District's distribution system between a storage tank installation (Pine Knolls) and a primary distribution pipeline on Hillcrest Drive. This project will address fire flow needs by installing a 14-inch diameter pipeline within this area.	225,000	3,993	6,500 06	San Luis Obispo	IV	2009

2040 4010014	4010014-007	CAMBRIA COMM SERVICES DIST	Stuart Street Tank No. 3	The project will consist of a new 365,000- gallon welder steel storage tank at the District's existing Stuart Street tank facility. The new tank will be 52 feet in diameter and 23 feet high. The project will also include the replacement of undersized inlet piping on two existing tanks with larger diameter piping. The new tank will bu monitored remotely by a Supervisory Control and Data Acquisition (SCADA) system.	d- M : e	5	С	The Cambria Community Services District completed a lengthy Water Master Planning process that was ultimately adopted by its Board of Directors on September 25th, 2008. A main purpose of the water master plan was to identify water supply and water distribution infrstructure needs to address public safety and health concerns. Hydraulic modeling of the water distribution system that was completed during development of the water master plan found the existing system did not meet fire flow and associated tank storage requirements. This analysis was based on review of the Uniform Fire Code (Table A-III-A-1) and detailed discussions with the Cambria Fire Chief. The additional Stuart Street Tank No. 3, in combination with fire pumps planned as part of the District's Rodeo Grounds Pumping Station Replacement project (for which a separate application was submitted), will provide fire flow capacities needed for the service area.	971,000	3,993	6,500 06	San Luis Obispo	IV	2009
2041 3610062	3610062-006	RUNNING SPRINGS WATER DISTRICT		Replace 4450 ft of main	м	5	с	Old, undersized steel mainline	267,000	3,160	6,713 13	San Bernardino	v	1998
2042 3410003	3410003-001	Golden State Water Co - Arden Water Serv	,	Install automation and telemetry.	М	5	С	No remote monitoring.	20,000	1,733	6,796 09	Sacramento	1	1998
2043 1510045	1510045-004	GOLDEN HILLS CSD		Develop and construct a system of wells in our nonadjudicated area, while continuing to increase our water rights. Other - Design/Construction	М	5	с	District is utilizing it's full capacity from the existing usable wells, all located within our adjudicated area.	800,000	2,796	7,434 19	Kern	Ш	1998
2044 1510045	1510045-002	GOLDEN HILLS CSD		Construct 4 new wells. Other - Design/Construction	М	5	С	District operates on thirteen wells. Nine wells have an output of less than 300 gpm., three have an output of less than 100 gpm.	400,000	2,796	7,434 19	Kern	ш	1998
2045 1510045	1510045-005	GOLDEN HILLS CSD		Construct a 1mg storage tank. Other - Design/Construction	М	5	С	Current district storage capacity only provides water for 24 hours.	500,000	2,796	7,434 19	Kern	Ш	1998
2046 2610001	2610001-007	MAMMOTH CWD	MCWD: Replacement of Aging Water Distribution Mains	MCWD proposes to remove and replace 12,000 lineal feet of aging water distribution mains with new Ductile Iron Pipe and appurtenances per current AWWA standards. The pipeline replacement will result in decreased water losses and increased operational efficiency.	Μ	5	С	The Mammoth Community Water District (MCWD) water distribution system includes several thousand feet of aging water distribution mains that are subject to increasing leakage and repairs. Unaccounted for water loss volumes within the MCWD water distribution system are estimated at about 15%, exceeding the industry standard of 5%-10%. The California Urban Water Conservation Council has identified leakage location and repair as a Best Management Practice that results in significant water conservation and more	1,900,000	3,666	8,214 13	Mono	v	2009

efficient use of available water supply.
2047 2610001	2610001-002	MAMMOTH CWD	Mammoth Community Water District: Water Main Replacements	Mammoth Community Water District proposes to remove and replace 12,000 lineal feet of aging water distribution mains with Ductile Iron Pipe and appurtenances per current AWWA standards. These pipeline replacements include about 5,700 feet of pipeline along Hillside Drive, Forest Trail and Ridgecres Drive; 3,600 lineal feet of pipeline along Kelly Road ann Davison Road; and, 2,500 lineal feet of pipeline along Mammoth Slopes and Aspen Lane. Several new fire hydrants with flow capacities meeting jurisdictional requirements will also be replaced along the subject alignments. These pipeline replacement projects are shovel-ready in the spring of 2009.	M st d	5	C	The Mammoth Community Water District (MCWD) water distribution system includes several thousand feet of aging water distribution mains that are subject to increasing leakage and repairs. Unaccounted for water volumes within the MCWD water distribution system are estimated at about 15%, exceeding the industry standard of 5%-10%.MCWD maintenance crews are responding to an increasing number of leakage incidents along water mains within the right-of-ways of Hillside Drive, Forest Trail, Ridgecrest Drive, Kelly Road, Davison Road, Mammoth Slopes and Aspen Lane. The California Urban Water Conservation Coucil has identified leakage location and repair as a Best Management Practice that results in significant water supply. Additionally, along with the aging water main locations described above, there are old fire hydrants with outdated flow capacity which do not meet local jurisdictional requirements.	2,640,000	3,666	8,214 13	Mono	v	2009
2048 0310012	0310012-010	AWA Buckhorn Plant	Buckhorn Water System Reliable Surface Source Supply-Green Infrastructure Project	a. The project will construct a gravity supply line consisting of 33,300 lineal feet of 20-inch pipe divertin, raw surface source water from the Tiger Creek regulator to the Buckhorn Water Treatment Plant. The conversion of the existing pumped, high electrical dependency transmission supply system to gravity will achieve green water infrastructure target goals and create a substantial increase in local jobs contributing: the economic recovery of Amador County dependant of tourism and services. The County has seen significantly high job loss impacts from the County's 10 largest employers in the last several months. These job losses place Amador County amongst the highest within the State and above the Federal average unemployment rates. Strategic placement of fire hydrants along the new route will improve capabilities of fire suppression within a commercial timber corridor vulnerable to forest, woodland and grass fires with urban sprawl reducing associated residential and commercial insurance costs. This new raw surface source supply is located up and off stream of the Mokelumne River on Tiger Creek. This location will provide a higher water quality avoiding turbidity events and difficult costly treatment associated with existing raw water supply pumped from the Tiger Creek Afterbay. The new gravit supply line will be mostly buried thus inacressible to th	M g t to on y t t y	5	C	The Buckhorn Water System raw-surface water source supply is subject to water outages, system interruptions, potential interruptions as a direct result of as many as 23 annual power failures during winter weather conditions, i.e., mudslides, snow storms; summer lightning storms and canyon wildland fires; human accidental or deliberate interference with electrical and water infrastructure; as well as State Energy Grid "black-outs". Frequent delivery deficiencies from equipment rapidly reaching its useful life expectancy increasing repairs, leaks and vandalism forces equipment to be removed from service. These "out-of service" conditions often average 2 to 3 days threatening the ability to deliver sufficient supply for current demands. There is no source redundancy or sufficient storage available to sustain the system for more than 2 to 3 days under optimum conditions. Although provided for under contract with PG&E, no alternate raw source supply is available for emergencies or schedule hydroelectric system repairs that could last up to 30 days. Surface source supply is delivered through 2- pump stations:1- at the intake and 1- two- thirds the 8,650' distance with an elevation change of 1,300' in a 12" cold tar-lined and coated steel pipe to the WTP. This source water delivery system is located within a canyon off a local steep, crooked, one-lane minor collector road. The locatinn and pince crates delays	8,000,000	2,558	8,508 10	Amador	11	2009
2049 3910015	3910015-001	CITY OF LATHROP		Replace network with larger diameter mains.	M	5	с	Aging network of small diameter mains in oldest part of town	4,500,000	3,675	12,427 10	San Joaquin	ш	1999
2050 0710002	0710002-004	Golden State Water Company - Bay Point		Replace 500' of 2" OD steel water main.	М	5	С	replace aging distribution water main to improve system reliability and water quality.	35,000	5,070	16,715 04	Contra Costa	Ш	1998
2051 1910245	1910245-005	SANTA FE SPRINGS - CITY, WATER DEPT.		Install booster station.	м	5	с	Low pressure in Zone 1.	750,000	5,209	17,438 22	Los Angeles	IV	2003

2052 3610120	3610120-009	Phelan Pinon Hills CSD	Water System Rehabilitation	Water transmission mains will be constructed improve the movement of water across the PPHCSD's water distribution system together to provide the ability to shift water across the system in the event of system shutdown due to seismic damage or operational outages. A distribution main replacement program is also anticipated in this phase for the upgrading and repair of undersized existing pipelines. This will improve service to its customers assuring adequate pressure and fire protections for , residential commercial and industrial uses.	M e d	5	C	These projects are the initial phase in an overall water infrastructure improvement program, which has been conceived and developed by the PPHCSD to provide supply reliability within its water system. The program is intended to upgrade the Districts' water facilities to provide a more reliable water supply, particularly in the event of an emergency such as a major earthquake or severe drought conditions. The increased system reliability will significantly increase the District's fire fighting capabilities, thus greatly enhancing water quality, public health and safety. The PPHCSD's service area has topography and proximity to a major earthquake fault (San Andreas).	5,000,000	6,267	20,681 13	San Bernardino	v	2009
2053 1910143	1910143-004	SAN FERNANDO-CITY, WATER DEPT.		Upgrade to a computerized telemetry system. Project involves: Study, Design, and Construction	М	5	С	WW standards defect. Reliability of outdated telemetry system.	180,000	5,049	23,564 16	Los Angeles	IV	2006
2054 1910143	1910143-002	SAN FERNANDO-CITY, WATER DEPT.		Design and replace approximately 1.75 miles of 18-inch water transmission lines.	I M	5	C	Several key water system transmission lines are damaged from earthquake activity and system aging. Frequent leakage repair creates a potential for water system contamination.	1,100,000	5,049	23,564 16	Los Angeles	IV	2006
2055 1910143	1910143-001	SAN FERNANDO-CITY, WATER DEPT.		Replace the 1.0 million gallon system storage Reservoir No. 4. Project involves: Design to solve problem, and Construction	M	5	с	Reservoir No. 4 was damaged in the 1994 Northridge earthquake. Replacement storage is needed to maintain system pressure.	2,500,000	5,049	23,564 16	Los Angeles	IV	2006
2056 4910013	4910013-006	Valley of the Moon Water District		Install Booster pumps and transmission/distribution pipelines.	М	5	С	Low-head lines in system.	550,000	6,783	23,858 18	Sonoma	Ш	1998
2057 4910013	4910013-004	Valley of the Moon Water District		Install new larger lines and booster pumps.	м	5	с	Low-head lines in system.	1.800.000	6.783	23.858 18	Sonoma	Ш	1998
2058 4910013	4910013-008	Valley of the Moon Water District		New distribution pipelines.	м	5	c	Low-head lines in system.	800.000	6.783	23,858 18	Sonoma	Ш	1998
2059 4910013	4910013-007	Valley of the Moon Water District		New distribution pipelines.	м	5	c	Low-head lines in system.	550.000	6.783	23,858 18	Sonoma	Ш	1998
2060 3110005	3110005-001	Placer CWA - Auburn/Bowman		Install standby diesel generator. Involves design and construction.	м	5	c	Does not have a standby generator and when power is lost, the plant does not operate. The water treatment plant does not have the required level of reliability as stated in SWTR Section 64659.	200,000	8,242	27,199 02	Placer	I	2006
2061 3410021	3410021-007	San Juan Water District	Auburn-Folsom Road Widening/Water Transmission Main - Middle Phase	This project is a 6,000 foot extension of 24" transmission main, including a pressure control valve and inter-tie with another large pressure zone. This critical transmission main has been desired for decades and must be installed when the road is being widened as a matter of good engineering practices, cost- efficiency, and energy efficiency.	Μ	5	C	This 24" pipeline will be installed during the middle phase of the Auburn-Folsom Road widening by Placer County this summer. It will provide critical supply redundancy, for the first time, to two large pressure zones serving 20,000 people in Granite Bay. It will also allow for over-all reliability by feeding San Juan Water District (SJWD) pressure zones, during a drought or other emergency, from the SJWD/PCWA Inter-tie. Additionally, this project will result in energy efficiency because it will allow water to flow by gravity from Placer County Water Agency to San Juan Water District. The first phase, completed in the summer/fall of 2008, was also a joint project with Placer County.	1,000,000	10,240	33,792 09	Sacramento	I	2009

2062 3110004	3110004-002	City of Lincoln	City Well 02-Airport South Equipment Replacement and Upgrade	1- The Well 02-Airport South (Well 02) Equipment Replacement and Upgrade Project (Project) includes removal, replacement and upgrades to the production facilities components related to Well 02. The Project includes the following major components:- Removal of existing 75 HP motor, pump, pump column/bowls sized for 750 gpm at 90 psi from 16-inch well casing, and motor control center from interior of concrete block and removable metal roofed "pump building"; - Replacement with 125 HP motor, pump, pump column/bowls and motor control center to match new operational parameters (950 gpm at 114 psi discharge pressure) and provide more efficient energy use;- Upgrade standby, stationary 175 KW diesel generator set in adjoining concrete block/metal roof pump building to match new operational parameters, battery replacement, re-test; and-Upgrade Well 02 to include e pump-to-waste capability through new valving, piping, electrical controls installed at the hydro-pneumatic tanl south of the pump building through an air gap into a new 230 ft 12-inch gravity drain through a buirde flow stabilization structure and into the nearby in 30-inch City storm drain in Nicolaus Road Upgrade Well 02 to include about 230 ft of 8-inch gravity sewer for proper discharge of chlorine analyzer waste and other liquids used in the pump building flowing into the existing 12- inch sanitary sewer in Nicolaus Road.	M i k r M	5	c	Well 02-Airport South (Well 02) is a critical element of the City's conjunctive-use program, with groundwater meeting about 10% of annual demand and about 20% of monthly seasonal demand from 5 wells. Well 02 cannot meet distribution system discharge head requirement, does not meet the CDPHS pump-to-waste requirement upon well startup, and proper discharge of chlorine analyzer waste stream and other liquids used in the pump building. Well 02 is essential to provide potable groundwater for peak demand management and emergency backup for the City of Lincoln's municipal water system. Historically the City has experienced complete 100% loss of its wholesale treated surface water supply for days at a time (3 occurrences since 1997), and seasonal reductions in wholesale deliveries. As a result, the City has developed groundwater sources to meet at least 75% of average day demand for the Lincoln municipal water system. Well 02 has provided groundwater, meeting Title 22 water quality standards with disinfection only, to the City's municipal water system since 1984. Well 02 is permitted by the CDPH but was inactivated in December, 2008 per City request. In 2003, the City eliminated its Zone B service area to provide unrestricted, improved flows to the City Airport and surrounding Industrial/Commercial area. The Zone B elimination was achieved by opening up the Nicolaus Road pressure reducing station and several in-line Water main is causing water quality and delivery	980,000	16,238	38,000 02	Placer	1	2009
2064 3410004	3410004-010	Carmichael Water District	Conjunctive Use Joint Project with Del Paso Manor Water District	construction. This project will construct a pipeline, pump station and well within the Del Paso Manor Water District Service area for supplemental water supply to the Carmichael Water District in the event of severe reductions in surface water resources.	Μ	5	с	problems. The Carmichael Water District is facing the possible District wide loss of groundwater supply to a regional groundwater contamination plume originating at the Gencorp Aerojet industrial site in Rancho Cordova. The District relies on high quality groundwater to meet its water supply needs and provide a base level of water supply in a potential critically dry year exceeding historical drought conditions. A neighboring water district, Del Paso Manor Water District relies completely on groundwater for supply and is committed to expanding their supply options to include a conjunctive surface water and groundwater mix. Carmichael Water District is competing this project in cooperation with Del Paso Manor Water District.	1,100,000	11,548	40,000 09	Sacramento	I	2009
2065 3410004	3410004-011	Carmichael Water District	Fair Oaks Boulevard Pipeline Replacement Project	This project will install approximately 18,000 feet of 18- inch diameter transmission main, service conversions, and connect the Carmichael Water District (District) surface water treatment plant with the District's larges storage reservoir. The work is being coordinated with a Sacramento County Department of Transportation project to avoid disruption of a newly constructed roadway. This project is also in response to potential loss of well production capacity due to a massive regional groundwater contamination plume associated with the Gencorp Aerojet industrial site in Rancho Cordova, CA.	- M t a	5	с	Groundwater contamination has caused the Carmichael Water District to revised its water supply planning away from the historical reliance on a conjunctive supply of surface water and groundwater. The contamination is coming from the Gencorp/Aerojet regional superfund site. In addition, Sacramento County is preparing for a major arterial roadway project (Fair Oaks Boulevard) through the center of the Water District Service Area. The District pipelines in Fair Oaks Boulevard range from fairly recent construction to over 70 years old. The transmission capacity design was based on the combined groundwater and surface water supply approach and is inadequate for a surface water only system. This project will provide additional distribution transmission capacity to respond to groundwater contamination and allow for coordination with a major transportation project.	3,960,000	11,548	40,000 09	Sacramento	I	2009
2066 3610029 2067 3610029	3610029-009 3610029-007	MONTE VISTA CWD MONTE VISTA CWD		Replace mainline Phase III Replace mainline Phase I	M M	5 5	c c	Old undersized mainline Old undersized mainline	2,200,000 410,000	11,595 11,595	51,014 13 51,014 13	San Bernardino San Bernardino	V V	1998 1998

2068 3610029 2069 3610029 2070 3610029 2071 5710006	3610029-008 3610029-011 3610029-010 5710006-004	MONTE VISTA CWD MONTE VISTA CWD MONTE VISTA CWD City of Woodland	Ground Level Tank Construction	Replace mainline Phase II Replace mainline Phase V Replace mainline Phase IV This project involves the installation od 2 million gallons tank and a pump staion to improve system presure.	M M M	5 5 5	c c c	Old undersized mainline Old undersized mainline Old undersized mainline This tank is needed for emergency fire flow. It will also enable proper mixing of poor quality water with good quality water which can eventually reduce the cost of drilling wells.	2,200,000 2,200,000 2,200,000 3,000,000	11,595 11,595 11,595 14,065	51,014 13 51,014 13 51,014 13 56,000 09	San Bernardino San Bernardino San Bernardino Yolo	V V I	1998 1998 1998 2009
2072 5710006	5710006-007	City of Woodland	Water Tank Replacement Project	At the moment there is a 300,000 gallons existing tank that was constructed 50 years ago. This tank does not meet the current Siesmic Code, the replacement tank is aimed at complying with the current Siesmic Code. The replacement tank will be a 400,000 gallons tank to provide aditional storage for emergency. The existing tank is approximately 115 ft high, the replacement tank would be approximately 135ft high to comply with a minimum of 40 psi service pressure requirement in the south west region of the City. Currently the City has 20 wells operational, some of these wells have increasing Nitrate concentration which sometimes calls for their cut off from the system. The new tank will be fed from well 4 which produces good quality water to offset water supply shortage from the other wells due to higher nitrate concentration.	м	5	с	The project is aimed at improving fire flow to the south west area of the City. It is also aimed at increasing emergency storage for the City in order to comply with Title 22 and Water Code requirements.	4,500,000	14,065	56,000 09	Yolo	I	2009
2073 1910211	1910211-001	PARK WC - BELLFLOWER-NORWALK		Preliminary and final design and construction of replacement well.	м	5	с	Aged wells are declining in both production and water quality.	1,180,000	16,702	66,256 22	Los Angeles	IV	2006
2074 1910009	1910009-007	VALLEY COUNTY WATER DIST.		Design and construct a new 3,500 gpm groundwater replacement well.	М	5	C	Expected shortage of water supply, based upon present growth projections for the fiscal year 1998/99. Need additional source of supply.	550,000	12,323	//,130 15	Los Angeles	IV	2006
2075 1910102	1910102-011	PALMDALE WATER DIST.	Palmdale Water Districy - Water Main Replacement Program	The project will target the replacement of the existing water mains that were constructed between 1950 and 1965 which totals approximately 125,000 linear feet of water main ranging in size of 6-inch to 16-inch. The Palmdale Water District (District) has historically replaced the aged and deteriorated water mains as part of the on-going maintenance of the existing water system, but due to the recent financial hardship, the District has not been replacing a sufficient amount of water main is order to keep up with increasing number of water main leaks needing repairs. The project will be designed by District staff and consulting engineering firms. The project will be inspected by District staff and constructed by competitively bidding the projects and awarding to qualified pipeline and/or general engineering contractors. The project will allow the District to reduce the amount of potable water that is lost through the distribution system and replace a substantial amount of the aged and deteriorated water distribution system.	M	5	c	The project will target the replacement of the existing water mains that were constructed between 1950 and 1965 which totals approximately 125,000 linear feet of water main ranging in size of 6-inch to 16-inch. The subject water mains are experiencing a high rate of leaks and causing increased operation and maintenance costs, degrading the distribution system water quality, and increasing the unaccounted for water within the distribution system. The project will benefit the local community and rate payers by decreasing the amount of water that is lost in the system due to excessive water main leaks, decrease the rate payers maintenance costs by reducing the labor and material costs spent repairing leaking water mains. The project addresses the immediate need of water conservation within southern California and specifically the high desert region of the Antelope Valley's water Suply relies greatly on imported water via the Department of Water Resources, State Water Project, and with cutbacks in the annual allocation over the past several years, the District is looking for projects that will conserve the water supplies currently available to the Palmdale Water District's existing customers.	10,000,000	27,030	105,234 07	Los Angeles	IV	2009
2076 3610041	3610041-009	SAN GABRIEL VALLEY WC - FONTANA		Construct treatment facility	м	5	с	Well F26A at risk for VOC contamination from landfill upstream.	2,000,000	42,871	153,647 13	San Bernardino	v	1998
2077 3610041	3610041-008	SAN GABRIEL VALLEY WC - FONTANA		Construct treatment facility	м	5	С	Well F24A at risk for VOC contamination from landfill upstream.	2,000,000	42,871	153,647 13	San Bernardino	V	1998
2078 3610041	3610041-002	SAN GABRIEL VALLEY WC - FONTANA		Construct additional transmission line with intertie to adjacent utility	М	5	С	Single transmission line supplies majority of water to system	1,250,000	42,871	153,647 13	San Bernardino	V	1998
2079 3610041	3610041-007	SAN GABRIEL VALLEY WC - FONTANA		Construct treatment facility	M	5	С	Well F13A at risk for VOC contamination from landfill	2,000,000	42,871	153,647 13	San Bernardino	V	1998

2080 3610041 3610041-010 SAN GABRIEL VALLEY WC - FONTANA

upstream.

Construct nitrate removal facility M 5 C Well shutdown due to high nitrate contamination 5,000,000 42,871 153,647 13 San Bernardino V

2001

2081 1910039	1910039-010	SAN GABRIEL VALLEY WATER COEL MON	TE Replace 60 year old pipeline to Hacienda Heights	Install a 30-inch diameter pipeline to deliver a reliable M water supply to the Hacienda Heights portion of San Gabriel's service area.	5	с	Existing transmission pipeline providing water to the Hacienda Heights area is nearly 60 years old and must be replaced	2,000,000	46,304	161,945 22	Los Angeles	IV	2007
2082 3710020	3710020-008	San Diego - City of	Rancho Bernardo reservoir	Replacement of the 10 million gallon concrete reservoir M with two 5 million gallon prestressed circular concrete reservoirs.	5	С	Existing reservoir is deteriorated and needs to be refurbished and strenghtened to meet current seismic standards.	5,300,000	273,015	1,266,731 14	San Diego	V	1998
2083 3710020	3710020-060	San Diego - City of	San Carlos Reservoir Enhancement	The San Carlos Reservoir Interior Enhancements Project M will install a synthetic membrane lining system to prevent leakage from the 5.0 MG pre stressed wire- wrapped concrete circular potable water tank located at the intersection of Wing Span Drive and Tommy Drive in the San Carlos community. The reservoir, originally built in 1965, was substantially rehabilitated in 2001. That work included a seismic retrofit plus valve, pipeline, and appurtenance upgrades to bring the facility up to code. This is the final step in the complete rehabilitation process.This project is statutorily exempt from CEQA, pursuant to CEQA Guidelines Section 15301.	5	c	This project is not associated with a current DPH Compliance Order, however it continues the structural work identified in Department of Public Health Compliance Order, No. 04-14-96-22, Compliance Items No. 16; No. 19; No. 24. These specific items mandated the City of San Diego to construct and complete structural work on the San Carlos Reservoir. The San Carlos Reservoir Enhancement project will continue this effort by eliminating the reservoir's leak problem.	1,167,531	273,015	1,266,731 14	San Diego	v	2009
2084 3710020	3710020-005	San Diego - City of	South SD reservoir	Safety, sanitation, appurtenance, exterior and interior M surface restoration, cathodic protection, and structural improvements to the 5.2 million gallon tank.	5	С	The South SD Reservoir was constructed in 1970. The improvements have been identified in the areas of cicil, structural, and corrosion control to bring the facility up to current seismic standards and comply with the DHS compliance agreement.	2,500,000	273,015	1,266,731 14	San Diego	v	1998
2085 3710042	3710042-005	San Diego County Water Authority	San Vicente Dam Raise and Carryover Storage Project	I The San Vicente Dam Raise & Carryover Storage Project M allows the San Diego County Water Authority to address the region's vital water requirements by storing an additional 152,000 acre-feet of water, in support of its 3 million residents and a \$171 billion regional economy. This project significantly addresses critical supply issues facing San Diego County since up to 90 percent of water used by the region's 3 million residents is imported. The economy, job base, and quality of life in this region are dependent upon increasing the availability of water in the county. The San Vicente Dam Raise and Carryover Storage Project is the largest dam-raise project in the United States and when completed, will be the largest roller-compacted concrete dam raise project in the world. The San Vicente Dam Will be raised by 117 feet to more than double the reservoir's water storage capacity – from 90,000 acre-feet to 242,000 acre-feet. The project is ready to start construction immediately. Construction plans and Federal environmental review are complete; all permits from the applicable regulatory agencies have been obtained. The effects of global warming and reductions in water supplies from the Sacramento-San Joaquin Bay-Delta due to hydrologic, judicial and regulatory challenges have significantly reduced water supplies to Southern California. By raising San Vicente Dam, the Water Authority will be able to store an additional 152,000 acre-feet of water,	5	c	The San Diego region typically experiences water shortages during periods of drought that are exacerbated by regulatory issues in Northern California concerning the Sacramento-San Joaquin Bay-Delta. Additionally, in the event of a seismic event in California, the San Diego region would be cut off from its water supply. Either of these circumstances would leave the San Diego region in a severe water shortage situation. To mitigate this, the San Diego County Water Authority created the Emergency Storage Program, a large component of which is the San Vicente Dam Raise and Carryover Storage project. This project will mitigate a significant water quantity problem by increasing the capacity of this reservoir by 152,000 acre-feet.	130,000,000	102	3,140,000 14	San Diego	v	2009
2086 3710042	3710042-003	San Diego County Water Authority		Design and construction of a pump station and 12 mile M pipeline from San Vicente Reservoir to the second aqueduct.	5	с	Lack of distribution system for supplemental emergency water supplies from the San Vicente Reservoir to the second Aqueduct	146,600,000	102	3,140,000 14	San Diego	v	1998

2087 5000132	5000132-001	VALLEY HOME SCHOOL TEXAS	Distribution system replacement	We were told that all potable water pipes from the well to all school site outlets, interior and exterior were to be replaced with new up-to-code materials. That means we will have to trench, abandonand replace old exterior pipe from the well to the classroom building and all out buildings; and cut through interior plaster walls, flooring where required, and replace the existing out-of-code water pipes. This would include four classrooms, the teachers' workroom, custodial quarters/storage, main adminstrative office, library, four restrooms, and outdoor water sources connected to the buildings, as well as the drinking fountains. It has already cost the district \$4000.00+ to abandon and seal the older well and hundreds of more dollars for the ongoing monitoring and sampling of the water throughout our educational complex. It's slowly strangling our already underfunded budget.	M	5	Ρ	This funding would help replace all the potable water lines within our classroom building at the Texas Avenue Campus.(Harold Pope School) We have been fighting a lead contamination problem that has forced us to remove all classroom water fountains and shut off all water supply to these rooms as well as continously testing the complete school site for further contamination. the present building was constructed in 1948 and we just sealed one well in the past year as possibly being the culprit in an ongoing bacterialogical contamination problem at the school. fortunately we already had another well drilled to fall back on. In a rural K-8 school district of 160 students it is creating a real burden on us budget-wise and is eating through our reserve fund. We've had to use butled water for a period of time uring the last academic year and would like to avoid that scenario from recurring. Title 22, Cal Code of Regs, Section 64426.0 & 64426.1 Cal Code of Regs, Section 64676 (b)	60,000	1	26 10	Stanislaus	11	2007
2088 2800569	2800569-001	AETNA SPRINGS RESORT, INC.		Purchase five 5,000 gal tanks. Move chlorination system to location of new tanks to provide more contact time.	м	5	Ρ	25,000 gal tank needs to be repaired or replaced. Chlorination system also needs to be relocated.	25,000	1	100 03	Napa	II	1998
2089 4400758	4400758-001	RENAISSANCE HIGH SCHOOL		Replace two storage tanks and install two submersible well-pump motors. Construct a removable "shell" to surround the submersible well-pump.	М	5	Ρ	System is aging and is not adequate for present needs.	50,000	1	250 05	Santa Cruz	II	1998
2090 3701909	3701909-002	CUYAMACA OUTDOOR SCHOOL	Cuyamaca Reservoir Refurbishment and Filter Installation	We propose to use the funds to drain and clean the tank and refurbish the lining of the existing reservoir and repair all areas of deterioration. Additionally, we propose to install a filter system on the distribution side to eliminate particulates that reduce the drinking water quality and also foul the plumbing system. This will help maintain maximum water levels during fire emergencies and improve the quality of the water to the students and State Park headquarters. Additionally, the well which feeds this small water system produces water in which Manganese was found at levels that exceed the secondary MCL of 50 ppb (i.e. 110 ppb). If the budget permits, we propose to include a filter system that will help eliminate or reduce the Manganese content of the distributed water.	M 5	5	Ρ	The existing reservoir is a 100,000 gallon underground concrete vault. The structure is over 40 years old and the lining is in need of replacement. Additionally, there are some minor structural repairs that need to be completed (sealing cracks in the walls of the reservoir and replacing lids and level system).Due to the condition of the reservoir, there is sediment that enters the distribution system, causing significant problems with plumbing valves and fixtures at the site. Running water due to sticky valves can cause a loss of water that would reduce our sites' effective reserve to fight fires. Given the recent history of this location (Cuyamaca Rancho State Park), it is essential that the reservoir and distribution system is maintained in a manner that will ensure maximum supply of water during emergency response.	55,000	19	300 14	San Diego	v	2009
2091 4400757	4400757-001	SALSIPUEDES ELEMENTARY		Replace storage tank and construct structure to enclose tanks. Construct an enclosure to surround the well-	М	5	Ρ	System is aging and is not adequate for present needs.	60,000	1	790 05	Santa Cruz	Ш	1998
2092 4400750	4400750-001	APTOS HIGH SCHOOL		Replace two storage tanks and tank pads. Construct a 450 foot well. Construct an underground "vault" which completely encloses the submersible well-pump annaratus	М	5	Ρ	System is aging and is not adequate for present needs.	400,000	1	1,925 05	Santa Cruz	II	1998
2093 1900620	1900620-001	CAMP VALCREST		REPLACE EXISTING 2" WATER INTAKE PIPES (140") WITH NEW 4" LINES TO MAIN WATER TANK.	М	5	Ν	OLD INTAKE PIPES ARE INADEQUATE TO ALLOW PROPER WATER FLOW TO FILL UP THE 125,000 GAL RESERVOIR ON A MONTHLY BASIS.	21,000	1	25 16	Los Angeles	IV	1998
2094 2900508	2900508-001	KINGVALE PROPERTY OWNER S WATER SYS	STEM	Install a well and storage/pressure system. Involves design and construction.	м	5	Ν	Spring sources have inadequate capacity.	50,000	25	50 21	Nevada	I	2006
2095 4000652	4000652-001	NORTHSHORE S & B, INC		Install new large tank (replace 3 each 7,500 gallon tanks with one 100,000 gallon tank)	М	5	Ν	Needs storage capacity to comply with Water Works standards.	35,000	40	50 06	San Luis Obispo	IV	1998

2096 3700063	3700063-002	FREEDOM RANCH	Well replacement	Construct new well, destruction of old well and all necessary electrical, distribution and treatment equipment to provide safe drinking water.	Μ	5	Ν	Existing well is beyond it's useful life. Casing failure has caused repeat microbial contamination. Repeated disinfection procedures have failed indicating a breach in the existing fifty foot seal. Do not drink order issued in June 2008. Chlorine injector installed. We have had repeat collform present results from the well ever since. With a chlorine residual being maintained the system tests absent. Notification no longer ordered.	250,000	1	60 14	San Diego	v	2009
2097 0900202	0900202-001	CHILI BAR PUT-IN		Find additional backup source and improve quality of present system. Involves study, design and construction.	М	5	Ν	Single well source is inadequate.	160,000	6	100 09	El Dorado	I	2006
2098 2600510	2600510-001	VIRGINIA LKS. MUT. WATER CO.		Replace 800 feet of old steel line with PVC burried at appropriate depth.	М	5	N	Distribution system not constructed per water works standards. Distribution subject to freezing. Line rusting and deteriorating.	100,000	40	150 13	Mono	V	2001
2099 2900520	2900520-001	CAMP ROSS RELLES WATER SYSTEM		Build 50,000 gallons of water storage on camp property 200 feet above the living area; plumbing from the well to the tanks and back. Possible new well or well upgrade	/ M	5	Ν	Old tanks need replacing and needs second well for reliability.	125,000	15	150 21	Nevada	I	1998
2100 5500145	5500145-001	SAN JOSE FAMILY CAMP		DEEPEN THE EXISTING WELL BY 200 FEET, REPLACE AGING GALVANIZED LINES TO TANKS, AND ADD A NEW 10,000 GALLON TANK.	М	5	Ν	SYSTEM LACKS RELIABILITY SINCE IT HAS ONLY ONE WELL. BOTH SOURCE AND STORAGE CAPACITY IS MARGINAL, ESPECIALLY DURING LATE SUMMER.	40,000	14	200 11	Tuolumne	ш	1998
2101 5500141	5500141-001	CAMP TAWONGA		DRILL A SECOND WELL, ADD A 44,000 GALLON TANK, INSTALL CHLORINATION, LOOP THE SERVICE AREA.	М	5	Ν	NO BACKUP WELL, INADEQUATE STORAGE, NO CHLORINATION, UNEQUAL PRESSURE IN THE SYSTEM.	213,000	16	400 11	Tuolumne	Ш	1998
2102 4310027	4310027-019	Santa Clara Valley Water District	Rinconada Water Treatment Plant Valve Replacement	The project will replace/upgrade the piping, valves and actuators and associated components which are used to operate the filtration process at the treatment plant.	I M o	0	С	The Rinconada Water Treatment Plant's piping and control valves and actuators used to operate the filtration processes are leaking and/or failing.	6,567,000	25	0 17	Santa Clara	II	2009
2103 1910032	1910032-002	FOOTHILL MUNICIPAL WATER DIST.	Windsor Reservoir Zone Pipe Replacement and Interconnection	With this project an aging PWP pipeline will be replaced and an interconnection constructed between Foothill and Pasadena. Replacement will include 1200 linear feet of 24-inch ductile iron pipe and 600 linear feet 6- inch ductile iron pipe. The interconnection will require 100 linear feet of 16-inch ductile iron pipe, 7 16-inch butterfly valves, 2 16-inch turbo meters, 2 pressure sensors and 2 meter/valve valuts. The flow through thi intercoonection would be a maximum of 12 cfs.	d M	0	C	This pipeline replacement and interconnection will address reliability within both the Foothill Municipal Water District and Pasadena Water and Power systems. Approximately 1800 linear feet of aging pipeline will be replaced in the PWP system. Additionally, a two-way interconnection will be constructed between the water systems for use during shutdowns or emergencies thus increasing supply reliability for both agencies. Currently, during an emergency or shutdown the Foothill system in this area has no access to imported water beyond the 2.6 MG reservoirs it owns and operates.	606,760	19	0 07	Los Angeles	IV	2009

2104 4310027	4310027-017	Santa Clara Valley Water District	Penitencia Water Treatment Plant Standby Power Upgrade	The objective of the Project is to upgrade the existing M standby power system to ensure that the plant can continue to reliably and efficiently treat and provide clean water to District customers during a utility power failure. The Project includes design and construction of following major elements: Removal of the existing 300 kW diesel-engine generator and associated equipments. • Modifications of the Utility building and surrounding area. • Provision of temporary portable standby engine-generator unit during construction to support plant operation during utility power interruptions. • Installation of new 1000 kW size standby diesel-engine generator unit with a sound attenuated enclosure in the existing Utility building. • Installation of pad-mounted outdoor 480–12,470 volts step-up transformer, 600 volt low voltage cables, 15 kV medium voltage cables, new medium voltage (MV) circuit breaker type automatic transfer switch, and control system modifications for automatic transfer operations, control and aarms. • Obtaining following permits: air permit; building permit including lettrical, mechanical, and structural; and hazmat permit from each authority having jurisdiction. • Utilization of the existing 4000 gallon underground diesel fuel tank for the Project.	0	c	The Penitencia Water Treatment Plant (PWTP) produces up to 42 million gallons of treated water per day. The primary source of power at PWTP is provided by the Power and Water Resource Pooling Authority (PWRPA) via Pacific Gas and Electric (PG&E) transmission and distribution network.An existing 300 kW diesel generator provides limited standby power to operate the plant in the event of a disruption of the primary power service. The existing standby generator was installed in 1973 when PWTP was originally constructed. Since that time, there have been a number of improvements to the PWTP which have increased operational power demand. The Project will meet plant's increased standby power demand during utility power failure and enhance water production reliability with no impact to the plant neighbors.	2,522,000	25	0 17	Santa Clara	Ι	2009
2105 4310027	4310027-015	Santa Clara Valley Water District	Penitencia Water Treatment Plant Backwash Pump Replacement	The Project consists of the following key items of work at the Penitencia Water Treatment Plant (PWTP):• Install a new 18,800 gpm pump and new 350 hp motor: a new pump and motor will improve plant reliability while the increase in capacity will enable more efficient and effective backwashing of the filters.• Installing new Adjustable Speed Drive: the pump will be provided with an adjustable speed drive "ASD". The ASD allows flow control by changing the speed, and output, of the pump. As there is no backup backwash pump at the facility, the ASD will be supplied with a service bypass switch and reduced voltage starter that will allow the pump to be operated in the event of ASD failure. The existing butterfly flow control valve will be replaced and will serve as a backup for flow control. Replacement of the existing butterfly valve will improve reliability. The ASD will be supplied with a simple payback period of approximately eight years. The Incremental Internal Rate of Return (IRR), that is, the return on the additional \$17,621 capital cost for the ASD saume an average annual electrical cost inflation of 6%, an NPV discount rate of 6%, and a financial life of 20 years. The ASD also has the capability to provide much greater monitoring and control information to the operators through its digital communications gateway into the	0	c	The existing single filter backwash constant speed pump and motor, installed in 1974, is at the end of its service life thereby increasing the risk of failure. As there is no backup pump at the facility, a pump failure would result in the inability to produce treated water at the Penitencia Water Treatment Plant. Furthermore, the pump is undersized and cannot efficiently treat water under high water influent temperature conditions. The EPA recommends granular filter media beds be expanded 20% - 25% during a backwash (EPA 1999). The current backwash pump capacity expands the GAC media ±21% expansion. However 21% bed expansion is at the low end of the recommended range and data indicates that a higher flow rate is required to achieve the greater bed expansion, i.e. >21%, at elevated temperatures. The backwash data collected also indicates that bed expansion is inconsistent throughout yearly water temperature variations. The inability to optimize backwashes can lead to longer filter to waster run times in order to achieve the required the filter NTU. This leads to inefficiencies both with respect to energy use and water conservation. The constant speed motor wastes energy while the underpowered pump requires more water to clean a filter. The regulations and directives which govern filter backwashing and returning the filter to service Are: Title 22 Section 64657 of the CCR, the Cryptosporidium	2,190,000	25	0 17	Santa Clara	Π	2009
2106 1910032	1910032-003	FOOTHILL MUNICIPAL WATER DIST.	Sheldon Pressure Zone Interconnection	The interconnection will require the installation of 100 M linear feet of 16-inch ductile iron pipe, 4 16 inch butterfly valves, 1 16-inch turbo meter, 1 16-inch ball valve, motor operator and orifice plate, 1 pressure sensor, 1 16-inch check valve and 2 meter/valve vaults. This interconnection would then be able to carry a maximum of 15 cfs of water to Foothill's distribution system which could meet partial needs during peak periods.	0	с	This interconnection will address water supply reliability issues with Foothill. Foothill has only one interconnection to its imported water supplier (Metropolitan Water District of Southern California). When there is a shutdown or should there be an emergency and water from the connection is not available, this interconnection will allow water to be delivered into Foothill's system and delivered to all retail agencies. This will alford the 105,000 people	121,770	19	0 07	Los Angeles	IV	2009

living in the service area a greater degree of reliability

than currently exists.

2107 1910128	1910128-001	COVINA IRRIGATION CO.		REPLACE ENTIRE SECTION ALONG THE PUBLIC RIGHT OF M	0	С	APPROX. 1 MILE OF 24" PIPELINE THAT WAS SLIPPED LINE WITH AN 18" TO 20" LINE HAVE LEAKS THAR ARE HARD TO LOCATE.	800,000	12	0 15	Los Angeles	IV	1998
2108 4310027	4310027-001	Santa Clara Valley Water District	Santa Clara Valley Water District	Replacement of the filter underdrain system with cast- M in-place, monolithic, false floor, air/water nozzle system.	0	с	System has defects in the filter underdrain system.	2,010,000	25	0 17	Santa Clara	II	1998
2109 1910128	1910128-005	COVINA IRRIGATION CO.		BUILD A NITRATE TREATMENT AND BRINE DISPOSAL M FACILITY TO TREAT MORE THAN ONE WELL AT THE FACILITY	0	С	ONE WELL IS CONTAMINATED WITH HIGH LEVELS OF NITRATES.	4,000,000	12	0 15	Los Angeles	IV	1998
2110 4310027	4310027-012	Santa Clara Valley Water District	Pacheco Pumping Plant Pump #5 & #11 Rebuild	Pacheco Pumping Plant Rebuild Program: PPP has been M in service since 1987. The PPP rebuild program began in 1993 and after several rebuilds the District decided to enter into a sole source arrangement with Unico Mechanical Corp. the only authorized Ebara representative in the United States. The Ebarra pumps are 3 stage vertical lift pumps with 300' shafts. Each pump costs ~5650,000 to rebuild. The parts; i.e. impellers, bowls, etc. are purchased from Ebarra in Japan and can exceed \$400,000 or more per pump (depending on the damage found) with the cost of the shafts at \$250,000 alone. The District attempts to rebuild 2 pumps per year and at that rate will be on schedule in another 3 years at which point the rebuild scehdule will be scaled back to 1 pump per year or as necessary. However, it is absolutely critical to the water supply for Santa Clara County that all 12 pumps be fully operational during the peak delivery months for Conveyance and Distribution of Raw Water.	0	c	The Santa Clara Valley Water District relies on the San Felipe Division to deliver half of its imported water (Bureau of Reclamation allotment 153,500 acre feet) and the San Benito County Water District relies on the San Felipe Division for all of its imported water. The 12 Pumps at the Pacheco Pumping Plant are a critical link in the system. It is imperative that the pumps be maintained in good condition as failur of the pumps could lead to disruptions in water delivery. It is crucial that the Santa Clara Valley Water District stay current with its PPP pump rebuilding program in order to meet peak demand for both agencies during the summer months. Due to the nature of the rebuild program; i.e scheduling, availability of resources, etc. it is possible to rebuild only 2 pumps each year and as such all 12 pumps are in various states of condition with different delivery capacities.	1,700,000	25	0 17	Santa Clara	Ι	2009
2111 1910041	1910041-008	THREE VALLEYS MWD	Emergency Interconnection from SGVMWD to WFA/TVMWD for Water Supply Reliability	M reliability to three community water systems. Those water supply systems are Three Valleys Municipal Water District (TVWMD), Water Facilities Authority (WFA), & Inland Empire Utilities Agency (IEUA). The completed project will address & resolve the increasing demand for a reliable water source in the event of reduced or truncated water supplies from the existing Rialto Feeder transmission line. This project will allow the community water systems to reduce their dependence from their existing single supply line by offsetting their demand with a new emergency inter-tie connection to the San Gabriel Valley Municipal Water District (SGVMVD) system, and continued development of existing groundwater supplies.Physically, the project will have two components. The first part will consist of a raw water connection from SGVMWD with 4,100 linear feet of 36-inch diameter pipeline to WFA. The first part will also include a pump station and three automated valves. The second part of the project will be a 36-inch diameter 3,600 linear foot emergency inter-tie pipeline that connects WFA to TVMWD via a treated water interconnection system which also includes automated valves.	0	c	The current problem for Water Facilities Authority and Three Valleys Municipal Water District is that they receive their raw water supply from just one source, the Metropolitan Water District's (MWD) Rialto Feeder line, making both agencies vulnerable to shut downs (for several reasons). Shut downs have the potential ability to disrupt between 500,000 to 850,000 people served between the two community water systems, Because of the anticipated drop in water supply reliability from MWD in the coming years, the two water systems, along with Inland Empire Utilities Agency (WFA delivers potable water to ~50% of iEUA's customers) are working to eliminate future disruptions due to shut downs & the much anticipated reduced water supply, by creating an emergency inter-tie to the existing system via the San Gabriel Valley Municipal Water District system. Continued development of local supplies will also be connected to the new interconnection at a later time which will further enhance supply reliability during emergencies or water shortages.	3,550,000	11	0 07	Los Angeles	IV	2009

2112 1910087	1910087-014	Metropolitian Dist. of So. Cal.	Robert B. Diemer Treatment Plant Emergency Access Road	The project consists of earthwork, retaining walls, storm M drain system, bridge (flatbed railcar) system, approximately 1.3 miles of road construction, lighting, security, railings, erosion control, landscaping, and other appurtenant work. The road will begin south of State Route 142, within the city of Brea, either sharing or being directly adjacent to the new entrance of the future CHSP visitor center. The initial 0.2 mile of the proposed road will cross State Parks land and Carbon Canyon Creek. The remaining 1.1 miles will be located within Metropolitan property, traversing the northern side of the solids lagoons before the road transitions up the Diemer plant's north slope. It will intersect with the existing (primary) plant entrance road at the southeast corner of the Diemer plant. Mitigation features incorporated into the project include: reduction of the road width to the minimum required to meet Orange County Fire Authority emergency road criteria; installation of a "card-reader" device and security gates to prohibit unauthorized access to the road from park visitors and to ensure compliance with use limitations agreed to by Metropolitan and State Parks; installation of a mechanically stabilized earth retaining wall system with plantable facades to minimize aesthetic impacts on CHSP and the city of Brea, and to restore native plant communities: incorporation of a comprehensive native	0	C	The 520-mgd Diemer plant, located on the crest of a hill, needs a secondary emergency access road. Securing an adequate secondary access road for the Diemer plant is a long-term objective which would improve emergency access to the plant and provide an overall higher degree of operational flexibility and safety. A secondary access road would also enhance the safety and security of the Diemer plant's north boundary by providing access for patrol, security monitoring, and emergency response purposes, such as fire fighting. Since the plant was built in 1963, plant personnel have relied on a single entrance gate for primary access to the plant. This main entrance gate, located on Valley View Circle in the city of Yorba Linda, is situated in a residential neighborhood. A second unimproved plant entrance is located on Carbon Canyon Road, providing limited access via an easement through Chino Hills State Park (CHSP). This easement, commonly known as Telegraph Canyon Trail, provides access to Metropolitan's north solids lagoons and to existing Metropolitan infrastructure within CHSP. This easement cannot presently be used to access the main Diemer plant. Over the past decade, staff has assessed alternative alignments for a secondary access road several times, including routes from the south. Discussions have been held with the city of Yorba Linda,	12,000,000	647	0 16	Los Angeles	IV	2009
2113 4310027	4310027-010	Santa Clara Valley Water District	Santa Teresa Water Treatment Plant Incompatible Materials Project	Communications, incorporation on the north slope of the The Project consists of the following key items of work M at the Santa Teresa Water Treatment Plant (PWTP):• Provide adequate separation and containment of incompatible materials in the chemical metering areas, in the chemical distribution trenches, and in the chemical distribution trenches, and in the polytopic section of New Chemical Trench. Install a new caustic soda/aqua ammonia chemical trench from the storage tank area to the chemical feed room in the operations building. 2. Chemical Trench Modifications: Demolish spare and seldom used chemical piping, and reduce discharge pipe sizes for the liquid alum/ferric chloride, caustic soda, phosphoric acid, aqueous ammonia and sodium hypochlorite chemical feed systems to create room in trenches for secondary contained piping. Provide leak detection systems on all the double contained piping. 3. Chemical Feed Room Modifications: Demolish selected spare and seldom used chemical systems in the chemical feed room to allow for relocation of the liquid alum and phosphoric acid metering pumps and control panels. This relocation will separate these systems from the alkaline equipment and containment areas. Chemical piping mounted on the wall will be double contained in areas above incompatible secondary containment areas and adjacent to incompatible secondary containment areas and adjacent to incompatible secondary containment areas and adjacent to incompatible chemical piping. 4. Chemical Feed Systems Modifications: To provide	0	c	These previous assessments were unsuccessful in These previous assessments were unsuccessful in The existing chemical feed piping, chemical feed area, and chemical storage areas are not in compliance with current hazardous materials regulations providing for separation or double containment of incompatible chemicals.Liquid alum/ferric chloride, caustic soda, phosphoric acid, aqueous (aqua) ammonia, sodium hypochlorite and cationic polymer are conveyed in single walled pipes in common trenches and/or adjacent to each other in feed areas. Additionally, the liquid alum feed pumps share a common secondary containment area with the caustic soda and aqua ammonia feed pumps. The phosphoric acid feed pumps, while in a separate containment area, is immediately adjacent to the ammonia feed pumps. The close proximity of incompatible chemical piping and feed systems presents a safety issue in the event of a pipe failure and comingling of incompatible chemicals.Floor drains in the secondary containment areas in the chemical feed area and chemical storage areas allow all chemical spills to enter a common chemical drain system. This creates a safety issue due to possible comingling of incompatible chemicals in the drainage system. In addition, once the chemical enters the drain system, it has the potential to flow to either the drying beds or the washwater recovery ponds which could impact water quality and upset treatment plant	6,500,000	25	0 17	Santa Clara	Π	2009
2114 1910128	1910128-009	COVINA IRRIGATION CO.	Baldwin Park Well #2 Pump to Waste and Annular Seal	The proposed project is to bring this active source up to M current standards by constructing an annular seal and including additional piping necessary to deliver the water produced to a nearby flood control channel until water quality is acceptable. This will include water quality monitoring equipment and an additional flow meter to account for water loss. This project is (and has been) considered a high priority by CDPH following routine inspections.	0	c	This well was constructed in 1911 and does not include any type of surface seal such as an Annular Seal to protect it from contamination. Positive Total Coliform results have been observed over the years, including recent monitoring. There is also no provision for pump- to-waste upon start up, since piping only exists to deliver the water produced directly to the adjacent reservoir.	250,000	12	0 15	Los Angeles	IV	2009

2115 3610086	3610086-001	West End Consolidated Water Company	Pipeline replacement	Replumb pumping lines from wells to booster station, install new reservoir and control valve at booster	М	0	с	An upgraded iner-tie is needed with SBCsA 70 zone L system due to susecptible MTBE contamination	275,000	1	0 13	San Bernardino	v	2000
2116 1910087	1910087-009	Metropolitian Dist. of So. Cal.	Weymouth Treatment Plant Filter Rehabilitation	Under this project, the four filters will be rebuilt with new media and different configurations of design enhancements, so that the performance of these four filters can be monitored and evaluated at full-scale when the four filters are returned to service. The estimated construction contract cost is \$2 million. The full-scale evaluation of filter modifications will include alternate types and layers of filter media, a new underdrain system, an air-scour system, and new washwater troughs. Test protocols will be followed to ensure that all water quality criteria are met during the evaluation period. During the planned nine-month test period, Metropolitan staff will assess performance with respect to water quality and the impacts of physical constraints within the existing filter cells, in order to identify the optimal configuration for rehabilitation of the remaining 44 Weymouth plant filters.	M	0	C	At the present time, four filters at the 520-mgd Weymouth plant have been removed from service due to unacceptably high outlet turbidity levels. Although staff has conducted filter surveillance and box excavations to investigate filter performance, and has varied operating conditions by reducing the filter rate, changing the backwash rate, and adding filter-aid polymer, the performance of these four filters is inadequate and they remain out of service. The 48 filters at the Weymouth plant range in age from 40 to nearly 70 years old. While they were state-of-the-art at the time of their construction, the filters were originally designed to operate at lower filtration rates, using a fine sand monomedia and low backwash rates. Since then, the filters have been retrofitted with a dual media composed of anthracite coal and silica sand to enhance performance. However, no other appurtenances that support the filtration process (e.g., troughs, underdrains, etc.) were changed to accommodate the higher performance expected of the filters. By modern standards, the existing filter cells are constrained by their shallow depth. Metropolitan has standardized on a tri-media filter design wherever possible. Because of the shallow filters and hydraulic constraints at the Weymouth plant, however, the tri-	2,000,000	647	0 16	Los Angeles	IV	2009
2117 1910128	1910128-014	COVINA IRRIGATION CO.	San Gabriel River Diversior Structure	A diversion structure has been designed from a matrix of possible options given the nature and topography of the river at the existing location where levees are typically constructed.	M	0	с	Covina Irrigating Company is a part of the San Gabriel River Water Committee, which diverts surface water for treatment and subsequent potable use. If water is not available from the Azusa Conduit, water must diverted into a structure downstream from Morris Dam. Currently, levees are constructed on an as-needed basis for this, which will at some point no longer be possible because of regulatory changes. If the Conduit fails, and this has happened within the last 5 years, there is no reliable means to divert water for treatment to two plants with a total capacity of 24 MGD. Should this occur, the negative impact to the local water supply situation will be disastrous.	3,500,000	12	0 15	Los Angeles	IV	2009
2118 1910128	1910128-012	COVINA IRRIGATION CO.	Baldwin Park Well #1 Pump to Waste and Annular Seal	The proposed project is to bring this active source up to current standards by constructing an annular seal and including additional piping necessary to deliver the water produced to a nearby flood control channel until water quality is acceptable. This will include water quality monitoring equipment and an additional flow meter to account for water loss. This project is (and ha been) considered a high priority by CDPH following routine inspections.	s M	0	с	This well was constructed in 1910 and does not include any type of surface seal such as an Annular Seal to protect it from contamination. Positive Total Coliform results have been observed over the years, including recent monitoring. There is also no provision for pump- to-waste upon start up, since piping only exists to deliver the water produced directly to the adjacent reservoir.	250,000	12	0 15	Los Angeles	IV	2009
2119 4310027	4310027-008	Santa Clara Valley Water District	Distribution System - ARV Improvements	Each below-grade ARV on the Treated Water Pipelines will be equipped with a vent attached to the ARV that will extend one foot above flood levels. Project will also include seismic bracing of the ARVs and replacment of old isolation valves.	M 0	0	С	Existing Air/Vacuum Relief Valves (ARVs)throughout the distribution system are located below grade. The ARVs are in need of replacement due to old age and can cause disruption in treated water delivery.	21,066,000	25	0 17	Santa Clara	II	2006

2120 4310027	4310027-015	Santa Clara Valley Water District	Rinconada Water Treatment Plant Clarifier Rehabilitation Project	The project will rehabilitate the clarifiers at the Rinconada Water Treatment Plant. Work includes replacing the clarifier mechanisms and other mechanical components with new equipment, coating of steel components, and performing minor repairs to the existing concrete structures.	М	0	С	The clarifiers at the Rinconada Water Treatment Plant are over 40 years old and need to be rehabilitated. This will extend the useful life of the treatment plant and improve its reliability.	8,974,000	25	0 17	Santa Clara	II	2009
2121 4310027	4310027-018	Santa Clara Valley Water District	Treated Water Pipelines Inspection-Rehab and ARV Installation	The Santa Clara Valley Water District (District) is / planning maintenance, rehabilitation and air release valve (ARV) vent installation on two pipelines in 2009/2010. The work will include the West Pipeline from the Cox turnout structure to the Turnout structure for the Mountain View Pipeline and the East Pipeline from the Patt Ave Line Valve to the Ocala Line Valve. Failures have occured on these pipelines over the past few years and work is needed to reduce the risk of failure. District staff and selected contractors will perform inspection and maintenance work at approximately sixty vault and Christy box sites and approximately 8.3 miles of treated water transmission pipelines that extend through portions of the cities of San Jose, Saratoga, Cupertino, and Los Altos as well as a portion of the county of Santa Clara. The majority of th work involves removing ARV's, combination air/vacuum release valves (VAR's) and replacing them with new valves and replacing blind flange gaskets and associated piping work in vaults and Christy box sites. The ARV valves range in size from 1 to 6 inch. Welding of new 4 inch nozzles on the pipeline and blind flanges will be a includes replacement of blow-off valves used for emptying water from the pipeline. The work also includes venting the ARV's. The vents modifications ard a specific requirement of the new Waterworks Standari	M e d d	0	C	This work is required to rehabilitate treated water pipelines that have had significant failures in recent years. In the fall of 2008, a major failure almost resulted in the loss of supply to several communities in East San Jose. The replacement of Air Release Valves (ARVs) require vents and modifications that are a specific requirement of the new Waterworks Standard regulation issued by the California Department of Public Health (CDPH). The work will be perfromed in accordance with American Water Works Association Standard C512-04 and Manual M51 (2001).	2,800,000	25	0 17	Santa Clara	Π	2009
2122 1000405	1000405-001	DOYALS MOBILE HOME PARK	New well to augment	Drill a new well or interconnection if possible.	м	0	С	Single well, if it fails, system is out of water	200,000	15	16 23	Fresno	Ш	2008
2123 1700519	1700519-002	Crescent Bay Improvement Company	Crescent Bay Improvemen Company-Distribution System Improvements	It Our capital improvement plan includes replacing the aging distribution lines within the next 20 years. The lines run down the sides of the only road serving the community, and will require replacing the water system distribution lines,	M	0	С	Crescent Bay improvement Company has been on a Boil Water Order since 1999. It draws surface water from Clear Lake for a community of 23 hookups. It has been unable to meet compliance standards for turbidity and disinfectant byproducts under Surface Water Treatment Rule Sections 64664, 64652(a), 64655(b), 64657.40(c), 64646(a), 64659 and 64661. The company was established in 1935, and the distribution system dates back to the late 1930s. The California Department of Public Health regulator has advised us to seek ground water as a source for our system rather than surface water. replace the aging distribution lines	500,000	24	18 03	Lake	Η	2012
2124 5400660	5400660-001	LAKE SUCCESS MOBILE LODGE	Lake Success Mobile Lodge Water Supply Reliability Project	e Lake Success Mobile Lodge currently obtains its potable water supply from one community groundwater well. I this well were to fail due to dropping groundwater levels or other emergencies, the community would hav no source of domestic water. In addition, the well has a history of violating the MCL for nitrates, and an additional/replacement source of water is desired. The proposed project would drill and equip one additional community water well including related appurtenances and also including applicable engineering and design costs, land acquisition, well development, CEQA/NEPA requirements, and legal/contract costs.	e M a	0	C	Lake Success Mobile Lodge is supplied with potable water by one groundwater well, which has a history of nitrate contamination (appx 55 ppm). In light of the current drought conditions being experienced throughout the State of California, relying on a sole source of drinking water leaves residents in a risky and vulnerable position. If drought conditions were to cause groundwater levels to drop, the community could find itself completely out of water. In addition, a collapse or other failure of the well and/or pump would leave water system users without a source of drinking water. Therefore, a second source of domestic water supply is urgently needed.	1,000,000	18	20 12	Tulare	Ш	2008

2125 1502056	1502056-001	CLARK STREET COMMUNITY WELL	Clark Street Community Well-Second well/intertie with Erskine Creek WC	As part of this project, Clark Street Community Well Water System will either drill a new well or develop intertie with Erskine Creek Water Company	М	0	С	Clark Street Community Well Water System has only one well and that well is hard rock well. Therefore, the water system is unreliable.	500,000	16	25 19	Kern	ш	2008
2126 4900665	4900665-001	Russian River Mutual Water Co.		Replace transmission lines, increase storage, and install	ΙМ	0	С	Upgrade transmission, treatment and storage.	75,000	24	25 18	Sonoma	Ш	1998
2127 1500564	1500564-001	HOMETOWN WATER ASSOCIATION	Second Well for the Water System or inter-tie project for increasing the reliability of the water su	Funds are needed to drill a second well or consolidate with nearby water system. The goal of the project is to ensure served people of a reliable domestic water supply.	м	0	с	With only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	200,000	12	25 19	Kern	Ш	2008
2128 0400091	0400091-003	BUZZTAIL MUTUAL WATER COMPANY	Replacement of substandard infrastructure	Project would include the acquisition for land and associated fees for property located in or around the north east corner of Sierra Foothills Subdivision (less than 1 acre). Installation of additional holding tank and pressure pump. Installation of trench with rock cutter in area where temporary line was installed. Replacement of deteriorated pipe and installation of required fire hydrants.	M	0	c	In 2000 the Buzztail Community Service District (Water Division) received a request from the Butte County Environmental Health Department to allow the emergency connection of three residences due to well failure. The connections were allowed and a combination of 3" to 1" PVC pipe was extended over 8000ft to serve the homes. Shallow soil and hardpan made proper installation difficult. Pipes were run along the ground and dirt was placed over the line is some areas. Portions of the line have been exposed for almost 9 years and have become very brittle. The residences are unable to construct their own well and significant improvements are required to adequately serve the property. Due to the long distance and possible leaks water pressure to these homes is very low and susceptible to contaminant infiltration. Funding would allow for the provision of improvements to state standards.	215,000	31	25 21	Butte	I	2009
2129 3601036	3601036-001	Calico Lakes Homeowners	Replace well, add tank, add back generator	Place a second tank of 20,000 gallons, install back up generator and drill secondary well.	М	0	с	Storage tank is below county standards. No back up power to run distibution pumps. County requesting we have a secondary well. Our community is now 51 connections serving 200 people.	80,000	15	25 13	San Bernardino	v	2011
2130 5602132	5602132-001	WATERS ROAD USERS GROUP	Waters Road Permanent New Booster Pump and Storage Facility	The system modifications proposed for this project include the following:a)Acquisition of a larger easemen to house the new equipment.b)Installation of a 105,000 gallon tank situated at the pump station to be filled by the WWD1 supply, and provide a relatively constant head to the pump station for consistent operation. The additional storage also helps in achieving the required Title-22 storage volume even when irrigation demand is taken into account. c)Installation of a duplex booster pump station with a backup unit to provide Title-22 QO and also keep up with irrigation demand.b)Installation of a local telemetry system to automatically signal pump operation at pre-set tank volume points, e) Installation of an emergency power generator.f) Install all necessary electrical and controls including VFD.The project also entails:a) Obtaining permits and approvals with Environmental permitting/CEQA reviewb) Engineering and project management	M t )- s	0	c	The Waters Road Domestic Users Group system supplies domestic and irrigation water to the 13 services in the service area. The system is comprised of a metered service from Ventura County Waterworks District 1 (WWD1), a small booster pump, and elevated storage. Problems with the system include:1) The service from WWD1 does not deliver a constant pressure, so the booster pump filling the elevated storage sometimes cannot keep up with demand, and the storage often is very low or goes dry, especially during the irrigation season.2) The tank-fill booster pump is not automated, and is run manually when high demand is anticipated3) The existing system storage is just barely compliant with Title 22, but since the system combines domestic and irrigation water the irrigation demand often leaves less than the required storage in the tank.4) The existing booster pump supplies less than the title-22 required Q0 when taking into account the combined irrigation demand.5) The system has no emergency back-up power.	377,400	17	25 06	Ventura	IV	2009

2131 0400091	0400091-002	BUZZTAIL MUTUAL WATER COMPANY	Alternative Water Source (2nd Well)	Second well will be drilled to an approximate depth of 800ft. Well will be located on same parcel as the existing well and will attempt to intercept the existing aquifer. Well will be 8" in diameter with a 4" drop pipe. Additional facilities will include an additional 150 feet o metal pipe that will direct water into the existing 80,00 holding tank. Additional facilities will also be required t keep well protected from the elements.	M f 0 0	0	C	Buzztail Community Service District (Water Division) is not currently in compliance with state standards and only has one water source, has insufficinet holding capacity for residencial systems and does not have minimum pressure, volume and storage for fire suppression. The Existing well is 38 years old and is in a highly deteriorated state. Over 50% of factory installed perforations are clogged. Well pump has failed 3 times since 1999. Well has been sanding in at an increased rate and has forced the water provider to raise the well significantly to avoid rising sediment levels. Pump has been raised to a point where the static water level has fallen below the pump level. Drought in the area has resulted in lower aquifer levels and in 2008 on a number of occasions the water level fell to a point that did not allow pump to function. System has 28 approved connections and 3 emergency connections that were installed on a temporary basis in 2000 due to failure of a neighboring well. The existing well is in desperate need of rehabilitation which cannot be attempted until a second well is drilled and an alternative source is secured.	135,000	31	25 21	Butte	I	2009
2132 1500599	1500599-001	CHOCTAW VALLEY MUTUAL WATER CO.	Choctaw Valley MWC-Drill a Second Well	Drill a second well	м	0	с	The water system has only one well. A second source of supply is needed	200,000	18	25 19	Kern	Ш	2008
2133 1500591	1500591-001	SWEET WATER CO-OP	Sweet Water CO-OP- Intertie with Inyokern CSD or Drill a Second Well	An intertie wit Inyokern CSD or drill a second well is needed.	м	0	С	The water system has only one well. another source of supply is needed.	500,000	16	25 19	Kern	Ш	2008
2134 1503482	1503482-001	Rio Mesa Mutual Water Company	Rio Mesa MWC- Drill a Second Well	Drill a second well.	м	0	С	The water system has only one well. A second source of supply is needed	200,000	6	25 19	Kern	Ш	2008
2135 2210904	2210904-001	Golden Hill Mobile Home and RV Park	New well to augment single well	The proposed project consists of the construction of a new well.	М	0	с	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	12	25 11	Mariposa	Ш	2008
2136 1502666	1502666-001	WILCOX WATER SYSTEM	Wilcox Water System- Second Well/intertie with Inyokern CSD	As part of this project, the Wilcox Water System will either drill a second well or develop intertie with Inyokern CSD.	М	0	с	Wilcox Water System has only well. Therefore, the water system is unreliable.	500,000	12	27 19	Kern	Ш	2008
2137 1500152	1500152-002	MIRASOL COMPANY WATER SYSTEM	Storage Tank For the Water Company	As part of this project, we will have a planning project for a 30,000 gallon storage tank and a meter for the well. Once planning is done and approved, a new tank will be constructed and a meter provided on the well.	М	0	с	Currently, we do not have any storage tank, so the Water System lacks reliability and also in violation of Waterworks Standard by not having storage equivalent to maximum day demand. We also do not have a meter on the well so we are not able to record production.	75,000	13	30 19	Kern	Ш	2012

2138 1900509	1900509-002	BAXTER MUTUAL WATER CO.	Upgrade existing well	According to the pump company, they would install an inner PVC casing, inside the existing 8 inch casing, and install a submersible pump (replacing the existing turbine pump).	Μ	0	c	The active Baxter Water System well was drilled in 1968 and has been in use by the local community of 14 homes since then. LA Co. Health Department has suggested that we should be considering a new well.In May 2009, we suddenly had considerable visible contamination from the well. There appeared to be considerable rust coming from the well and the "experts" believe it was likely a part of the well casing breaking off. The contamination cleared up in a few days. One pump company suggested using a inner pvc casing (inside existing 8 inch casing) and installing a submersible pump which would be more energy efficient and would extend the life of the well. However, this procedure has not been approved by the County department of Health. I talked to Richard Lavin from the county and he said that he had not heard of this procedure being done in the past. He said we could submit plans and the County would consider it. So this funding would be needed only if the upgrade is approved by the county, we will be looking at a much more expensive option, purchasing property for a new well and getting the new well constructed, and would be looking for considerably more funding.	20,000	10	30 16	Los Angeles	IV	2011
2139 1502649	1502649-001	DIXIE WATER COMPANY	Dixie Water - Single Sourc	e Consolidate with Indian Wells Valley WD.	м	0	с	Dixie Water Company has a single well as its source of supply, therefore lacks required system reliability.	800,000	12	30 19	Kern	ш	2008
2140 1900509	1900509-001	BAXTER MUTUAL WATER CO.	Install Generator Backup for well	Purchase gas or diesel generator and have it installed, including electrical switching to provide emergency power to the two pumps.	Μ	0	с	The Baxter well system consists of two electrical components: (1) well turbine pump motor, 440V, 3 phase and (2) pressure pump, 220V, 3 phase. Commercial power is the only source of power for operating these pumps and providing water to the community. In the event of a commercial power outage lasting for more than a few hours, we will be without water with resulting health hazards. In the event of power outage, we will not be able fight fires nor provide water to the Fire Department. The Fire Department occasionally extracts water from our system to fight fires in the surrounding area. The Fire Department has recommended that we have a gas/diesel powered backup generator.	25,000	10	30 16	Los Angeles	IV	2011
2141 2100549	2100549-002	BLUE MOUNTAIN CENTER	New well for back-up water source	A hydrologist will be hired to locate a site for the new well. A new well is to be drilled on hillside above existing storage tanks. All pumps, controls, and electrical and water lines to be installed to connect new well to existing infrastructure.	M	0	С	Current system relies on one vertical well. A second well is required to meet water works requirement for community water systems to have at least two sources, Section 645540. The proposed well will also improve system reliability and provide added protection from drought conditions.	35,000	11	30 18	Marin	Ι	2009

2142 1900509	1900509-003	BAXTER MUTUAL WATER CO.	Decommission Inactive Well	Hire licensed contractor to abandon well per this document, http://www.gordens.us/Baxter/RequirementsWellDeco mmission.pdf, paragraph 10.In addition to the required procedures for abandoning a well, the end of the pump house must be removed/reconstructed, cement pad removed/replaced, power lines temporarily removed, fence removed/replaced, and possibly remove a large tree for access.		0	с	This request is for decommissioning old well. The old well is capped and has not been used since late 1960's we believe. None of current residents were here when the well was capped. We were issued a notice from Los Angeles County Public Health Department on 6/18/09 to formally abandon/destroy the well (see http://www.gordens.us/Baxter/AbandonedWellNotice. pdf). However, the water company has not been able to afford the approximate \$25,000 cost. There are currently two houses on the system (of 14 total) that are vacant and not paying water distribution fees. Job layoffs and home repossessions within the water community have exacerbated the problem for raising the necessary funding.	25,000	10	30 16	Los Angeles	IV	2011
2143 1500511	1500511-001	V.R. S Trailer Park	Inter-tie project with City of Bakersfield	FUNDS NEEDED TO CONSOLIDATE THIS SMALL SYSTEM WITH THE CITY OF BAKERSFIELD DISTRIBUTION SYSTEM THE GOAL IS TO ENSURE SERVED PEOPLE OF A RELIABL DOMESTIC WATER SUPPLY.	M I. E	0	С	With only one well as a source of water supply, this public water system is deemed to have unreliable source capacity.	200,000	27	30 19	Kern	ш	2008
2144 1500152	1500152-001	MIRASOL COMPANY WATER SYSTEM	Mirasol Comany has only one well. A second well is needed	Drill a second well.	М	0	С	Mirasol Water Company has only one well.	200,000	13	30 19	Kern	Ш	2008
2145 2100549	2100549-001	BLUE MOUNTAIN CENTER	Storage capacity improvement	We propose to replace two 8,000 gallon concrete tanks with four 5,000 gallon polyethylene tanks located highs on the hillside and to install all the necessary plumbing to connect these tanks to one 5,000 gallon poly tank already in place at the higher level. The concrete tanks will then be used for irrigation water storage.	; M er	0	С	Water system is gravity feed from storage tanks located above buildings being served. Existing concrete tanks are located too low on hill to provide adequate pressure to prevent pressure drops in higher elevation buildings.	20,000	11	30 18	Marin	II	2009
2146 0400003	0400003-002	NORTHWOODS MUTUAL WATER SYSTEM		Construct a new roof over 18,000 gallon in ground reservoir.	м	0	С	18,000 gallon in ground reservoir needs a new roof.	10,000	16	31 21	Butte	I	1998
2147 2700669	2700669-001	ORCHARD LN WS #02		Need to drill new well.	М	0	С	System needs new well.	40,000	16	32 05	Monterey	Ш	1998
2148 1502619	1502619-002	SOUTH DESERT MUTUAL WATER COMPAN	Y South Desert MWC- Drill a Second Well/ Intertie with Inyokern CSD	Drill a second well or intertie with Inyokern CSD	м	0	С	The source has only one well. A second source of supply is needed.	500,000	13	32 19	Kern	Ш	2008
2149 2210917	2210917-001	Yosemite Ridge Resort	New well to augment single well	The proposed project consists of the construction of a new well.	М	0	С	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	23	32 11	Mariposa	Ш	2008
2150 5800851	5800851-001	FEATHER RIVER MANOR	2nd Water Source	This project would include the construction and development of a new production well. The pump, panel and pipelines would also be installed after completion of the new well.	м	0	C	This community PWS currently has only one source of water - a groundwater well. Due to the current drought conditions in California, the need for another water source may be imminent.	250,000	2	35 21	Yuba	I	2008
2151 1502162	1502162-001	LINNS COURT MUTUAL WATER	Linns Court MWC-Drill a Second well	Drill a second well.	М	0	С	The Water System has only one hardrock well. Another source of supply is needed	200,000	16	35 19	Kern	Ш	2008
2152 2800527	2800527-003	LINDA FALLS TERRACE MUTUAL	Tank and Treatment Replacement	This project will include:Construction of (4-6) 10,000 gallon concrete tanksDemolition and removal of existin tanksRe-plumbing to distribution pipelinesInstallation of full flow 6" Fire HydrantInstallation of Treatment and Chemical Storage ShedInstallation of proportional chlorination treatment equipmentInstallation of pH correction treatment equipment	M Ig of	0	С	Currently there are two different water storage tanks. The concrete storage tank is cracked and leaking with structural compromise. The steel tank is suffering from corrosion. The treatment system doses chlorine at levels that vary and needs replacement. There currently is no treatment done for low pH water which causes lead and copper levels to exceed the action level.	120,000	10	35 03	Napa	II	2009

2153 2800527	2800527-004	LINDA FALLS TERRACE MUTUAL	Replacement of main water line	The main line system that needs replacement would entail trenching a new line along our private road way to deliver water to each of the 16 homes and homesights in our comunity. We would also replace the old and badly needed fire hydrants. The distance of th trench would be 0.4 mi and mainly in volcanic tuffa. The old line was hand dug and only a foot or two deep. This fact has lead to open exposure of pipe and therefore the need for a main line that is up to code an safe.	M e e	0	С	Our Main water line is 50 years old and galvanized metal. It has developed leaks over the recent years and the threat of water contamination from the residential septic system is a real and likely concern. This main line needs replacement with state of the art pipe that is non corrosible.	500,000	10	35 03	Napa	11	2009
2154 1500448	1500448-001	HILLVIEW ACRES MUTUAL WATER COMPA	N' Hillview Acres-Second Wel for the Water System	I As part of the project, Hillview Acres will drill a second well to increase system reliability.	М	0	с	Hillview Acres MWC has one hard rock active well. Therefore the water system is not reliable.	200,000	47	35 19	Kern	Ш	2008
2155 1500344	1500344-002	SOUTH KERN MUTUAL WATER COMPANY	South Kern MWC- Drill a Second Well/Intertie with City of Bakersfield	Drill a second well or intertie with the City of Bakersfield	М	0	с	The water system has only one well. A second well or an intertie with City of Bakersfield is needed	1,300,000	14	35 19	Kern	Ш	2008
2156 2300596	2300596-002	Big River Vista Mutual Water Company	Big River Vista Water Company Stop Water Leakage from 45,000 Gallon Redwood Water Storage Tank	Mendocino Coast Water Works, contractor license 887988, will provide the time and materials to drain and clean the redwood tank in preparaton for the installation of a Hypalon Liner by New World Mfg. Inc, contractor's license 618911. Mendocino Water Works scope of work includes installation of scaffolding for safe access, draining and cleaning of the tank. Post Hypalon liner installation work includes the installation of new tank fittings for water tight seal from the liner One fitting to be for main service, the other will be for emergency and drainage. New valves to be installed on tank fittings, valves to be 3" AWNA resilient gate valves Main connection to be fitted for a 2" meter bypass in Ductile Iron pipe. Existing meter to be reused. Cleaning of roof and installation of new screening and galvanizee flashing for roof. New World Mfg. Inc. will install a 45 MIL Hypalon Liner cut 19' 6" in diameter by 19' 7" high. The Liner will be made in 3 to 4 sections and completed in the tank. The required plumbing permit for this project has been approved by the Mendocino County Department of Building and Planning.	M d	0	C	The Big River Vista Water Company's primary water storage facility is a 45,000 gallon redwood water tank. This tank is approximately 50 years old and has been repaired over the years to minimize water leakage. We are currently experiencing water loss from tank leakage in excess of 120 gallon per day. The condition of the tank has reached the point where it is no longer feasible to attempt repairs to the tank structure itself. The recommended repair to eliminate leakage is to install a fitted Hypalon liner in the existing redwood tank. The 45 mil Hypalon liner has a 30 year limited warrenty, it is expected to last between 30 and 40 years. Hypalon is a high grade material that is used for the containment of potable water. It is not affected by ultraviolet light, ozone, chlorine, water fluctuations or sitting empty ofr long periods of time. On February 10, 2009 the Mendocino City Community Service District declared a Stage 3 Water Shortage directive that requires a 20% reduction in water allotments. The installation of the water tank liner will be necessary for the Big River Vista Water Company to comply with this community directive.	25,424	18	36 03	Mendocino	Π	2009
2157 1600007	1600007-001	COUTURE FARMS	Couture Farms Back-up Well	To drill a new well to serve as a back-up. Wells in this area are typically over 1000 feet deep.	М	0	С	This small community system is served by a single source (one well). This application is for a back-up well to insure adequate water.	200,000	15	38 12	Kings	ш	2008
2158 1000075	1000075-001	TRACT 1199 WATER SYSTEM	Drill a new well to augment single well	Drill a new well or inconnection if possible.	М	0	С	System supplied by one well and if it goes out due to drought, the systme would be out of water.	200,000	13	39 23	Fresno	Ш	2008
2159 3400130	3400130-004	GREGG WATER CO	Redundant Source	Drill a new well and install associated piping and pumps	5. M	0	с	The CWS does not have a redundant source. Intertie and/consolidation are not viable options because those system have similar problems and are non-community water systems	20,000	19	40 09	Sacramento	I	2008
2160 1502597	1502597-001	DEL SOL WATER CO-OP		Replace the old storage tanks w/ new polyvinyl tanks.	М	0	С	The three storage tanks are old, have running rust, and have developed leaks.	10,000	12	40 19	Kern	Ш	1998

2161 2000573	2000573-001	THE VILLAGE	The Village-Source improvement	Consultation with Engineers and Pump contractors to trouble shoot electrical and mechanical issues with the pump or they may have to drill a new well.	Μ	0	C	Population served by this community water system are retired and on a fixed income. The water system consists of 2 wells with only one well in active status and a storage tank with a 60,000 gallons capacity. The storage tank is used for both fire flow requirements and potable use. The other well is inactive due to well pump 's mechanical and electrical problems. The water system is in financial hardship and is not able to afford to hire consultants and contractors to trouble shoot and fix the problem. Without the use of this other well, the water system is only served by a single source and supply is not adequate in case of emergencies.	75,000	21	40 11	Madera	Ш	2008
2162 1500560	1500560-001	KRANENBURG WATER SYSTEM	Kranenburg-Second Well/Inter-tie with Vaugh Water Company	Funds are needed to drill a second well or consolidate n with Vaughn Water Company, a nearby water system. The goal of the project is to ensure served people of a reliable domestic water supply.	м	0	с	only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	500,000	14	40 19	Kern	Ш	2008
2163 1502659	1502659-001	OWENS PEAK SOUTH	Owens Peak South-An Intertie with Inyokern CSE or Drill Second Well	An intertie with Inyokern CSD or drill a second well is needed.	м	0	C	The water system has only one well. A second source of supply is needed.	500,000	17	40 19	Kern	Ш	2008
2164 1000407	1000407-001	GEORGE COX WATER SYSTEM	New well to augment	Drill a new well or interconnection	М	0	С	Single well, if it fails, the system is out of water	200,000	20	40 23	Fresno	Ш	2008
2165 5400767	5400767-001	WATERTEK - E PLANO	Watertek E. Plano Water Supply Reliability Project	The community of East Plano currently obtains its potable water supply from one community groundwater well. If this well were to fail due to dropping groundwater levels or other emergencies, the community would have no source of domestic water. The proposed project would drill and equip one additional community water well including related appurtenances, and also including applicable engineering and design costs, land acquisition, well development, CEQA/NEPA requirements, and legal/contract costs.	M r	0	C	The unincorporated Tulare County community of East Plano is served with potable water by Watertek. The water system is supplied with water by one groundwater well. In light of the current drought conditions being experienced throughout the State of California, relying on a sole source of drinking water leaves East Plano in a risky and vulnerable position. If drought conditions were to cause groundwater levels to drop, the community could find itself completely out of water. In addition, a collapse or other failure of the well and/or pump would leave water system users without a source of drinking water. Therefore, a second source of domestic water supply is urgently needed.	1,000,000	20	40 12	Tulare	111	2008
2166 1500398	1500398-001	FRONTIER TRAIL HOMEOWNERS ASSOC,	INC Frontier Trails Water Distribution system	3 addtional 8,500 gallon storage tanks placed into our existing system will generate increased pressure for residential use and provide for mitigation for our will- serve members. The additional tanks will allow FTHA to create a looped distribution system.	М	0	с	Due to low pressure distribution our system is in need of upgrading. Our "Gravity Feed" system requires 3 additional 8500 gallon storage tanks to complete our system, its loop and feed to unaddressed "will-serve" locations	55,000	36	40 19	Kern	III	2008
2167 1000410	1000410-001	SHORTY S PLACE	New well to augment single well	Drill a new well or interconection	М	0	с	Single well, if it fails, the system is out of water	200,000	17	40 23	Fresno	ш	2008
2168 1000277	1000277-001	ELM COURT	New well to augment single well	Drill a new well or interconnection if possible.	М	0	С	Single well system, if it fails the system is out of water.	200,000	14	40 23	Fresno	Ш	2008
2169 0400078	0400078-001	FOREST KNOLLS MUTUAL WATER CO	New Storage Tanks	Installation of two new 30,000 gallon steel tanks above ground or repair existing tank.	м	0	C	According to inspection reports, the cracks in the existing storage tank are the cause of several bacteriological water quality failures of the water system.	60,000	16	41 21	Butte	I	1998
2170 1500543	1500543-001	AGAPE MUTUAL WATER SYSTEM	DRILL A WELL OR CONSOLIDATE WITH ANOTHER SYSTEM.	FUNDS NEEDED TO DRILL A SECOND WELL OR CONSOLIDATE WITH NEARBY WATER SYSTEM. THE GOAL IS TO ENSURE SERVED PEOPLE OF A RELIABLE DOMESTIC WATER SUPPLY.	М	0	С	With only one well as a source of water supply, this public water system is deemed to have unreliable source capacity.	200,000	16	43 19	Kern	ш	2008
2171 3400192	3400192-001	TUNNEL TRAILER PARK	Reduntant Source and Source Upgrades	Drill a second well on the property. Bringing the exsiting well to at least 18" above grade and provide security to the well head	gМ	0	С	Add an additional source to the existing single well. Also make improvement to the exsiting well to meet the waterworks standards	25,000	21	44 09	Sacramento	I	2008
2172 2700536	2700536-002	CORRAL DE TIERRA ESTATES WC		Repair or replace inoperable valves throughout the system.	м	0	С	Distribution system valves will not close completely.	10,000	16	45 05	Monterey	Ш	1998

2173 1700536	1700536-003	Sunrise Shore Mutual Water Company	Sunrise Shores	We have to replace about 4,000 ft of water distribution M system. Need to replace our 3" main with minimum 4"	0	С	Existing distribution system is Military surplus thin walled steel nine installed in 1958. Pine was laid in	250,000	37	45 03	Lake	Ш	2007
				we also need to install Fire Hydrants to provide better			ground with rocks, gravel and earth. No sand was used.						
				community fire protecdtion. An additional 10,000 gal									
				storage tank must be added for addional water for fire			During recent years we are having more problelms with						
				protection and general use during power interruptions			the main line as the pipe is bursting and requires						
				and to handle the possible addition of more homes to			expensive repairs, plus interuption of water service to						
				the system. We have approximetly 20 vacant lots for			the entire community. Our last leak cost us \$3,570.00						
				home sites.			to repair.						
				The present system provides water service to 41 homes			Pipe is also filling with corrosion and we have a very						
				which would require hook up to the main delivery line.			high iron and manganese in our water. DHS has told us						
							that this problem needs to be addressed.						
				New system would be installed next to the existing lines									
				along the edge of the county road.			We plan to put in a filtration system to address the iron						
							and manganase from our own funds, but we do not						
							have funds to replace the distribution system.						

2174 2000553	2000553-001	MD#28 RIPPERDAN SELF HELP	MD # 28 RIPPERDAN SELF HELP	Drill a new well to serve as a back up ( emergency ) source.	м	0	С	Single source water system serving a low income community and no storage capacity. In times of drought conditions, vulnerable to water outages and inadequate fire suporession capabilities.	100,000	20	48 11	Madera	Ш	2008
2175 1502620	1502620-001	POND MUTUAL WATER COMPANY	Pond Mutual WC-Second Well or possible Intertie with City of Wasco	As part of the project, Pond MWC will either drill a second well or develop intertie with City of Wasco.	М	0	с	Pond Mutual Water Company has only well. Therefore, the water system is unreliable.	1,000,000	16	48 19	Kern	Ш	2008
2176 2701633	2701633-001	PARADISE RD WS #21		Recoat tank, repair back-up well, and install water treatment system.	Μ	0	С	System facilities (back-up well, main lines, treatment system) need improvement/replacement.	10,000	16	48 05	Monterey	Ш	1998
2177 5800850	5800850-001	REBEL RIDGE VILLAGE	2nd Water Source	This project would include the construction and development of a new production well. The pump, panel and pipelines would also be installed after completino of the new well.	М	0	С	This community PWS currently has only one source of water - a groundwater well in a fractured rock aquifer. Due to the current drought conditions in California, the need for another water source may be imminent.	250,000	35	48 21	Yuba	I	2008
2178 5400600	5400600-001	GOLDEN KEY APARTMENTS	New Well for PWS distribution and storage	New Well and storand and/or consolidation with larger pws	М	0	с	Shortage of water due to drought in State	500,000	16	48 12	Tulare	ш	2008
2179 1900599	1900599-002	VALHALLA WATER ASSOCIATION	Water Main Transmission and Storage Tank Repair and Upgrade	This project will replace the water main (currently 1- 1/2" galvinized pipe buried ~ 12" underground with some exposed runs) with 6-inch PVC buried 36" below the road grade. The new main will also be relocated along the Stonyvale Road right-of-way. All service connections will be replaced accordingly. The water storage capacity will be upgraded from 15,000 gallons to 150,000 gallons, at an elevated location to ensure a minimum static pressure of 20 psi. Resulting fire suppression capability will be 1250 gpm for 2 hours, per LA County fire regulations. LA County-approved fire hydrants (6 total) will be installed approximately every 500 feet (per fire department specifications) along Stonyvale Road from one end of the system to the other.	м	0	C	The Station Fire burned this community in August of 2009, damaging a significant portion of the water distribution system and destroying most of the homes in the system. To rebuild the community and renew the water system permit, LA County requires the refurbishment and upgrade of the distribution and storage system to meet California Water Works Standards, as ammended in 2008.LA County also requires the upgrade of the system's fire suppression capability to meet current fire flow regulations for the severe fire-hazard area, a necessary element of the home-rebuild-permit approval process.Additionally, key sections of the water main were damaged by the heat of the Station Fire, and those burned sections of steel pipe are now contaminating the water with iron levels measured above 8000 ppm and turbidity levels	600,000	17	48 16	Los Angeles	IV	2011

in effect since December 2009.

2180 3110049	3110049-001	Tahoe Park Water Co - Skyland/Nielsen	SWTR Compliance	Install filters. Involves design and construction.	м	0	С	System does not have the required reliable source capacity to meet current waterworks standards.	200,000	85	50 02	Placer	I	2006
2181 1500216	1500216-001	OPAL FRY AND SON	second well for Opal Fry &	A second well will be drilled to increase reliability of the	М	0	с	Community Water System with one well for water	200,000	13	50 19	Kern	Ш	2008
2182 5602130	5602130-002	SOLANO VERDE MUTUAL WATER CO	Son system Reservoir Replacement	water suppy. We will be dismantling and salvaging our existing 435,000 gallon tank and constructing a 600,000 gallon capacity tank or two 300,000 gallon tanks. Two tanks are preferred because our system is susceptible to compromise as we have one connection to our imported water from Calleguas Municipal Water District and two tanks would assist in operational efficiencies. Rehabilitation of the existing tank was explored but the cost is almost the same as a replacement and the lining of the existing tank is tar which can harbor VOC's.	Μ	0	с	supply is deemed unreliable. Based upon our 2008 annual inspection by the CDPH and recommendations by our engineering, firm our above ground reservoir tank needs to be replaced. The tank suffers from corrosion and structural deformation. This comes 25 years earlier than planned for based upon the original useful life of the tank. The replacement is an emergency situation. Our population includes residences and farming entities growing marketable citrus and avocados and covers 600 acres. The reservoir is an integral part of our delivery system as it provides the pressure for our distribution system. We would like to replace the tank with a 600,000 gallon capacity.Favorable bank funding is difficult to secure as many financial institutions are not familiar with the business practices of Mutual Water Companies and loans are considered unsecured by the bank's board.	835,400	38	50 06	Ventura	IV	2009
2183 3700073	3700073-004	H & J WATER COMPANY	Storage Tank Replacement and Water Filter Upgrade	Replacement of 20,000 gallon storage tank. Replace or upgrade water filter.We are in the process of having the plans drawn up for the replacement tank and a soil engineering study completed per county requirements. The approximate cost of the storage tank with installation is \$26,000. The cost of the plans and soil study is \$2,000. The approximate cost of a replacement or upgraded water filer is \$4,000, for a total cost of \$32,000. Estimated time for start of installation is November 2010.	Μ	0	C	Our water system has 35 members / lots sharing a well. There are approximately 20 houses with full time residents, approximately 8 houses with part time residents and 7 empty lots. Currently our 20 thousand gallon unlined metal storage tank has rusted out and needs to be replaced. This tank has been temporally repaired and is now in use. Our daily water use is 12,000 gallons of water in the summer and 6,000 gallons in the winter. Our water has a high iron content, 2,310 ug/L at the well. The Maximum Contaminant Level (MCL) being 300 ug/L. Our water is also exceeding the MCL in Manganese and Turbidity. Recently we discovered that we are exceeding the designed volume limit of our water filter. So our water filter needs to be ungraded or replaced to meet our needs and lower the iron content to below the MCL.	32,000	24	50 14	San Diego	v	2011
2184 1502629	1502629-001	HEATH BRIMHALL P.O.A.	Heath Brimhall POA - Resolve Problem of Single Source	Consolidate with Vaughn WC or develop an emergency intertie with Vaughn WC.	М	0	с	Heath Brimhall POA has a single source of supply, therefore does not have required system reliability.	500,000	14	50 19	Kern	Ш	2008
2185 5301101	5301101-003	Treasure Creek Woods MWC	Water Well replacement, additional storage, emergency power generation	The proposed project includes the construction of two new water wells constructed to the State of California standards for public water systems. The project also includes ground storage of approximately 50,000 gallon capacity and a pressure tank of approximately 2,000 gallon capacity. Emergency power generation equipment is proposed sufficient to operate one well and the booster pump.	Μ	0	с	The system is served by two very shallow wells that are not constructed to meet public water supply standards. These wells are only about 25 feet deep and are not cased properly. Pressure is maintained by two residential type pressure tanks. This results in very frequent cycling of the well pumps. The cycling rate is approximately every 8 seconds. The system suffers regular outages when power to the area is lost in storms. The system needs reliable backup power.	175,000	28	50 01	Trinity	I	2009
2186 4300792	4300792-001	Aborn Heights Water Mutual Association		Replace existing water tank. Pressurize entire system. Upgrade chlorine injection system.	М	0	с	Insufficient water storage and water pressure. Need new chlorine system.	150,000	19	50 17	Santa Clara	Ш	1998
2187 1502545	1502545-002	SCHWEIKART WATER SYSTEM	Resolve Problem of Single Source	Consolidate with Vaughn Water Company. If that is not feasible, construct a second well.	М	0	С	Water system has a single well as its sole source of water, therefore lacks required system reliability.	1,000,000	8	50 19	Kern	Ш	2008
2188 3301947	3301947-002	MORNING SKY SCHOOL	Add Storage	Construct new 30,000 gal storage tank & install manifold piping on all tanks to allow isolation of any one tank.	М	0	с	Unable to isolate storage tanks for service without compromising fire flow requirements.	70,000	15	50 20	Riverside	V	2004
2189 2700638	2700638-001	MAHER RD WS #05		Install additional storage tanks.	М	0	С	Current tank needs replaced. Need additional storage capacity & other system upgrades.	30,000	17	51 05	Monterey	Ш	2004

2190 1500327	1500327-001	RANCHO SECO INC. WATER SYSTEM		CONSTRUCT A NEW SYSTEM. OTHER - DESIGN AND CONSTRUCTION	М	0	С	PUMP HOUSE FOUNDATION CRACKED, WATER MAIN ABOVE GROUND, WATER TANK LEANING, WATER PRESSURE IS NOT CONSISTENT, MAINS ARE METAL	500,000	41	52 19	Kern	Ш	1998
2191 1500327	1500327-002	RANCHO SECO INC. WATER SYSTEM	Rancho Seco Water System-Second Well for the Water System	As part of this project, Rancho Seco will drill a second well to increase reliability of the water system.	М	0	С	Rancho Seco Water System has only well. As such the water system is not reliable.	200,000	41	52 19	Kern	Ш	2008
2192 4300573	4300573-001	Green Acres Mutual Water	Replace Aged, Leaky Supply and Distribution Water Pipes	The supply and distribution water pipes will be replaced with properly sized pipes that meet current standards. Associated fittings, valves, meters, fire hydrants and well head connections are also included in this project. This project will:1. Eliminate the health risks of contaminated water caused by leaky pipes.2. Prevent the loss of 2,000,000 gallons of water per year. 3. Save over \$10,000 per year is operating costs (\$2,000 for well water production and \$8,000 for purchased water).4. Increase water supply during peak usage periods so very expensive water does not have to be hauled in.5. Improve fire protection. The new 2 inch diameter supply pipe length is approximately 2,000 feet in length between the 2 wells and storage tanks.The new 6 inch diameter distribution pipe length is approximately 2,500 feet in length and serves 18 families.	M I	0	C	The water system has massive pipe leaks that have the potential of letting contaminates in the soil enter the water supply and adversely affect the health of users. The leaks also prevent the wells from meeting water usage needs during the summer months. The system's water supply and distribution pipes are leaking 2,000,000 gallons of water per year. This is about 60% of the water produced by the two wells in the system. The water produced by the two wells in the system. The water produced by the two wells in the system. The water loss in the supply line between the two wells and the storage tanks has been measured at 1,000,000 gallons per year. Theis is about 60% of the water ground the users' meters has been measured at 1,000,000 gallons per year. These pipes are about 35 years old and were installed by the original developer with substandard, thin-walled irrigation pipes which do not meet current code. The pipes are past their useful life. Attempts to locate major leaks have failed. The professional opinion is that the leaks are occurring throughout the system, primarily in the pipe joints. A leak recently found was at a pipe joint. The 4 inch diameter distribution pipes are also too small to meet fire protection standards. Another serious problem is that this system is unable to supply the water needs of the users because of the massive leaks. In year 2008, \$8,000 of water had to be purchased because the wells, with the pipe leaks, were not capable of meeting user demand. To solve these problems we	302,500	18	53 17	Santa Clara	Π	2009
2193 2801080	2801080-001	MILTON ROAD WATER COMPANY		Redesign, trench and lay new pipeline, laterals and	м	0	С	Deteriorating water mains.	30,000	24	55 03	Napa	П	1998
2194 2300604	2300604-001	Point of View Mutual Water Co	Add storage capacity and refurbish existing storage tank	Purchase and install new redwood storage tank with 30,000 gallon capacity, all float controls, inlet-outlet; all piping including flexible system couplings to protect agains earthquake damage. Refurbish existing tank to replace inoperable valves, leaking fittings, and replace system connections with earthquake-resistant flexible coupling to system.	Μ	0	с	The system does not have adequate storage capacity to assure uninterrupted supply in event of continued drought, emergencies and to provide adequate fire flow. System has only 30,000 gallons of storage for 28 services.	75,000	28	57 03	Mendocino	II	2009
2195 1000324	1000324-001	MANNING GARDENS CONVALESCENT	New well to augment	Drill a new well or interconnection	м	0	с	Single well, if it fails, system is out of water.	200,000	1	59 23	Fresno	Ш	2008
2196 5800572	5800572-003	FAIRWAY DOWNS MUTUAL WATER CO	Single Well 2nd Water Source	This project would include the construction and development of a new production well. The pump, panel and pipelines would also be installed after completion of the new well.	М	0	С	This community PWS currently has only one source of water - a groundwater well. Due to the current drought conditions in California, the need for another source of water may be imminent.	250,000	25	60 21	Yuba	I	2008
2197 1502600	1502600-001	WEGIS WATER SYSTEM		Replace failing tankage w/larger storage tanks, install second distribution pump + associated piping, install new distribution piping + fire hydrant, eliminate dead leg. Other - Study/Design/Construction	М	0	с	Inadequate distrabution system for fire protection, inadequate storage capacity, failing storage tankage, need redundant distribution pumps and problems w/ dead leg in system	90,000	22	60 19	Kern	ш	1998
2198 1502600	1502600-002	WEGIS WATER SYSTEM	Wegis Water - Single Source Problem Solution - Consolidate or Intertie	Consolidate with Vaughn WC or develop an emerency intertie with Vaughn WC.	М	0	С	Wegis Water System has a single well as its source of water, therefore lacks required water system reliability.	500,000	22	60 19	Kern	III	2008
2199 0707585	0707585-001	MORAGA HEIGHTS MUTUAL WATER		Replace system, expand filtration and develop further	м	0	С	Aging and deteriorating mains, inadequate capacity.	75,000	22	60 04	Contra Costa	П	1998
2200 4900549	4900549-001	Sonoma County CSA 41-Freestone		Replace the old 50,000 gal tank with new steel or redwood 50,000 gal tank.	М	0	С	The old and structurally failing finished water res. is at risk of contamination from storm runoff.	80,000	30	60 18	Sonoma	Ш	1998

2201 1400066	1400066-001	Aspendell Mutual Water Company	White Pine water line upgrade and fire hydrant	The project is our number one priority. It will involve trenching to at least four feet in depth due to sub-zero temperatures for a distance of 600 feet, then laying four inch PVC pipe from an existing valve to the end of the line and the new fire hydrant. The new four inch line will provide adequate water service to three residents and will provide a fire hydrant in a high threa wildfire area. There is no other solution to solve the two existing problems.	M t	0	C	Aspendell is a mountain community at 8,500 foot elevation surrounded by National Forest which is considered a high threat area for wildfires. the project is a water line on White Pine Street which is a one inch line serving three customers. the water pressure at the end of the line is 2SPSI at best. When two or more families draw water at the same time the water pressure drops to an unacceptable level. The 600 foot line needs to be replaced by a four inch line which is standard throughout the rest of the system. ADditonally, the two houses at the end of the street are over 600 feet from the nearest fire hydrant. (The Inyo County code maximum allowable distance from a fire hydrant is 500 feet.) The houses are backed by National Forest, which is a high threat area for wildfire. Installation of a firehydrant on the end of the line would greatly improve the fire fighting capability and would provide a means to periodically drain the line which we cannot do now.	16,700	92	60 13	Inyo	v	2007
2202 1502564	1502564-002	SIERRA MEADOWS	Sierra Meadows-Second Well or Intertie with CWS- Kernville System	As part of this project, Sierra Meadows will either drill second well or develop intertie with the neighbotring CWS-Kernville Water System.	a M	0	с	Sierra Meadows Water System has only well. Therefore, the water system is unreliable.	500,000	42	60 19	Kern	Ш	2008
2203 1502608	1502608-001	OWENS PEAK WEST	Owens Peak West Water System-Second Well/Intertie with Invokern CSD	An intertie with Inyokern CSD or drill a second well is needed.	М	0	С	The water system has only one well. A second source of supply is needed.	500,000	24	60 19	Kern	Ш	2008
2204 1900537	1900537-001	OAK GROVE TRAILER PARK	Oak Grove Trailer Park	The project is a community water system consisting of 25 to 99 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	Μ	0	с	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	40	60 16	Los Angeles	IV	2008
2205 1000057	1000057-004	WATERTEK-METROPOLITAN	New well to augment single well	Drill a new well or interconnect to system if possible.	М	0	С	Water system supplied by one well, if the well goes out due to drought conditions the system will be out of water.	200,000	26	60 23	Fresno	Ш	2008
2206 1502164	1502164-001	LLANAS CAMP FOUR WATER SYSTEM	LLANAS CAMP FOUR-A Second Well/Intertie with City of Shafter.	Drill a second well or an intertie with the city of Shafter is needed.	r M	0	С	The water system has only one well. A second source of supply is needed.	500,000	60	65 19	Kern	Ш	2008
2207 1502750	1502750-001	RIVERVIEW HOMEOWNERS ASSOCIATION	Riverview Homeowners AssocSecond Well/Intertie with Oildale MWC	As part of this project, Riverview Homeowners Assoc. will either drill a second well or develop an intertie wit Oildale MWC.	M	0	С	Riverview Homeowners Association Water System has only one Well. Therefore, the water system is unreliable.	500,000	18	65 19	Kern	Ш	2008
2208 1900145	1900145-001	REESEDALE MUTUAL	Reesedale Mutual	The project is a community water system consisting of 15 to 24 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	Μ	0	с	The Water System is in need of an additional water source to meet the demands of the community, i.e new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	22	68 16	Los Angeles	IV	2008
2209 1500507	1500507-002	ST. CLAIR RANCHOS MUTUAL WATER CO.	St. Clair Ranchos MWC- Intertie with City of Bakersfield or Drill a Second Well is Needed	An intertie with the City of Bakersfiled or drill a second well.	M	0	С	The water system has only one well. A second well or an intertie with the City of Bakersfield is needed.	500,000	27	68 19	Kern	Ш	2008
2210 2700686	2700686-001	GARLEN COURT WS		Design and construct a new roof and make other	М	0	С	Roof of water tank does not provide adequate	15,000	23	69 05	Monterey	Ш	1998
2211 2700686	2700686-003	GARLEN COURT WS		Replace existing distribution lines.	м	0	с	Existing water mains are very old and need to be	50,000	23	69 05	Monterey	П	1998
2212 3301690	3301690-001	TWIN PINES BOYS RANCH		Install a above ground tank and new service lines. Insta back-up well.	all M	0	с	The concrete storage tank is over 30 years old and leaking. Some steel pipe are beyond repair. One new well for back-up supply. (Existing: one 200' deep well with 30,000 gallon concrete storage tank system serves 60 residents with 30 daily staff)	90,000	15	70 20	Riverside	V	2001
2213 1000060	1000060-002	MUSICK MEADOWS #1	New well to augment single well	Drill a new well or construct an intertie with another system if possible.	м	0	с	Supplied by single well that if it goes out due to drought would be out of water.	200,000	65	70 23	Fresno	ш	2008

2214 4700503	4700503-003	Callahan Water District	Replace old main line & add storage.	Presently 4" line runs 1/4 mile to old main. From this juncture, run 4" pipe 3 miles over McKeen divide and down McKeen road to treatment plant. Two old 10,000 gal concrete tanks will need to be replaced, but are presently servicable. One 7000 gal steel tank and four 5000 gal plastic tanks are presently installed near the treatment plant. An additional 50,000 gal tank would be helpful, especially for fire protection.	М	0	с	New 4" main out of infiltration gallery on Boulder Creek chokes down to 3" old line, and then to 2.5" old line to treatment plant. Sediment clogs old line at bottom of gullies, and unknown quantities of water are lost to leaks along 3 miles of pipe. Last summer in a drought year we ran out of water several times. Replacing old line and adding and replacing storage should alleviate this problem. We will soon add water meters at the infiltration gallery and at the treatment plant to more accurately measure water loss.	500,000	29	70 01	Siskiyou	Ι	2011
2215 1500413	1500413-001	TEJON RANCH MAIN HEADQUARTERS	Second Well for the Water System for more reliable	r FUNDS NEEDED TO DRILL A SECOND WELL TO ENSURE SERVED PEOPLE OF A RELIABLE DOMESTIC WATER SUPPLY	Μ	0	С	With only one well as a source of water supply, this public water system is deemed to have unreliable source canacity.	200,000	22	70 19	Kern	Ш	2008
2216 2600532	2600532-001	LUNDY MUTUAL WATER COMPANY		Refinance loan, construct new tank and well, purchase generator and other equipment	М	0	с	Additional storage, additional source, standby power, equipment for repairs	500,000	32	70 13	Mono	V	1998
2217 2702026	2702026-001	APRICOT LN WS	Storage tank replacement and security upgrade.	Project is to replace current aging storage tanks that do not have the updated features required (proper vents and overflow), storage tanks that show corrision and potential leakage and to increase storage capacity. To fix the problem, increasing water storage from 18,000 gallons to 35,000 gallons.	Μ	0	С	Replace aging water storage tanks that are showing signs of corrision and leakage. Provide security around the storage tanks to prevent vandalism and safety concerns.	75,000	24	72 05	Monterey	II	2011
2218 1500556	1500556-001	HART FLAT BEAR MUTUAL WATER	Second Well for the Water System	<ul> <li>Funds are needed to drill a second well for the water system. The goal of the project is to ensure served people of a reliable domestic water supply.</li> </ul>	М	0	с	With only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	200,000	21	74 19	Kern	ш	2008
2219 2100565	2100565-001	GREEN GULCH FARM	Green Gulch Farm - New 20,000-gal Treated Water Storage Tank	The proposed project is the construction of a new 20,000 gallon storage tank to address water quantity issues. It will be built above ground on an existing site, alongside an existing 20,000 gallon storage tank. It will require minimal site work and minimal adjustments to current system layout.	Μ	0	С	Green Gulch Farm is a community water system with insufficient water storage. A single 20,000 gallon treated water storage tank services the entire system when operating from its primary source. During the dry season, demand exceeds inflow from the primary water source (Spring 01 - groundwater under surface influence). A second 20,000 gallon storage tank will improve storage capacity, extending the amount of time that the primary water source can be used into the dry season, and ensuring the availability of sufficient volumes of treated water year-around.	40,000	17	75 18	Marin	Ι	2009
2220 1500540	1500540-002	PINON HILL WATER COMPANY		Drill new well, add storage and replace undersized pipe with 4" diameter mains	М	0	С	Need backup source and storage, upgrade distribution nine to 4"	220,000	38	75 19	Kern	Ш	1999
2221 1900520	1900520-001	SMITH'S VILLAGE MOBILE HOME PARK	Smith's Village Mobile Home Park (2008)	The project is a community water system consisting of 25-99 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	М	0	C	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	34	75 16	Los Angeles	IV	2008
2222 2900548	2900548-001	SIERRA RANCH LTD WATER SYSTEM		Install new well and install float-pressure switch for	М	0	С	Needs second well for reliability.	10,000	32	75 21	Nevada	I	1998
2223 4100510	4100510-005	REDWOOD TERRACE MUTUAL	REDWOOD TERRACE STORAGE TANKS	RWT operates from an offset well which water is pumped up through a supply line to our storage tanks and from there water is gravity fed to the properties. RWT needs to replace the two dilpaitated existing actively used tanks with new 20K to 30K tanks to upgrade, to increase capacity which is required for a community system, and to have a safe storage supply for it's users. There will also need to be distribution equipment and piping for connection into the system.	Μ	0	с	Redwood Terrace (RWT) is in dire need of replacement and additional storage. Two actively used existing 15Kg redwood storage tanks are dilapitated and not restorable and are becoming health risks. The tanks are very old (50+ years) and the covers are becoming unsafe. Currently RWT does not have enough storage capacity to be in compliance with county regulations for a community system and is requesting funds to replace tanks and increase storage capacity.	25,000	28	75 17	San Mateo	Ι	2009
2224 5400527	5400527-001	SHILOH WATER CO.	Emergency funding for drought related problems	Add a water source, well, distribution, and or consolidation to lager pws	Μ	0	С	Possibility of water shortage due to drought in State	500,000	20	75 12	Tulare	Ш	2008
2225 3400149	3400149-001	RANCHO MARINA	Redundant Source	Drill a new well with associated pumps and piping. Purchase a back up generator to cover power loss.	Μ	0	С	Water system has only one source. Consolidation or intertie are not feasible options. Another well would need to be drilled.	20,000	35	75 09	Sacramento	I	2008

2226 3400149	3400149-003	RANCHO MARINA	Water system infrastructure replacemen to limit system failures/outages	The project will involve replacement of all underground t water distribution pipes and service connections to eac homesite.	i M h	0	С	Water pipe infrastructure is failing and must be replaced to maintain water service to tenants and limit water system outages. The system outages have resulted in numerous notifications to tenants and numerous bacteriological sampling being required.	75,000	35	75 09	Sacramento	I	2009
2227 4100510	4100510-003	REDWOOD TERRACE MUTUAL	REDWOOD TERRACE PUMP HOUSE, INTAKE SUPPLY AND DISTRIBUTION LINE PIPING	RWT is seeking funds to replace the original (1921) linear 5400' distribution infrastructure which is leaking, corroded and clogging. Additional new piping will be 5 used to connect the new developed spring sites to the required filtration treatment plant and then to the storage tanks. RWT is in dire need to replace the corroded leaking supply line located under the highway feeding water to storage tanks. RWT is also seeking funds to upgrade the existing pump house to today's standards to resolve and fix safety hazard issues.	м	0	с	Redwood Terrace (RWT) needs to replace 5,400 linear feet of old leaking water lines used for supply intake and distribution. The original water lines used for both supply and distribution were laid in 1921 and are now leaking, corroded and clogged. The intake supply line under the highway, which transfers our water from the off-site well to the storage tanks, is leaking and is in dire need of replacement. RWT is also seeking funding for pipes to incorporate the new alternative sources (springs) from the respective spring sites to a filtration treatment plant and then to the storage tanks. RWT is under a cease and desist order CDO ORDER WR 2008 - 0020 EXEC and needs to replace the pipes so that no water is lost or wasted. The pump house located at the off-site well is in need of renovation and upgrades to bring it to standard levels and will need to be completed at the time the piping is replaced so the project can be cost-effective. The pump house was never upgraded since the flood/storm of 1998 and has safety hazard issues.	225,000	28	75 17	San Mateo	Ι	2009
2228 5401026	5401026-001	DEER MEADOW MUTUAL	Deer Meadow Mutual	New Well or consolidation with larger PWS	М	0	С	Add a source of water to the storage and distribution of this water system due to the recent drought in the State	500,000	22	75 12	Tulare	Ш	2008
2229 5401026	5401026-002	DEER MEADOW MUTUAL	Emergency funding for my community water system due to drought if my wells go dry.	New well or donsolidation with larger PWS	м	0	С	Add a source of water to the storage and distribution of this water system due to the recent drought in the State	500,000	22	75 12	Tulare	Ш	2008
2230 1900155	1900155-003	WILSONA GARDENS MUTUAL		UPGRADE TO A NEW 5,000 + GAL. TANK AND UPGRADE BOOSTER PUMP.	ΕΜ	0	С	PRESSURE TANK HAS SETTLED WHICH IS PUTTING STRESS ON THE CONNECTING PIPE AND APPEARS TO HAVE A SEVERE INTERNAL CORROSION PROBLEM. TWO HOUSEHOLDS SUFFER INSUFFICIENT PRESSURE DUE TO SIZE AND CONDITION OF THIS TANK.	13,000	32	75 16	Los Angeles	IV	1998
2231 1900155	1900155-001	WILSONA GARDENS MUTUAL		DRILL A NEW WELL	М	0	с	WELL CASING HAS COLLAPSED AND NOT ABLE TO	39,000	32	75 16	Los Angeles	IV	1998
2232 1900817	1900817-001	CLEAR SKIES MOBILE HOME RANCH	Clear Skies Mobile Home Ranch	The project is a community water system consisting of 15 to 24 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	М	0	С	The Water System is in need of an additional water source to meet the demands of the community i.e., new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	47	75 16	Los Angeles	IV	2008
2233 1900155	1900155-002	WILSONA GARDENS MUTUAL		SITE PREPARATION, PURCHASE, AND INSTALLATION OF A NEW 20,000 GAL. OR TWO 10,000 GAL. STORAGE TANKS	М	0	С	OLD 20,000 GAL. STORAGE TANK IS IN POOR CONDITION, WITH LEAKS AND RUST VISIBLE ON THE EXTERIOR	16,000	32	75 16	Los Angeles	IV	1998
2234 1900155	1900155-004	WILSONA GARDENS MUTUAL		DESIGN AND CONSTRUCT A NEW DISTRIBUTION SYSTEM COVERING APPROXIMATELY 163 ACRES.	М	0	с	EXISTING, 1950'S DISTRIBUTION SYSTEM REQUIRES REHABILITATION. OCCASIONAL POSITIVE COLIFORM RESULTS. REQUIRES CHLORINATION.	50,000	32	75 16	Los Angeles	IV	1998
2235 2700606	2700606-001	HIDDEN VIEWS MHP WS	Number 2 well arsenic treatment	project may include drilling new well, and or new distribution system or treatment facility.	Μ	0	С	Well #2 tested arsonic levels in June of 2006. The MCL is 10. One test came back 31. In September of 2006 another lab tested .015. Well has been shut down from system since and we rely on Well #1 for the system leaving us without a backup. A new well drilled may solve our problem or possibly a treatment system.	250,000	31	75 05	Monterey	ΙΙ	2007

2236 1900158	1900158-008	LITTLE BALDY	Water storage tanks	A new 18 inch well needs to be constructed; installed, outfitted, and connected to the transmission line. The well will be enclosed in a small building for security, and will include necessary disinfection equipment.	Μ	0	С	The system's sources consist of two wells located within Grandview Canyon of the San Gabriel Mountains. The production area is above the LBWC Service Area and more than a mile from the first connection. The wells are less than 70 feet deep, don't have sanitary seals, and produce very poorly. During summer demand months the well production is reduced critically due to drought conditions and the system rations water for consumers.	130,000	27	76 16	Los Angeles	IV	2009
2237 1900158	1900158-006	LITTLE BALDY	Two Water storage tanks	The proposed project is to construct two 98,000- 100,000 gal steel bolted storage tanks to allow for more than one day's capacity in storage, and to pressurize the system. This will reduce dependence and wear and tear on the wells. The tanks will be about 34' diameter, 16' tall, and have an overflow at about 15' above the floor. Construction will include appurtenances to connect the tanks to the transmission lines.	Μ	0	С	Without online storage the system is in violation of Title 22 and also there is no way to pressurize the distribution system as required under California Water Works Standards. No tanks or reservoirs of any sort have ever been part of the community system. Each user is assigned a day of the month during which he must draw water for his needs in the upcoming month. If the user misses the appointed time, the user must make special arrangements or, if no time is available, have water trucked in from elsewhere, or wait until the next month for his next turn.	450,000	27	76 16	Los Angeles	IV	2009
2238 4900620	4900620-001	Austin Acres Mutual Water Company	Electrical relay		м	0	с	well motor electrical relay is in disrepair	10,000	26	78 18	Sonoma	II	2002
2239 1500550	1500550-002	WEST VALLEY MUTUAL WATER COMPANY	Second Well for the Water System or inter-tie project for increasing the reliability of the water su	Funds are needed to drill a second well or consolidate with nearby water system. The goal of the project is to ensure served people of a reliable domestic water supply.	М	0	с	With only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	200,000	40	79 19	Kern	ш	2008
2240 3301247	3301247-001	Elms Mobile Park		Upgrade/replace well pump, build protective structure (steel building), enlarge storage tanks. (System has one well & 5,000 gal corrugated storage tank serving 50 connections. City of Indio has water main in adjacent street for emergency connection if nee	Μ	0	с	We recently had a proficiency test: result was running at only 25%, low pressure.	40,000	45	80 20	Riverside	V	2002
2241 2000647	2000647-001	JOHN HOVANNISIAN WATER SYSTEM	Water outages	Consultation with Engineers and contractors to fing best fit solution to wate outages problems of the water system.	М	0	с	The system consist of two hardrock wells serving a low income community of about 20 service connections. Recent reports of water outages were filed through the Madera County Environmental Health dept. due to mechanical issues and low water level.	75,000	21	80 11	Madera	Ш	2008
2242 2000530	2000530-001	CRASS MUTUAL WATER COMPANY	CRASS MUTUAL CO SINGLE SOURCE	Drill a new well or consolidate with another water system if feasible.	М	0	С	The water system is served by a single source (hard rock) providing water to a low income mountain community. No back up source in case of water outages.	100,000	26	80 11	Madera	III	2008
2243 1907028	1907028-001	SPV WATER CO INC	Water system improvement	Addition of Nitrate treatment and/or drill another well to blend water with. Possible addition of a backup well. Add disinfection equipment to the existing well. Clean the storage tank.	Μ	0	С	The system has one groundwater well. The well is near exceeding the Nitrate MCL with a January 2007 indication of 43.5. It also had Total Coliform exceedance in August 2004. The system does not have disinfection. Their only other backup well is not currently active, is more than 50 years old, and has high iron concentrates. They need a disinfection system, possible Nitrate removal or reduction, and storage tank rehabilitation.	450,000	22	80 16	Los Angeles	IV	2007
2244 1000248	1000248-001	DOUBLE L MOBILE RANCH PARK	New well to augment single well	Drill a new well or interconnection if possible.	М	0	С	Single well if it goes out during drought, system is out of water.	200,000	37	80 23	Fresno	ш	2008
2245 1500593	1500593-001	UPLANDS OF THE KERN MUTUAL WATER CO	D Upland of the Kern MWC- Second Well/Intertie with Oildale MWC	As part of this project, Uplands of the Kern will either drill a second well or develop an intertie with Oildale MWC.	М	0	с	Uplands of the Kern Water System has only one well. Therefore, the water system is unreliable.	500,000	20	80 19	Kern	Ш	2008

2246 0400028	0400028-003	BIG BEND MOBILEHOME PARK	Water Distribution Improvement	Drill and install a new, wider, deeper well. Install new booster pump and tank(s) to accomodate the increased capacity. Install new distribution lines and related hardware (valves, meter boxes, etc.). Install new hydrant(current system has no hydrant or capacity to support one)	Μ	0	c	Current distribution system is beginning to fail. There has been a significant loss of pressure between units 1 - 6 (drop below 20psi). There is currently a temporary fix in place which is not up to AWWA standards to maintain pressure. This item is currently under violation from Butte County Environmental Health. There also have been several breaks in the distribution lines that have to be repaired and placed under a boil order notice till resolved. Most recent boil order notice was only a few weeks back. The parks distribution system is a network of old 1" galvanized pipes that date back to the mid 1950s. There are 2 wells that service the water system, and last year well #1 is believed to have gone dry as production from that well was minimal (1000 gallons per month)System is currently exceeding Chemical MCLs for Manganese & Iron	191,775	35	85 21	Butte	I	2009
2247 3500900	3500900-001	Ashford Highlands MWC	Install sand separator and chlorinator at Well #1	Well #1 sand production can be corrected by the installation of a 100 gallon per minute vortex-type sand separator. Coliform bacteria can be removed by installing a Stenner chlorine pump utilizing liquid 12.5% NSF approved Sodium Hypochlorite injected into the system at the well and prior to storage and distribution. The Ashford Highlands Mutual Water Co. is proposing to install these devices to solve lack of adequate production and possible Coliform contamination and to satisfy Health requirements for a stand-by system.	Μ	0	с	The Ashford Highlands Mutual Water Co. currently serves 52 connections. The system relies on 2 groundwater wells. Well #1 is currently unusable due to excess sand production and coliform bacteria. Well #2 is the sole source of water available to the Mutual at this time. With declining water levels there is a concern that water will be seriously deficient from only one well.	20,000	44	85 05	San Benito	II	2009
2248 2300506	2300506-001	Meadow Estates Mutual	Distribution/Storage/Filtra tion	<ul> <li>Install 100,000 gallon tank, replace distribution system with approved pipe, double filtration capacity.</li> </ul>	М	0	с	Insufficient Storage, failing storage tank, failing distribution system, insufficient filtration capacity	350,000	35	85 03	Mendocino	II	2004
2249 1700563	1700563-005	Lake County CSA 22 - Mt. Hannah	Well Controls - Mt. Hannah Water System	Level control sensors (on/off) will be installed on the water storage tank coupled through wireless telemetry to the pump control shelter adjacent to the well. Power to run the unit will be supplied from existing PG&E service at the pump control shelter.	Μ	0	c	Storage tanks, supply pumps and wells are traditionally connected through a system of level-controls which maintain water at a specified level in the storage tank. The Mt. Hannah system lacks this control and relies on a manually set timer. The level controls would automate this task and better insure water tank levels are maintained for sufficient drinking water and fire flow.HEALTH BENEFIT includes better management of water store - maintaing available drinking water.ECONOMIC BENEFIT includes construction (equipment and technician labor).REGULATORY BENEFIT includes proper operation of the water system (maintaining adequate water storage for drining and fire flow).	10,000	36	88 03	Lake	Ι	2009
2250 1700563	1700563-003	Lake County CSA 22 - Mt. Hannah	Mt. Hannah Distribution System Looping	The current distribution system was constructed with water mains which dead end at the ends of there service route (six in all). This project will install new pipe to create three loops , one at each dead end pair. Approximatel 900 ft' of pipe (300 ft. for each loop) will be utilized for this project.	Μ	0	С	The Mt. Hannah Water System serves a small community in County Service Area #22. The distribution system contains several dead ends. This project will loop six dead ends, improving the delivery and quality of drinking water. HEALTH BENEFITS include better supply and quality of drinking water (and fire flow availability).ECONOMIC BENEFITS include construction (engineering, materials and labor).REGULATORY BENEFIT includes a more reliable system, and fire flows.	50,000	36	88 03	Lake	II	2009

2251 1700563	1700563-004	Lake County CSA 22 - Mt. Hannah	Water Distribution System Upgrades	h The project will include the design and construction of new water distribution system for all 37 active connections. A new larger water main will be installed and connected to existing service lines, where possible New service connections will be installed where existin service lines are damaged or otherwise cannot be used	a M .g i.	0	C	The water distribution system was originally constructed out of substandard materials using substandard methods and needs to be replaced. Increased water pressure from the recently constructed 50,000 gallon water tank (2008) is observed through increased maintenance and water loss within the distribution system. The well pumps are working harder to supply the system, at a time when recharge to the aquifer is at an all time seasonal low. The new distribution system will insure continuous water availability and fire flow. HEALTH BENEFIT includes continuous water availability to all customers and fire flow.ECONOMIC BENEFIT includes contruction (engineering, materials and labor/REULATORY BENEFIT includes compliance with DPH permit requirements for continuous water availability.	750,000	36	88 03	Lake	II	2009
2252 1900541	1900541-001	WESTERN SKIES MOBILE HOME PARK	Western Skies Mobile Home Park	The project is a community water system consisting of 25-99 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	Μ	0	С	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	60	90 16	Los Angeles	IV	2008
2253 2300606	2300606-002	Lake View Mutual Water Co.	Valve replacement	Install readily accessible shut-off valves so system components can be isolated.	М	0	С	System needs shut-off valves so system components can be isolated.	10,000	25	90 03	Mendocino	Ш	2006
2254 5500353	5500353-003	SIERRA VILLAGE MOBILE HOME PARK	Sierra Village Trailer Park	only one approved source	М	0	С	only one approved source	100,000	16	90 11	Tuolumne	ш	2008
2255 2900511	2900511-003	SHADY LAKE WATER ASSOCIATION	Shady Lake Water Association / Shut-Off Valves	This system is presently over 25 years old and never ha had shut-off valves installed. To have these installed would insure that any repairs could be more quickly an efficiently carried out. Also these valves would be used to shut off the water usage to any members that had refused to pay their yearly dues. This would secure the funds for the Association to be able to maintain and ru the system for the members that were responsible for their dues. This installation would entail: Contracting with a local excavator - \$115 per hr.@ 2hrs. times 30 membersTotal approx. \$6900.00Purchasing valve boxes \$13.87 per box times 22 membersTotal approx. \$305.00Purchasing concrete valve boxes - \$29.27 per box times 8 membersTotal approx. \$234.16Purchasing valves - \$77.89 per valve times 30 members. Total approx. \$2336.70Grand Total = \$9776.00(We would likk to request a total of \$12,000 to cover any taxes or cost of living increases in the economy that may occur before the grant funds were distributed).	is M d n s -	0	C	The system is presently over 25 years old and never has had shut-off valves installed. To have these installed would insure that any repairs could be more quickly and efficiently carried out. Also these valves would be used to shut off the water usage to any members that had refused to pay their yearly dues. This would secure the funds for the Association to be able to maintain and run the system for the members that were responsible for their dues.	12,000	32	90 21	Nevada	I	2008

2256 2300606	2300606-003	Lake View Mutual Water Co.	Rehabilitation of Contaminated Well	The McKee Well will undergo a major rehabilitation.       M       0       C         This will include:       1. dismantling the current surface seal and surroundng structures       2. removal and replacement of the sanitary seal       3. scrubbing and disinfection of the casing       4. flushing, cleaning and disinfection of all lines       5. pouring a new surface seal       6. trenching and laying electrical, control, and water         lines from the well to the pump house       7. installing meters and controls       8. tying the McKee line into the main prior to the         chlorination injector point       9. running of a complete array of water quality tests       10. check for bacterialogical contamination         11. obtain Mendocino County inspections       12. submit permit application to the Department of         Health Services       12. submit permit application to the Department of	We currently have four operating wells that produce a total of 33 gpm. One of these wells, the Lightel Well, reverts to its owner in August 2007. Currently with all four wells pumping at full capacity we can marginally keep up with peak summer demand, despite implementing a graduated rate schedule that is punitive to heavy users. A fifth stand alone well, the McKee Well, now inactive, was found to be contaminated. Despite several clean- ups it continued to be biologicaly "hot" due to defects found by a 1994 inspection by the Department of Health Services, Drinking Water Field Operations Branch; viz, major cracks in the surface seal plus an opening in the sanitary seal that "is a possible pathway for contaminants to enter the well casing." Furthermore, the water pumped from this well fed directly into the service line. Its disinfection depended upon mixing with the chlorinated water from the other system wells. This process of disinfection was unsatifactory. Due to these problems the McKee Well was shut down and deactivated in 1998.	25,500	25	90 03	Mendocino	I	2007
					In 2001 our principle well, the Montalvo Well, began to run dry, dropping from its normal capacity of 33gpm to under 3 gpm. Two geological surveys were commisioned by our company to find a site to dig a new						
2257 2900511	2900511-005	SHADY LAKE WATER ASSOCIATION	Shady Lake Water Association/Dedicated li	The project will entail contracting the services of a M 0 C C elicense equipment operator for all necessary excavation and installation of the waterline. A trench will need to be constructed to place and house the water line, along with a sand bed for it to lay in. A trace wire will need to be installed along the waterline as well. The length of the trench will be approximately 1000 feet, initiating from the well site and continuing to the storage tanks. It will also require the purchasing of 1000 feet of 2 inch pipe, including any and all couplings, valves, adhesives etc.	The system now in place is soley dependent on one line that distributes the water from the well site into the storage tanks. This same line also distributes the water from the storage tanks out to a junction that feeds into the members individual lines to their homes. The Association would like to install a separate line so that the system would have one independent line coming from the well site going into the storage tanks, as well as having a completely separate line initiating from the storage tanks and feeding to the water junction. As it stands currently there is substantial stress being given to the one existing line, and a high potential for break- down. We are concerned that if this were to happen it would place our 30 members in a position of great	12,000	32	90 21	Nevada	I	2008

need. In 2007 we did have a system breakdown of a pressure valve which caused the water from the storage tanks to drain back into the well site. If a second water line had been available to utilize, the water in the storage tanks would have been secured. Estimated costs as of 8/22/08:Excavation & installation of pipe (\$150 an hr. times 50 hrs.) - \$7500Sand - \$25001000 feet of schedule 40/2 inch pipe - \$720Trace line/solid 8 gauge wire/no coating - \$360Couplings - \$8.00Valves - \$45.00Achesives - \$10.00Elbows - \$7.00Tees - \$6.00Check Valves(2) - \$36.00Grand Total - \$11,192(We would like to request a total of \$12,000 to cover any taxes or cost of living increases in the economy that

2258 2900511	2900511-002	SHADY LAKE WATER ASSOCIATION	Shady Lake Water Association/Second Source of Water	The system is presently dependent on a well site that is over 25 years old, and it services 30 lots in the area. In May of 2007 there was a water usage disruption due to the local water table falling below the depth of the pumps extention. It was necessary to have the pump then lowered by a local drilling company, further into the well, from 105 feet to 135 feet to reach the available water. Thankfully, the system has a 15,000 gallon water storage capacity that kept the 30 members connected to water while this repair was being done. But if the situation had worsened, it would have caused a hardship to many families. The Association would like to have an additional well site installed to ensure our members of uninterupted service in the future. In 2008 the Nevada County Environmental Health department had suggested this would be prudent). This installation would entail: Contracting with a local drilling company to arrive at the well site area to determine where the most efficient site might be - (\$95 per hour) County Permits at the cost of approximately - \$530 Installed at the cost of approximately - \$550 Installing the appropriate length of 6 inch casing into the hole. Installing a 50 foot sanitary seal at the cost from the drilling company (\$95 per hour) Purchasing	M	0	c	single source system; source reliability	15,000	32	90 21	Nevada		2008
2259 3400140	3400140-001	ASPEN GROVE MH & RV PARK	Redunant Source	Intertie with large public water system with required piping and backflow prevention device or drill another well with assoicated plumping, pumps and piping.	Μ	0	С	Provide reduntant source to single source water system	10,000	35	90 09	Sacramento	I	2008
2260 2701503	2701503-003	MESA DEL TORO MWC	Mesa del Toro MWC #2	Sandblast, paint interior/exterior, and repair three 20,000 gallon drinking water tanks. This will include painting the interior of each tank with three coats of epoxy paint (2 component paint) 4 to 5 mill. each coat, total of 12-15 mill. pottable water approved, install side manways, sand to be left on site, patching and welding interior and exterior of tanks, clean out sediment, disinfect, lab testing, and paint exterior. This process will take place on each of the three tanks.	M	0	с	Interior of three water holding tanks need to be cleaned inside, outside and repaired as needed. Tanks do not have side manways. The tanks have not been cleaned, treated or repaired since installation seven years ago.	45,000	35	90 05	Monterey	II	2011
2261 1502247	1502247-002	DESERT BREEZE MOBILE HOME ESTATES	Desert Breeze MHP- Second Well/Intertie with Rosamond CSD	As part of this project, Desert Breeze MHP will develop an intertie with Rosamond CSD via a master meter. Rosamond CSD's pipeline is less than 1,000 feet away.	М	0	С	Desert Breeze MHP has only well. Therefore, the water system is unreliable.	500,000	60	95 19	Kern	Ш	2008
2262 5601122	5601122-001	TICO MUTUAL WATER CO		Add a pressurized 8,000 gallon storage facility to the system immediately downstream of the current main tank.	м	0	С	System pressure does not comply with Water Works standards at times.	35,000	38	95 06	Ventura	IV	1998
2263 1500340	1500340-001	WEST TEHACHAPI MUTUAL	DRILL A SECOND WELL OR CONSOLIDATE WITH NEARBY WATER SYSTEM TO ENSURE SERVED PEOPLE OF A RELIABLE	FUNDS NEEDED TO DRILL A SECOND WELL OR CONSOLIDATE WITH NEARBY WATER SYSTEM. THE GOAL IS TO ENSURE SERVED PEOPLE OF A RELIABLE DOMESTIC WATER SUPPLY.	М	0	с	Public water system with only one well as a source of water supply. The system is deemed to have unreliable source capacity.	200,000	37	95 19	Kern	111	2008
2264 3900702	3900702-001	CORRAL HOLLOW PWS		CONSTRUCT PRESSURE TANK AND BOOSTER STATION. OTHER = DESIGN AND CONSTRUCITON	М	0	С	PRESSURE PROBLEMS IN DISTRIBUTION SYSTEM	300,000	38	98 10	San Joaquin	Ш	2006
2265 0500027	0500027-001	LILI VALLEY WATER CO.	Water Line Project	Replace 2000 feet of water main.	м	0	С	Water line installed in 1963 needs replacing.	40,000	70	99 10	Calaveras	ш	2003
2266 1500516	1500516-001	TUT BROTHERS FARM #96	Tut Brothers Farm #96 has only one well. A Second Well is Needed	Drill a second well.	М	0	С	The water system has only one well. A second source of supply is needed.	200,000	15	100 19	Kern	Ш	2008

2267 2400128	2400128-002	COUNTRY CLUB COUNTY WD	Water Distribution Upgrade	<ol> <li>Replace two 500 gallon tank/bladders to include re- plumbing with appropriate maintenance access valves for each. 2. Install a back up generator system. 3.</li> <li>Replace well pump with sized variable speed frequenc drive pump4. Rewire existing electrical panel to meet current codes and interconnection of items 2 and 3 above to PLC controller5. System Installation and start up costs6. Removal of replaced equipment to meet loca and EPA standards</li> </ol>	M y al	0	с	System 2400128 is approximately twenty five years old. The rural system uses two 500 gal. bladder/tank to store and maintain pressure. The bladder/tanks are in need of replacement due to bladder leakage. Because of leakage, the risk to meeting monthly microbiological sample requirments is increased. The system services 23 residences. We currently meet microbiological standards without chlorination. In the event of electrical power outage, there is no backup generator to maintain distribution pressure increasing the risk factor of not meeting microbiological standards.	55,000	27	100 11	Merced	III	2008
2268 0510004	0510004-002	C.C.W.D. Sheep Ranch	Storage project	Install two 50,000 gallon steel tanks and 10,700 feet of distribution mains	М	0	С	Inadequate storage and undersized distribution mains that are in poor condition	700,000	48	100 10	Calaveras	ш	2003
2269 3700422	3700422-002	STUART WATER COMPANY	New Well, New Storage Tank, and Security Fencing	Drill new 300 ft. well, purchace new submersable pump g. and pipes, build new protective well house, purchace and install 50,000 steel and fiberglass lined storage tank, and security fencing, as the County of San Diego has requested in it's annual inspection reports.	м	0	C	The Stuart Water Co. system is over 55 years old, and is in emergency need of capitol improvements, so it can continue to serve the 250 customers, or more, in the summer months, that completely depend on the company for water, in the rural community of Mt. Laguna, Ca. The Dept. of Environmental Health, Small Water Division, San Diego County, agrees with this assessment. A new well, 50,000 gallon storage tank, and security fencing are necessary if the company is to continue to serve the community's water needs, and provide water for fire fighting to the Mt. Laguna Voluntary Fire Dept. in this watershed area. Currently, the company has no funds, or reserves available to to start these projects even though it has the plans and approvals ready to go.	75,000	37	100 14	San Diego	V	2009
2270 3400169	3400169-001	SPINDRIFT MARINA	Redundant source	Consolidation or entertie are not viable options for the water system. The water needs to drill a new well for a redunant source. Also the purchase of a generator as back-up power for both the source and the treatment facility.	М	0	C	The CWS has only one source. The project would be to develop a new source.	20,000	25	100 09	Sacramento	I	2008
2271 4900637	4900637-001	Magic Mountain Mutual Water Company		Replace mainlines and new tanks	м	0	с	Aged distribution system and storage tanks	650,000	67	100 18	Sonoma	П	2001
2272 4100515	4100515-001	MARTINS BEACH WATER SYSTEM		Modernize the existing purification system.	М	0	С	Need to upgrade	50,000	49	100 17	San Mateo	П	1999
2273 2000724	2000724-002	SA#14 CHUK CHANSE SUBDIVISION	SA#14CHUCKCHANSE - SINGLE SOURCE	Drill a second well as a back up source and/or consolidate with another water system.	Μ	0	с	The water system is served by a single source providing water to a low income community in the Valley. Storage capacity is about 20,000 gallons. The system is chlorinating as a preventive measure.	100,000	30	100 11	Madera	111	2008
2274 1900975	1900975-002	WHITE ROCK LAKE RV PARK	White Rock Lake RV Park	The project is a community water system consisting of 25-99 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	Μ	0	с	The Water System is in need of additional water sources to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA COunty Water Quality Program.	500,000	50	100 16	Los Angeles	IV	2008
2275 2400128	2400128-001	COUNTRY CLUB COUNTY WD	Second Well for County Club County WD	Locate and purchase property for new well site. Design well construction, wellhead features, connection to existing distribution system, and wellhead protection/security. Drill test well. Conduct test well monitoring. Construct well, wellhead. Purchase and install pressure tank. Connect new well to existing distribution system. Purchase and install emergency electricity generator. Install wellhead protection and security.	Μ	0	c	Water system lacks adequate water supply because it has only one well as its total water source. System does not have any storage capacity. Loss of this well or pump will result in loss of all water to the entire system until correction is made. Title 22§64554. New and Existing Source Capacity.(a) At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). MDD shall be determined pursuant to subsection (b).(c) Community water systems using only groundwater shall have a minimum of two approved sources before being granted an initial permit. The system shall be capable of meeting MDD with the highest-capacity source off line.	600,000	27	100 11	Merced	III	2008

2276 3700962	3700962-003	OAKVALE PARK		Installing larger water line of approved material to better serve residents and avoid damage to paved county rd	м	0	С	Old steel water line serving 7 houses on Oakvale Rd. is of too small diameter and is in Jeopardy of leaking that will damage county rd	20,000	125	100 14	San Diego	v	1998
2277 1502690	1502690-003	DUNE III Water Co., LLC	Improve water system Infrastarcture for supply, security and health.	The present system is 80% old equipment that needs replacing or upgrading, such as pumps, motors, piping and storage tanks. A. We will be replacing one 21 year old well pump, three 21-year old pressure pumps surface piping from pumps to tanks, four storage tanks with upgraded tanks as well as two additional tanks. The state requirement that there be water storage to supply water at peak demand cannot be met without additional storage. A. The two additional tanks are needed to meet present state requirements.Land neet to be acquired to establish a security perimeter and to allow for ingress/egress for large equipment which ma be needed for repair/replacement of equipment and ft the ability to put larger storage tanks into the system. Fencing around the acquired land and well heads woul provide needed security. A. We will purchase two 1 acce parcels adjacent to the well sites. Once the land i acquired the perimeter will be fenced and this will provide a secure barrier around each of the two well heads. This will allow for the ability to repair, replace, and to install large tanks and allow access for equipment to pull the well pumps if necessary. This land area would also allow for installation of a facility for future water treatment if needed. The current system has two individual systems that need to be tiec together to provide a supporting supply if one of the systems goes down. The current systems, because of	M , s ab or or ld L- is	0	C	The present system is 80% old equipment that needs replacing or upgrading, such as pumps, motors, Piping and storage tanks. The state requirement that there be water storage to supply water at peak demand cannot be met without additional storage. Land needs to be acquired to establish a security perimeter and to allow for ingress/egress for large equipment which may be needed for repair/replacement of equipment and for the ability to put larger storage tanks into the system. Fencing around the acquired land and well head would provide needed security. The current system has two individual systems that need to be tied together to provide a supporting supply if one of the systems goes down. The current systems, because of their separation, have dead ends and are not looping systems which can cause potential health hazards.	594,000	32	100 19	Kern	111	2009
2278 5400523	5400523-002	EL MONTE VILLAGE M.H.P.	Emergency funding for this pws due to drought.	s New well or consolidation with larger pws	М	0	с	Add a source of water to the storage and distribution of this water system duie to the recent drought in the Stae	500,000	49	100 12	Tulare	Ш	2008
2279 3701995	3701995-001	WILLOWSIDE TERRACE WATER ASSOCIATIO	M distribution improvements - pumps & larger lines	s install 4 to 6 inch lines and new pump	М	0	с	low water pressure from 2-inch lines	250,000	34	100 14	San Diego	v	2006
2280 1900677	1900677-001	OASIS PARK MOBILE HOME PARK		REPLACE OLD GALVANIZED PIPES WITH PLASTIC PIPES	м	0	С	OLD PIPES	60,000	70	100 16	Los Angeles	IV	1998
2281 1000260	1000260-002	SANDY CREEK VILLAGE MHP	New well to augment single well	Drill a new well or interconnection if possible.	М	0	С	Single well system, if the well fails, the system is out of water	200,000	47	100 23	Fresno	Ш	2008
2282 3701995	3701995-002	WILLOWSIDE TERRACE WATER ASSOCIATIO	IN installation of secondary pump and replacing of old water lines	We need a secondary pump for emergency use and als to replace our existing water lines that are old and inadequate for our needs.l	so M	0	С	We need a secondary pump for emergency use and also to replace our existing water lines that are old and inadequate for our needs.	125,000	34	100 14	San Diego	v	2009
2283 4900637	4900637-002	Magic Mountain Mutual Water Company	Supply main replacement	Replace 3/4 mile of 50 year old 2' steel service/supply line with 4' pvc, including service connections to households	Μ	0	С	We have 1.5 miles of 50 year old 2" steel supply line pressurized at up to 440 ft of head. After 45 years it has begun leaking and rupturing. We have had at least 1 significant interruption in service each year since then, and currently leak 1/3 of our total usage. We expect the interruptions to increase to the point that we can no longer provide a reliable source of water. We are attempting to replace piecemeal but, given that most of our population are on fixed incomes, are having difficulty raising funds. In addition, the Fire Marshall has told us that the lines are inadequate to supply a pumper in event of fire, requiring them to use tankers in this rural area. We lost a house to fire two years ago, partially because of the lack of sufficient water. As we spend money repairing ruptures, we use up money we try to save for replacement. We're in a downward spiral.	150,000	67	100 18	Sonoma	Ι	2009
2284 3700897	3700897-001	GUATAY MUTUAL BENEFIT CORPORATION	deadends	loop water system to eliminate deadend lines	м	0	с	poor water quality from dead end lines	173,000	39	100 14	San Diego	v	2004

2285 5800820	5800820-002C	RIVER HIGHLANDS COM.SERV.DIST	River Highlands CSD Publi. Water System	<ul> <li>c Water source: new wells need to be located, drilled an placed in service. Wireless monitoring system for wells and tank.</li> <li>Water Treatment: Treatment system will need to be evaluated and installed.</li> <li>Water distribution: The water lines currently travel from the wells to the homes and then travel to the water storage tank. This system needs to be changed so that the water travels first to the storage tank and then to the homes. This will include modifications to the existing tank or installation of a new tank as well as new pipelines installed. Approximately 40 homes will need to be purchased.</li> <li>The system as a whole needs a telemetry notification system to insure pr</li> </ul>	d M	0	c	River Highlands CSD supplies water to 85 homes. There is currently no water treatment system. If there was a contamination issue there is nothing in place to treat/filter the water. The wells which supply 100% of the water are not sufficient to adequately supply the needs of the community. Fire protection is also a main concern when water levels are down. Every year we fall below the necessary water supply. The water distribution system (wells to homes to storage tank) has been evaluated and found to be installed incorrectly and major corrective work is needed. Approximately 40 homes have no water meter connected. The water storage tank (285k gallons) is in need of possible repairs and cleaning. The entire water distribution system needs to be monitored manually (almost hourly) to insure it is functioning. This system is in need of a telemetric monitoring system. From the wells (water source) to the treatment to the homes (distribution) this system is in great need.	500,000	24	100 21	Yuba		2007
2286 1000247	1000247-001	SHERWOOD FOREST MHP	Drill a new well and augment single well	Drill a new well or interconnect if possible.	М	0	с	System supplied by one well. If it goes out due to drought system is out of water.	200,000	50	100 23	Fresno	Ш	2008
2287 5800820	5800820-003	RIVER HIGHLANDS COM.SERV.DIST	Additional water source(s	) This project would include the construction and development of new production wells. The pumps, panels and pipelines would also be installed after completion of the new wells.	м	0	С	This community PWS has experienced water outages during the last two summers. The water sources are unreliable in the summer months and are not adequate to serve this system during the drought conditions now being experienced in California.	500,000	24	100 21	Yuba	I	2008
2288 4300912	4300912-001	Mecchi Water Company		Replace 2" main to 4" main. Install meters to all users.	М	0	С	System is served with a 2" water main that is inadequate	80,000	26	104 17	Santa Clara	П	2006
2289 2310012	2310012-003	Irish Beach Water District	Tank Replacement project	Tank 1 is 210,000 gallons and needs replacement. Tank 3 is 84,000 gallons and needs replacement. Preliminary engineering indicated geologic concerns at both sites thus the proposal is to replace the same or greater volume at three sites.	М	0	С	Aging storage tanks are steel and deteriorating in the salt air. There are two tanks of 84,000 gallons and 210,000 gallons respectively. These tanks have outlived their useful life. They were used to begin with and have been in place over 40 years.	295,000	190	106 03	Mendocino	II	2009
2290 2310012	2310012-001	Irish Beach Water District		Repair, patch, and repaint water storage tanks. Professional inspection of water system facilities to produce a water system master plan	М	0	С	Storage tanks in poor physical condition; distribution system mains in poor physical condition.	150,000	190	106 03	Mendocino	II	2001
2291 5400604	5400604-001	MOUNTAIN VIEW DUPLEXES	New Well for PWS, distribution and storage	New well and distribution system, and or consolidation to lagrer pws	М	0	С	Possible shortage of water due to statewide drought	500,000	27	108 12	Tulare	ш	2008
2292 1500405	1500405-002	AERIAL ACRES WATER SYSTEM		Install from Ave. A to Ave. B (~675 ft.) & along length o Ave. B (~2625 ft.) of 6-inch, class 150, C-900 pipe with tracer wire to replace existing transite lines (~3,300 ft. total), installation of 6-inch & 4-inch gate valves along Ave. B, 4-inch pipe	fM	0	С	Current transite lines running from Ave. A to Ave. B and along the length of Ave. B need to be replaced due to leaky seals caused by age and root penetration and overall depreciation of system lines, replace old valves and lateral lines to fire hydrants	50,000	62	114 19	Kern	Ш	2002
2293 1500405	1500405-004	AERIAL ACRES WATER SYSTEM	Aerial Acres Well Replacement Project	Design and construction of a test well, replacement well, pump, electrical facilities, meter and related equipment, connection to the water system at the sam well site	M	0	с	Well #1 collapsed in July 2011 leaving this desert community on only well #2 and a restricted water supply.	400,000	62	114 19	Kern	Ш	2012
2294 5400655	5400655-001	CENTRAL MUTUAL WATER CO.	Emergency Funding for m community water system due to drought. First Pre Apolication	New well and distribution and or consolidation with larger PWS	М	0	с	Add a source of water to the storage and distribution of this water system due to the recent drought in the State	500,000	23	115 12	Tulare	Ш	2008
2295 1000366	1000366-001	SUNNYSIDE CONVALESCENT HOSP	New well to augment single well	Drill new well or interconnection if possible.	М	0	С	Single well, if it fails, system is out of water.	200,000	3	116 23	Fresno	ш	2008

2296 3100011	3100011-003	AUBURN VALLEY COMMUNITY SERVICE DIS	Valve Replacement and New Well	With regards to the valve replacements, it is critical th these valves be replaced. At this time, if there is contamination somewhere in the water system it is impossible to shut down specific areas of the subdivision and repair any problems. Instead we must shut down water to the entire subdivision and repair the problem. With the recent growth of the communi it is not realistic to shut down water to a subdivision of 10 homes. Diamond Well Drilling Company has already constructed a plan to replace three faulty valv with limited interuption to water service. With the addition of these valves it will be possible to correct an future problems without disturbing the entire community's water service. Auburn Valley CSD is trying to plan for continued growth in the community and realizes that soon the current wells will not sufficiently suply water to the subdivision. For that reason, they know it is necessany to have another well constructed before a lack of wate adversely affects the community. Diamond Well Drilli has designed a well and pump system that will work flawlessly with the SCADA system currently in place. The proposed well site is near the current well #6. The water supply in that vicinity is already known to exist and can likely porvide an additional 80-100 GPM.	t t ity of ny er ing e	0	c	The gravity feed lines and control valves were installed in the mid 1970's. In 2004 when resolving water impurity problems at Auburn Valley CSD, we were unable to shut down the system using three key valves due to their leakage which was so high that Water Hydrants at full open could not sustain the rework effort. One remaining valve, just below the underground reservoir, was successful in stopping flow. The water lines, circa 1970's, are made of asbestos cement and the failed valves design and materials are also circa 1970's. Therefore, these valves must be replaced with current state of the art valves and must accommodate mateing with the Asbestos Cement lines. A major development (Suncrest Homes) has increased the quantity of homes within the Auburn Valley Community to 110 with some 44 purchased lots awaiting future home construction. As an addition, the Community has added a SCADA "Supervisory Control and Analysis System" to monitor performance of all existing wells. This approach has been very successful. However, it reflects low water production of one well, #2, which was developed in 1989. Another well, #6, developed in 2003, is located 125 feet away from Well #2 and produces 85-100 GPM versus 30-33 GPM for Well #2. With the opor production of one well, and a	155,179	42	120 02	Placer	I	2007
2207 4000205	4000005 000		Name II ta anno 11			0	<u> </u>	much greater demand for water with the recent	200.000	40	420.22	<b>5</b>		2000
2297 1000295	1000295-002	KINGS PARK APARTMENTS	single well	Drill a new well or interconnection if possible.	M	0	L	Single well system, if it fails, the system is out of water.	200,000	40	120 23	Fresho	Ш	2008
2298 5200562	5200562-002	SKY VIEW CWD (AKA PONDEROSA SKY RAN	IC Sky View CWD (aka Ponderosa Sky Ranch)	New holding tank 100,000 gal. Lay new piping system, alternate pump, alternate energy source for power.	M	0	С	Holding capacities not adequate piping system in need of 50% to 75% replacement, alternate pupm.	200,000	98	120 21	Tehama	I	2001
2299 0600012	0600012-002	Colusa Co. Service Area #1-Century Ranch		Design a surface water treatment plant and replace al air vacuum release valves	II M	0	с	System source supply is declining and the system will have water shortages/outages. System surging is occurring due to malfunctioning air vacuum release valves.	1,131,715	88	120 21	Colusa	I	2001
2300 3701341	3701341-001	BUTTERFIELD OAKS MOBILE HOME PARK	Water Storage System	Clean out and disinfect exhisting unused 25,000 gallor water storage tank. Install dual stage pump system to distribute water to the mobile home park water distribution system. Install new electrical panel to service dual stage pump. Install plumbing from storage tank to main water line.	e	0	с	The mobile home park water system does not have any water storage. Cited by San Diego County Department of Environmental Health, and given 6 months or less to install adequate water storage tank. The mobile home park is in the San Diego County wild fire zone and it is therefore crutial that there is adequate water storage in the case of fire. Median income at mobile home park is below \$20,000 per year. Tenants cannot afford additional monthly charges for installation of water storage system.	30,000	48	120 14	San Diego	v	2009
2301 3100033	3100033-001	TAHOMA MEADOWS MUTUAL WATER COM	MPANY	Repair or replace the tank.	М	0	С	Single source is an old well. Needs additional source canacity	75,000	43	120 02	Placer	I	1998
2302 3600027	3600027-001	Bar H MWC	Bar-H 60,000 gal. storage tank,flow meters	2 flow meters to monitor 2 wells and installation.60,00 gal water tank to store water, pump to get water into tank or out of tank,pipe lines from 2 wells to storage tank and installation.	00 M	0	С	The water company needs a large storage unit in case of any problems such asearthquake, break down of well, etc. we also need flow meters put on our two wells for Mojave Water Agency. The storage tank and flow meters are required. We have no money for these things.	60,000	45	124 13	San Bernardino	v	2011
2303 3600025	3600025-002	Bar-Len MWC	Storage Tank	Project includes planning/feasibility/engineering and construction of treatment facility to meet CDPH MCL requirements for Arsenic. Project includes funding for maximum daily usage of water and to meet required fire flow. Project includes funding for meters for wate accountability and conservation at each connection. System is considered low income and in need of funding	M r ng	0	с	Bar-Len MWC has insufficient storage to meet maximum daily demand and fire flow.	1,000,000	39	124 13	San Bernardino	V	2012

assistance.

2304 3600027	3600027-002	Bar H MWC	Bar-H replace main water lines, fire hydrant,	Install new water main and connections. Buy and install M new fire hydrants to regulations. Get rid of old pipes and fire hydrants. Construction of new sources and destruction of old courses	0	С	Part of our water system has water pipes from 1957. The pipe is made of asbestos and the pipe is to small for regulations and our fire hydrants are out of date and cast he used.	100,000	45	124 13	San Bernardino	v	2011
2305 0500019	0500019-006	MINERAL MOUNTAIN MUTUAL WATER	MMEWC holding tank replacement	Me will be purchasing two 25,000 gal tanks from Pat Biggs of Fresno-who builds stainless steel water tanks. He will build two 10ft diameter tanks in order to make the trip with the tanks up Sheep Ranch Rd and up to the present tank site. They will place one tank next to the present 50,000 gal torn silo bladdered tank and divert the water to this tank in order to guarantee the flow of water as they take down and haul away the old silo 50,000 gal tank and place a second 25,000 tank next to the first one. Our capacity will again be 50,000 gals of stored water. Our 10,000 gal filtered water tank at this time is still good and will not be replaced. We can no longer find sources to build and install the bladders for these tanks and our 50,000 gal tank is torn down to the 8ft mark. This has become an emergency fix for us. The bladders seem to just disintegrate from the heat and we need a better solution for the safety and storage of our water.	0	C	Our water system was destroyed in 1993 in the Old Gulch fire. We purchased and set up two steel silos with plastic bladders. One was 50,000 capacity the other was 10,000. Because of the disintegration of the plastic from the heat we experience up here, we have had to replace the bladders several times because of tearing. We now have a tear in the bladder and our capacity is now down to the 8 ft level. We can no longer find anyone who repairs or replaces and installs the bladders. Our only choice to insure safe water to our neighbors is to replace the silos with real storage stainless steel tanks at considerable cost to us. We have applied several time to this fund and have received no help. We have found someone who builds these tanks and at this time will give us a good deal given the need for work. We just need money to this. We have the concrete platforms and will purchase two 25,000 gal tanks. The first will be placed next to the steel silo and water will be diverted to the 25,000 gal tank so there will be no interruption of water flow to our neighborhood. Then the old tank will be taken down and another 25,000 gal tank will be placed next to the first new one. We will again have the capacity for 50,000 gals of storage. Pat Biggs, the storage tank builder in Fresno, will come asap as he feels this is an emergency situation as we are down to 30,000 gals of water to service a population of 35 connections and 100 people (contrary to the county	55,000	24	125 10	Calaveras	Π	2011
2306 1900936	1900936-001	AQUA J MUTUAL WATER COMPANY	Aqua J Mutual Water Company	The project is a community water system consisting of M 25-99 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	0	С	The Water System is in need of additional water sources to meet the demands of the community i.e, new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	49	125 16	Los Angeles	IV	2008
2307 0500019	0500019-007	MINERAL MOUNTAIN MUTUAL WATER	New MMEWC holding tank	K Central Valley Tank of California Inc. is pleased to offer you the following proposal; 1. Tear down existing old 50,000 gallon bolted tank with liner and haul off.2. Fabricate three new tanks to place in a triangular pattern that all may fit on one existing concrete pad.3. Connect all tanks together as a manifold system and connect to main line again.4. Fabricate one new 12,900 gallon tank for 10,000 gallon tank replacement.5. Tear down existing old 10,000 gallon tank with liner and haul off.6. Replace piping and reconnect to water system.7. Permitting and engineering not included, this will be considered a tank exchanging projectunder a "Grandfathered System".8. Delivery with our Semi Truck, our Staff, our equipment to offload materials.Lump Sum Budget Price \$60,840.00(This is pretty close to accurate) We suggest your request is \$65,000 - \$70,000.The above price is quoted FOB Fresno, California, California State Sales Tax is not included.Bid Breakdown1.) 12,900 gallon tank. 10' dia. X 22' tall (10 gauge steel)A) 20' roof manwayB) All inlets, outlets, vents included.C) Complete interior epoxy lining for Potable Water Tanks (NSF Approved).D) Exterior Paint Industrial Enamel, Color of choice.Price Each \$11,000 x 4 = \$44,0002.) Delivery of Four tanksA) Two tanks per loadB) Permits and Pilot car.Price Each Delivery \$2,000 x 2 = \$4,0003.Llabor to tear down tanks and haul off.50,000 gallon and 10,000 gallon – 2	0	C	Our water system was destroyed in 1993 in the Old Gulch fire. We purchased and set up two steel silos with plastic bladders. One was 50,000 capacity the other was 10,000. Because of the disintegration of the plastic from the heat we experience up here, we have had to replace the bladders several times because of tearing. We now have a tear in the bladder and our capacity is now down to the 8 ft level. We can no longer find anyone who repairs or replaces and installs the bladders. Our only choice to insure safe water to our neighbors is to replace the silos with real storage stainless steel tanks at considerable cost to us. We have applied several time to this fund and have received no help. We have found someone who builds these tanks and at this time will give us a good deal given the need for work. We just need money to this. We have the concrete platforms and will purchase three 15,500 gal tanks. The first will be placed next to the steel silo and water will be diverted to the first 15,500 gal tank so there will be no interruption of water flow to our neighborhood. Then the old tank will be taken dext on the first new one. We will again have the capacity for 50,000 gals of storage. A third tank 12,900 gal will replace the the filtered water tank on the second platform. Pat Biggs of Central Valley Tank of California, the storage tank builder in Fresno, will come asap as he feels this is an emergency situation	65,000	24	125 10	Calaveras	Π	2011

2309 4200800	4200800-001	EAST VALLEY FARMS MUTUAL WATER	East Valley Farms MWC	In order to address the deficiencies within the EVFM	WC M	0	с	The EVFMWC system is currently unable to comply with	475,000	21	125 06	Santa Barbara	IV	2008
			Supply and Distribution	system, a prioritized capital improvement program v	vas			mandatory CDPH requirements for adequate backflow						
			System Improvements	prepared for the Company in 2007. The proposed				prevention and water supply. In addition, the system						
				projects are ranked in order of priority, with the high	nest			lacks adequate design redundancy for periods of power						
				priority project listed first, as follows:Project 1:				outage and adequate contingency planning for rising						
				Automated disinfection facilitiesIn this project, man	ler			groundwater nitrate levels, which are consistently near						
				chlorination facilities would be replaced with				the MCL. Section 64554 (Title 22, Chapter 16) of the						
				automated facilities and permanent liquid hypochlor	ite			California Waterworks Standards includes the following						
				storage. This project would provide a consistent				requirements: "Community water systems using only						
				chlorine residual throughout the system in accordan	ce			groundwater shall have a minimum of two approved						
				with applicable Water Works Standards. The cost of	:			sources before being granted an initial permit. The						
				this project is estimated at \$15,000.Project 2: New				system shall be capable of meeting MDD with the						
				water supply wellin order to provide adequate supp	v to			highest-capacity source off line." The existing system						
				meet the maximum day demand a new source of w	ater			includes two wells, with numping canacities of 291 and						
				is required. Based on previous groundwater studies	in			164 gallons per minute (gpm) respectively. The						
				the area a single new well would be expected to via	ld.			EVENING is not able to supply its surrent maximum day						
				the area, a single new well would be expected to ye	iu			demond (MDD) of 0.4 mod with the largest well out of						
				over 300 gpm, which would bring the system into				demand (MDD) of 0.4 mgd with the largest well out of						
				compliance with waterworks Standards and provide				service, thereby risking an extended water outage in						
				critical supply redundancy. The well would be drilled	a in			the event of well failure. If the smaller well is disabled						
				convenient proximity to the existing supply system,	and			during maximum use conditions, the larger well must						
				could be readily assimilated into the distribution				pump continuously to keep pace with demand. In						
				system. The cost for the well is estimated at				addition to the supply deficiency, both wells						
				\$150,000.Project 3: Water service backflow prevent	on			consistently operate near the MCL for nitrates, with an						
				devicesAs required by the local Health Department,	this			occasional excursion above the MCL. Currently, the						
				project includes the installation of listed reduced				system does not have the ability to remove nitrates and						
				pressure principle (RPP) backflow devices to 30 wate	er			no supplemental blending sources are available to						
				service connections. Completion of the project will				reduce the supply concentration. Finally, chlorination						
2310 1000430	1000430-002	COUNTRY VIEW ALZHEIMER CENTER	New well to augment	Drill a new well or interconnection	м	0	с	Single well, if it fails, the system will be out of water	200.000	2	125 23	Fresno	Ш	2008
			single well											
2311 1900936	1900936-002	AQUA I MUTUAL WATER COMPANY	Project "ENDEAVOR" to	Aqua-I-Mutual Water Company will construct and	м	0	С	Aqua-I-Mutual Water Company is a 55 year old	903.350	49	125 16	Los Angeles	IV	2008
2011 1000000	1900990 002		arise to standard	integrate a parellel and alternate drinking water svs	em	Ū	U U	company. Since the early 50's "Aqua-I" has delivered a	505,550	.5	120 10	Los / ingenes		2000
				into the existing physical plant while ungrading and	iem -			guality product to the members within the District. We						
				augmenting the electrical panel and proceure deliver				quality product to the members within the District. We						
				augmenting the electrical parter and pressure deriver	У			are a small fular community and the service has been						
				system. The primary focus of Project Endeavor is to	)			uninterrupted. Over the years we have upgraded the						
				create a secondary system that would give us a fully				delivery system and the well itself. Although fiscally						
				functional and automated back-up system, allowing				difficult, it has been our primary objective to be in						
				major components to be taken off line for maintena	nce			compliance with State and County regulations and						
				as needed or required. The secondary system would	be			preserve the quality of life the rural sphere						
				united and fully integrated with the primary system;				perpetuates. The need for a back-up system is						
				however each would have the capability to function				paramount for us. Presently we cannot shut down any						
				independantly and maintain capacity and delivery				of our major components for maintenance for any						
				requirements currently required by County and				duration of time. The effective life of the initial						
				State.Our board of directors understands, and has				exhausted and a second well was drilled and is currently						
				thoroughly contemplated this bold undertaking. We	are			the sole source. Aqua-J's storage capability is truly						
				also of the realization; all facets will never be				insufficient. At present we cannot store enough water						

for 24 hours of consumption and concurrently combat a

capacity is slightly over 100,000 gallons. Daily usage is

again in our storage tank in preparedness for a natural

compliance would not be allow to open in todays world. We are "grandfathered-in" in the area of not having a

approximately 80,000 gallons. We need atleast that

disaster, i.e. fire.Our system, although in total

secondary source. "Project Endeavor" is a bold

untertaking to address that problem.

fire, should it occur within the District. Our storage

accomplished simultaneously, systematically and timely

without pecuniary assistance from outside agencies. It

would all merely evolve into a 50 year "piece-meal"

endeavor.Our Company is small, but we always think

a quality life style away from the hustle and bustle of

Endeavor", will be given serious consideration. We have engeering professionals poised to leap to the

implementation.

big. The people within our District pursue the dream of

"Metropolis". We sincerely hope our proposal, "Project

breech of "Project Endeavor" to assist with planning and

2312 4300522	4300522-005	Lake Canyon Mutual Water Company	Extend 6" line to residents in lower canyon area.	Major Project Phases: Planning Permitting Engineering Excavation. Removal of old line. Installation of new 6" lineScope. Affects ~ 2 miles pipe (~ 30 homes or ~ 80 residents)Timeline: Expect from planning to installation to take 18 months	3. M	0	с	Currently approximately 50% of the community is served by an inaequate water main (2" line) which drastically decreases water pressure and is below Cal Fire requirements lWith the recent fires in the Santa Cruz Mountains residents and the Board of the Lake Canyon Mutual Water Company are extremely concerned that the distribution system is inadequate to respond in an emergency.It is essential that the Water Company undertake this project as soon as possible; however, other necessary projects have taken priority.	400,000	56	125 17	Santa Clara	Π	2008
2313 2701355	2701355-001	PRINCES CAMP RESORT WS		Replace pipes and pump.	М	0	С	Need new pipelines, pump, and more water pressure.	28,673	55	126 05	Monterey	II	1998
2314 5510025	5510025-001	TUD - Phoenix Lake Park	Connect Phoenix Lake System to Sceneic View	INTERCONNECT TO THE ADJACENT SCENIC VIEW WATER SYSTEM.	RM	0	с	HIGH IRON AND MANGANESE LEVELS IN THE EXISTING WELL. ALSO, OCCASIONAL FECAL COLIFORM BACTERIA IN THE WELL	36,000	55	130 11	Tuolumne	Ш	1998
2315 1000244	1000244-001	SHADY LAKES MOBILE HOME PARK	New well to augment	Drill a new well or interconnect if possible	М	0	С	System supplied by single well, if it goes dry the system	200,000	56	130 23	Fresno	ш	2008
2316 4900560	4900560-001	Kelly Mutual Water Company	single well	Replace distribution mains, hydrants, pressure tanks.	м	0	с	50 year old distribution system (2.5 inch) with failing	200,000	41	135 18	Sonoma	Ш	1998
2317 5500042	5500042-003	BELLEVIEW OAKS MUTUAL WATER CO		DRILL A NEW WELL, INSTALL A PUMP, AND CONNECT I' TO THE SYSTEM.	тм	0	с	Water mains. NEED TO EXPAND SOURCES OF WATER. THE WELLS DRAW DOWN TO MARGINAL LEVELS IN AUGUST AND	31,000	100	140 11	Tuolumne	ш	1998
2318 5500042	5500042-004	BELLEVIEW OAKS MUTUAL WATER CO		INSTALL 5,200 FEET OF NEW LINE.	м	0	С	NEED TO REPLACE OLD SERVICE LINE DUE TO RUST AND	260,000	100	140 11	Tuolumne	Ш	1998
2319 1900721	1900721-001	LOCUST GROVE MOBILE HOME PARK	Locust Grove Mobile Hom Park	e The project is a community water system consisting of 15 to 24 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	М	0	с	The water system is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	75	140 16	Los Angeles	IV	2008
2320 1500563	1500563-001	CHINA LAKE ACRES MUTUAL WATER CON	IPA Second Well for the Wate System or inter-tie project for a more reliable water	<ul> <li>Funds are needed to drill a second well or consolidate</li> <li>with nearby water system. The goal of the project is to ensure served people of a reliable domestic water</li> </ul>	Μ	0	с	With only one well as a source of water supply, this public water system is deemed to have unreliable water supply.	200,000	57	145 19	Kern	ш	2008
2321 5200007	5200007-001	HOWELL S LAKESIDE WATER CO.	supply	suppiy. Install new tanks, upgrade pumps, clean wells and install plumbing.	м	0	с	System needs two 1000 gallon tanks, two air compressors, two chlorinators, and miscellaneous	100,000	52	147 21	Tehama	I	2006
2322 4900850	4900850-002	Bodega Water Company	Bodega Water System Upgrade	The following upgrades are submitted in order to bring the BWC water system into conformance with safe drinking water system standards.1. Electrical System: The electrical system from the drop pole to two supply wells will be repaired. Overhead conduit will be replaced with 800' of underground copper wire. The conduit will be installed in an 18" trench, and bedded in six" of sand. The existing 60-amp service panels will be replaced with new 200-amp service panels. The existing circuit breakers will be replaced to meet current electric code requirements. 2. Chlorination System: The existing defective chlorinator will be replaced with a new, non- electric, flow-generated chemical injector pump with a 140-mesh inline water filter as recommended by CDHP. The existing chlorine analyzer will be replaced with a Hach chlorine analyzer as recommended by CDHP.3. Storage Tank Upgrade: A new 95,000-gallon steel storage tank will be installed at a more accessible location approximately 2000' from the existing treatment plant. The storage tank will be covered with a water catchment system which will direct water to the treatment plant. 4000' of underground Schedule 80 1%' line will be installed running in both directions between the new tank and the treatment plant. A new access road will be built to the tank. The project includes design, engineering, permitting, grading, site prespontion embraine and including the domine the new tank and the treatment plant. An ew in the directions between the meet the metant and the reatment plant. A new access	M 8 6 3	0	c	Bodega Water Company (BWC) seeks funding to upgrade its aged drinking water system and mitigate potential public health risks. BWC serves a small, rural, economically disadvantaged community and is located in a Level 4 Water Scarce Area. This scarcity, inadequate storage capacity, and water lost due to leakage, results in the added expense of hauling water. Members pay higher than average rates. Needed upgrades would require unaffordable rate increases unless grant funding becomes available. The system was designed 30 years ago and most of it is in need of replacement. It is comprised of: three wells; several storage tanks which do not provide sufficient storage; a substandard chlorination system; and approximately three miles of Schedule 40 PVC distribution pipeline. Distribution lines are partially above-ground, poorly mapped and frequently cross private property, creating difficult accessibility. Outdated water meters are poorly located and leak. Less than 20% of the meters include backflow prevention devices, posing a risk of contamination due to the agricultural nature of the community.Portions of the electrical system are not compliant with current electrical codes. The potential for causing a fire is imminent and could disrupt power to the entire system. The damaged and leaking storage tanks are located on a steep hillside making access and rease for acrois revene uting. The bard	800,000	38	150 18	Sonoma	Η	2009
2323 4900630	4900630-001	Austin Creek Mutual (Springhill)	Electric Relay	ארקסיסנוטוז, וווסנפוזסוג, מווט וווגנמוומנוטוז. 4. Kesource	м	0	С	pump motor electrical relay in disrepair	10,000	61	150 18	Sonoma	Ш	2002
2324 1000039	1000039-001	FCSA #10/CUMORAH KNOLLS	Replace 10,000 gallon hydropneumatic tank	The District shall replace the aging and failing 10,000 gallon hydropneumatic tank. The existing tank shall be hauled to a recycler for disposal. The cost estimate to construct a 10,000 gallon hydropneumatic tank and destroy the existing tank is approximately \$80,000.	Μ	0	с	CSA No. 10 must be able to provide water to 47 residential parcels. The 10,000 gallon hydropneumatic tank was originally installed in1963. The deteriorating tank is rusted and seeping. Corrosion of the tank leaching into the water system represents a health hazard. In order to continue to pressurize the water system, the Distirct must replace the tank before it completely fails. The existing tank must be destroyed.	60,000	47	150 23	Fresno	111	2009
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2325 2000851	2000851-002	MD#40 SUNSET RIDGE ESTATES	MD-40 Contaminant removel	Install iron and manganese removal plant. Replace current distribution system and storage tank. Drill high production well.	Μ	0	с	System wells Exceed secondary MCLs for iron at 300 ppb and Manganese at 50 ppb. Current iron level is 690 ppb and current manganese level is 160.33 ppb. The system does not have adequate production system wells are not able to keep up with water demand. Water system is in a critical fire hazard zone. System cannot provide fire protection needs with current production, storage and distribution system.	1,200,000	50	150 11	Madera	III	2007
2326 3901303	3901303-001	ACAMPO WATER SYSTEM		REPLACE WELL 2 WITH NEW WELL. OTHER = DESIGN AND CONSTRUCTION	М	0	С	WELL 1 HAS DBCP BELOW THE MCL. HOWEVER, WELL 2, THEIR STAND-BY WELL HAS DBCP GREATER THAN THE MCL	450,000	61	150 10	San Joaquin	Ш	2006
2327 2701705	2701705-002	TASSAJARA SPRINGS WS	Tassajara Springs clear well roof replacement	Replace the 845 square-foot roof over our 35,000 gallon water tank. Joists are rotting, safety of drinking water for the community at risk in future.	М	0	С	Replace the 845 square-foot roof over our 35,000 gallon water tank. Joists are rotting, safety of drinking water for the community at risk in future.	31,750	70	150 05	Monterey	II	2011
2328 1500401	1500401-003	METTLER COUNTY WATER DISTRICT	Mettler Well Project	Design and construction of a test well/community well with a pump and water lines to connect to the community water system. The well site will be on land donated by the Water District. This will provide an alternate water supply to the community when the old well, fails, is out for repairs or contaminated. Consolidation is not an option since the nearest community water system is several miles away.	Μ	0	C	Mettler is a disadvantaged community located several miles from other community water systems. Their only well is about 14 years old and was drilled to replace two water wells that were contaminated with Nitrates (238 & 98 pm) from local septic systems. This well is the community's only source of water. If the well pump fails, the well collapses or becomes contaminated; the 180 residents will be without water. A second well is needed to provide a back-up water supply to prevent the community going without water during failure of their only well. A second well will allow the old well to rest and enable repairs to be made without interruption of water supply to residents. A source water assessment has documented the presence of septic systems, and discharge of greywater within 800 feet (Zone A) of the well and the influence on local groundwater (high nitrate levels 238 & 98 ppm in two previous community wells). Drinking water standard: Primary Drinking water standard, Nitrate MCL = 45 ppm	600,000	40	150 19	Kern	III	2008
2329 2000552	2000552-002	MD#24 TEAFORD MEADOW LAKES	MD-24 water outages and system failure	PROJECT DESCRIPTION Drill high production well and install new tank and well controls. Replace current distribution system and storage tank.	м	0	С	System wells are not able to keep up with water demand. Water system is in a critical fire hazard zone. System cannot provide fire protection needs with current production, storage and distribution system. Current storage tank is to small and is beyond its service life.	1,000,000	47	150 11	Madera	Ш	2007

2330 1400020	1400020-002	Aberdeen Resort	Additional Water storage	The community of Aberdeen currently has a water storage capacity of merely 5,000 gallons. The community can deplete this water in less than 15 minutes. This is with a minimum amount of people within the community. The community if at full capacity of people will deplete this water to the point that the well pump is not able to shut off, and the tank never refills. Not only does this create a water shortage, but this creates an issue when fire flows are needed. We would like to replace the existing 5k gallon water tank with a 50,000 gallon water tank. This capacity would be adequate enough for distribution and provide enough for fire flows. In order to change from the existing tank we would need to install a cement slab to support the tank, as well as upgrade all piping from the well head to the tank and from the tank to the distribution pressure pumps. A contractor would be needed to build the tank and install the cement slab. Alteration of the well house would also be required. The new tank would also require a new liquid level system for pump controls. The existing tank would be sold to another small water system with only 4 hookups.		0	c	The community of Aberdeen currently has a water storage capacity of merely 5,000 gallons. The community can deplete this water in less than 15 minutes. This is with a minimum amount of people within the community. The community if at full capacity of people will deplete this water to the point that the well pump is not able to shut off, and the tank never refills. Not only does this create a water shortage, but this creates an issue when fire flows are needed.	400,000	75	150 13	Inyo	v	2008
2331 1000551	1000551-002	FCSA #43/RAISIN CITY	Install fire hydrants and a booster pump	The project seeks to install 17 fire hydrants and a 60 hp booster pump to provide fire protection for this community. Each fire hydrant unit is estimated to cost \$10,000 each and the booster pump is estimated to cos \$50,000.	9 M	0	с	The water system in CSA No. 43W was constructed in 2006 to serve the Raisin City Elementary School and approximately 60 dwellings, mostly single family residences. A State grant and community block funds were used to finance the construction of water system, which initially included seventeen fire hydrants. However, because there were not sufficient funds, the fire hydrants and support system were eliminated. With the nearest fire station located more than fifteen miles away from the Raisin City community, and the community having a high density of older dwelling in close proximity to each other, fire hydrants would be essential to reducing the potential of loss of life and property.	220,000	15	150 23	Fresno	11	2009
2332 1000200	1000200-001	Rubys Valley Care Home	New well to augment single well	Drill a new well or interconnect if possible.	М	0	С	System suppled by one well. If it goes out due to drought the system would be out of water.	200,000	1	158 23	Fresno	Ш	2008

2333 3600209	3600209-001	Rocky Comfort MWC	Rocky Comfort MWC Pump and Tank for Pressure Interruptions	The MWC recently contracted with an engineering firm to investigate alternatives for ensuring continuous adequate pressure. Three system improvements were evaluated. One alternative was based on the storage needs to allow for the simultaneous irrigation of all groves while meeting all household demands. With the contracted limit of 162 gpm, the storage requirement would be 250,000 gallons. The Preliminary Engineer's Estimate for this alternative was \$310,400.The second alternative considered that irrigators would stagger their water use to alternate days so that storage requirements would be reduced. This alternative includes a variable flow pump and a small hydropneumatic bladder-type tank. The Preliminary Engieer's Estimate is \$143,030.The third alternative was the installation of booster pumps at each individual service. This is the least-cost alternative (approximately \$2,300/service) but removes the MWC's control of the contract with the City. Alternatives 1 and 2 could include a device to regulate flows so that the contracted amount of 162 gpm of supply is not exceeded.The requested project is Alternative 2 as evaluated by the Engineer. This Alternative will add pumping and stroage facilities to Rocky Comfort MWC's system to allow it to continuously meet Title 22 pressure requirements. Facilities required to ensure adequate pressure would		0	C	Rocky Comfort MWC has been receiving its domestic water supply directly from the City of Redlands since 1924. The MWC has one metered connection with the City and is billed monthly for water use in accordance with the 1924 Agreement. The Agreement limits water use to 162 gpm and does not require that the City meet a minimum pressure. Rocky Comfort MWC has 34 metered connections within 40 acres; approximately 50% of the area is irrigated groves, accounting for 5 meters. Buildout within the MWC is not expected to exceed its 162 gpm contract limitation. Rocky Comfort bills its customers bi-monthly for meterd water use. All meters and service laterals are owned and maintened by property owners who are also shareholders. Historically, the MWC has received water directly from the City that often does not meet State-mandated minimum pressure requirements. Extremely low pressure (less than 10 psi) incidents occur in the summer. When the City's Tate Water Treatment Plant is operating, the water pressure delivered to Rocky Comfort MWC normally averages above 40 psi. However, when the treatment plant is shut down because of high sedimentation in the surface water source of supply, the City switches the MWC's supply to a downgradient well that is not able to provide 20 psi.For many years, the City Water Department has told	143,000	32	160 13	San Bernardino	v	2008
2334 5800832	5800832-001	CASTLEWOOD MOBILE HOME PARK	2nd Water Source	be the installation a 3-inch double check valve backflow, This project would include construction and development of a new production well. The pump, panel and pipelines would also be installed after completion of the new well.	, М	0	С	Rocky Comfort MWC that once its planned This community PWS currently has only one source of water - a groundwater well. Due to the current drought conditions in California, the need for another source may be eminent.	250,000	88	161 21	Yuba	I	2008
2335 2700772	2700772-001	STRUVE RD WS #02		Build storage tanks and take measures for well head protection. These projects would involve study, design, and construction.	м	0	с	Insufficient water storage capacity.	50,000	81	166 05	Monterey	II	1998
2336 0707569	0707569-001	ANGLERS SUBDIVISION 4		Install 3" - 4" lines throughout entire system. To each	М	0	С	Inadequate mains, low pressure not in compliance with WW Standards	560,000	70	168 04	Contra Costa	Ш	1998
2337 5400682	5400682-001	CENTRAL WATER CO.	Central Water Company Water Supply Reliability Project	This portion of the community of Plainview currently obtains its potable water supply from one community groundwater well. If this well were to fail due to dropping groundwater levels or other emergencies, the community would have no source of domestic water. The proposed project would drill and equip one additional community water well including related appurtenances, and also including applicable engineering and design costs, land acquisition, well development, CEQA/NEPA requirements, and legal/contract costs. The scope of this project could include consolidation and/or a permanent interconnection with Plainview Mutual Water Company	М	0	С	A portion of the unincorporated Tulare County community of Plainview is served with potable water by Central Water Company. The water system is supplied with water by one groundwater well. In light of the current drought conditions being experienced throughout the State of California, relying on a sole source of drinking water leaves residents in a risky and vulnerable position. If drought conditions were to cause groundwater levels to drop, the community could find itself completely out of water. In addition, a collapse or other failure of the well and/or pump would leave water system users without a source of drinking water. Therefore, a second source of domestic water supply is urgently needed.	1,000,000	42	170 12	Tulare	11	2008
2338 1700511	1700511-001	Harbin Hot Springs	Distribution/Storage Improvements	Replace old galvanized pipe and install new 100,000 gallon storage tank.	М	0	С	Old pipes in poor condition and inadequate storage	300,000	47	170 03	Lake	П	2002

2339 1000042	1000042-003	FCWWD #40/SHAVER SPRINGS	Replace water storage tank, construct water distribution system, destroy wells	1. Approximately 1/2 mile of water pipeline shall be constructed to access the new well source. The cost estimate to construct this pipeline is \$350,000. This includes the cost of booster pumps and/or pressure tanks required to pressurize the distribution system.2. The existing 40,000 gallon water storage tank shall be replaced. The cost estimate to replace this tank is \$100,000.3. The 5 existing wells shall be destroyed. The cost estimate is \$25,000.4. The new well source may require a more recent pump test to meet State requirements. The cost estimate for a pump test is \$25,000.	Μ	0	C	The District is currently searching for a new water source since 5 of their 6 wells are chemically or radiologically contaminated. Currently, the District does not have potable water. The District must also carefully manage its water use because the 2 active wells produce an average day demand of 9.0 gpm whereas the approximate yield of both wells is 9.1 gpm. During summer months, the water system becomes severely strained. The District has located 2 wells of interest and are assessing the water quantity/quality. Once the District selects a clean water source, they wish to purchase water rights to the source. Part of the project shall involve constructing approximately 1/2 mile of water pipes to access the water source and upgrade the current water infrastructure. One of the three 40,000 gallon water storage tanks for this water system is approximately 30 years old and has deteriorated beyond repair. Four of the five existing wells must be destroyed per recommendations from CDPH.	500,000	51	172 23	Fresno	111	2009
2340 1000484	1000484-001	FCSA #34/BRIGHTON CREST	Millerton Lake Pump and Pipeline Improvements	Within this context, staff, in consultation with engineering consultant, is recommending that the overall situation be address in two phases. Phase I could be implemented immediately to address most of the problems caused by a draining pipeline and provide emergency pumping capabilities and Phase II would address a comprehensive solution to the system's problems. Phase IImmediate measures that can be taken to ameliorate the effects of a draining pipeline and provide emergency pumping capabilities. Task I: Install a 12" check valve on the water line at the high water mark of the lake. This would prevent the line from draining to a point below the newly installed checy value and reduce or eliminate the problem of metering water twice. However, this would not remove the requirement of having a functional check valve on each of the individual valves and would not insure the operation of the system if a serious leak or malfunction occurred below water. The estimated cost is 55,000.Task II: For emergencies, install a tee connection, branch and gate valve on water line near the check valve above the high water line. If a serious problem occurred with the pumps or underwater portion of the pipeline, a portable pump could be set up near the lake edge, drawing lake water through a temporary pipe to the branch and into the above water portion of the pipe as an emergency supply. The	M s s s r	0	C	County Services Area (CSA) No. 34 encompasses the Millerton New Town Plan Area. It is located on the north and south side of Millerton Road approximately 1.5 miles east of the unincorporated community of Friant. Raw water is drawn from Millerton Lake by two pumps and electric motors on a platform submerged in the Lake. Each pump feeds water through an attached check valve and manifold into a twelve inch diameter water line submerged in the lake adge. The water line has a meter station approximately ¼ mille from the submerged platform and the water line travels generally south from the lake across Millerton Road to a pond which is located on the Brighten Crest golf course. Water in the pond is drawn from another water line that provides irrigation for the golf course. Another water storage tank, where it is feed into a water treatment plant. In December 2007, it was noticed that the water line partially drained when the system had been shut down over night due to low water demand. A pump test was done and no flow was observed at the meter station confirmation of the leak occurred during an air test of the water line. An underwater camera picked up a large air bubble over one of the pump's check values. No leaks were seen in	400,000	70	175 11	Fresno	111	2008
2341 5400718	5400718-002	WILLIAMS MUTUAL WATER CO.	Williams Mutual Water Supply Reliability Project	A portion of the community of Cotton Center currently obtains its potable water supply from one community groundwater well. If this well were to fail due to dropping groundwater levels or other emergencies, the community would have no source of domestic water. The proposed project would drill and equip one additional community water well including related appurtenances, and also including applicable engineering and design costs, land acquisition, well development, CEQA/NEPA requirements, and legal/contract costs. An alternative solution to be evaluated within the scope of the project is an interconnection and/or emergency connection to Popla Community Service District.	M 2 ar	0	C	A portion of the unincorporated Tulare County community of Cotton Center is served with potable water by Williams Mutual Water Company. The water system is supplied with water by one groundwater well. In light of the current drought conditions being experienced throughout the State of California, relying on a sole source of drinking water leaves the Water Company in a risky and vulnerable position. If drought conditions were to cause groundwater levels to drop, the community could find itself completely out of water. In addition, a collapse or other failure of the well and/or pump would leave water system users without a source of drinking water. Therefore, a second source of domestic water supply is urgently needed.	1,000,000	50	180 12	Tulare	111	2008

2342 0400027	0400027-001	FOOTHILL MOBILE HOME PARK	Well #1 - Arsenic	Planning study to determine the lowest cost, long term	M	0	С	High concentration of arsenic in Well #1	500,000	127	180 21	Butte	I	2012
2343 0600011	0600011-001	Del Oro Water CoWalnut Ranch	compliance	Construct additional water source and pipeline	М	0	С	Need additional water source.	150,000	78	182 21	Colusa	I	1998
2344 3110017	3110017-005	Sierra Lakes County Water Dist	CIP Project 09-001 Replace Water Mains and Laterals	apputerances. The 2009 project includes the following components: Replacement of approximately 5,500 lineal feet of 4- inch diameter AC water main line with 8-inch PVC diameter mainlineReplacement of 26 mainline valvesReplacement of 6 fire hydrants Replacement of 104 galvanized residential laterals with polyethylene lateralsInstallation of 92 water meter pits to allow future installation of water meters	M	0	c	The water system infrastructure was constructed in the 1960's and has reached the end of its useful life. The mainlines are Asbestos-Cement pipe and are beginning to fail due to age, water chemistry and original construction practices. The District retained a Corrosion Engineer in 2007 to study the pipe and he concluded: "the external surfaces of the failed pipes have deteriorated badly due to the leaching of the cement mortar binder from the pipes. The chemical analysis of the groundwater indicates that the protective calcium carbonate will leach out of the pipe wall leaving behind a fibrous material with greatly reduced structural properties." The District has experienced at least two mainline leaks due to pipe wall failure. The existing mainlines are primarily 4-inch diameter which limits the District's ability to meet current fire flow requirements due to friction losses.In some locations the separation between water and sewer (gravity and/or force) mains is less than required by CDPH. The residential laterals are galvanized iron and failing due to exterior corrosion pitting. The Engineer determined that a plan of action should be implemented to deal with the "severe degree and extent of corrosion damage on the laterals". In most instances leaking laterals cannot be repaired due to the corroded/thin pipe wall and complete replacement of each lateral is necessary when a leak occurs.	1,366,076	810	185 02	Placer	1	2009
2345 3110017	3110017-004	Sierra Lakes County Water Dist	CIP Project 09-002 Replace Water Mains and Laterals	The 09-002 project includes the following components: -Replacement of approximately 2,580 lineal feet of 4- inch diameter AC water main line with 8-inch diameter PVC mainlineReplacement of 4 mainline valves Replacement of 3 fire hydrantsReplacement of 1 air- relief valvesReplacment of 92 galvanized residential laterals with polyethylene pipe materialInstallation of 84 water meter pits to allow future installation of water meters	M of r	0	c	The water system infrastructure was constructed in the 1960's and has reached the end of its useful life. The mainlines are Asbestos-Cement pipe and are beginning to fail due to age, water chemistry and original construction practices. The District retained a Corrosion Engineer in 2007 to study the pipe and he concluded: "the external surfaces of the failed pipes have deteriorated badly due to the leaching of the cement mortar binder from the pipes. The chemical analysis of the groundwater indicates that the protective calcium carbonate will leach out of the pipe wall leaving behind a fibrous material with greatly reduced structural properties." The District has experienced at least two mainline leaks due to pipe wall failure. The existing mainlines are primarily 4-inch diameter which limits the District's ability to meet current fire flow requirements due to friction losses. In some locations the seperation between water and sewer (gravity and/or force) mains is less than required by CDPH. The residential laterals are galvanized iron and failing due to exterior corrosion pitting. The Engineer determined that a plan of action should be implemented to deal with the "severe degree and extent of corrosion damage on the laterals". In most instances, leaking laterals cannot be repaired due to the corroded/thin pipe wall and complete replacement of each lateral is necessary when a leak occurs.	844,521	810	185 02	Placer		2009
2346 4100509	4100509-003	COUNTY SERVICE AREA 7	Pescadero creek road pipe	Lay new piping (3") along Pescadero Creek Road to Alpine Creek Bridge.	М	0	С	Replace deteriorated piping	100,000	62	186 17	San Mateo	II	1998

2347 4100509	4100509-005	COUNTY SERVICE AREA 7	County Service Area No. 7 Water Distribution System Improvements	A master plan for the water system was prepared in 1998 to identify water system needs and capital improvement projects. This project includes implementation of a majority of the recommendations of the master plan to improve the water distribution system to comply with the requirements of Title 22 of the California Code of Regulations. The project consists, in general, of the following improvements:1. Replace existing 0.75 inch to 2 inch diameter pipes with 4 inch diameter pipes to deliver a 200-gpm fire flow coincidem with the maximum-day demand while maintaining a 20- psig residual pressure at most locations. The new pipes will be installed with proper bedding and backfill material and cover 2. Reroute approximately 2,500 feet of pipeline currently in private property to public right- of-way to correct low water pressure deficiencies at the northwest end of the distribution system (Memory Lane and Pope Road areas).3. Install a new looping water main, approximately 6,500 feet in length, along Pescadero Creek Road. This work is recommended since the existing distribution system consists only of unlooped branches and completion of this loop would provide greater capacity to maintain service in remote locations in the unexpected event of pipeline or equipment failure.4. Install County Fire Marshal approved fire hydrants as part of the pipeline replacement work. There are no existing fire hydrants	M t t t	0	C	Most of the distribution system water pipelines in CSA-7 are old, poorly installed, and undersized based on current water industry standards - Title 22 of the California Code of Regulations. Pipe materials include galvanized steel, cast iron, ductile iron, asbestos cement, and high density polyethylene. Pipe diameters range from 0.75 inches to 4 inches. The water pipeline serving a residential area (Memory Lane) runs through a privately owned Trailer Park where service by County staff is difficult and pressure is lower than the required 20 psi due to the undersized distribution system pipes. In addition, line breaks are occurring more frequently throughout the system as pipes deteriorate, for portions of the system date back to the early 1920s and without adequate cover exposing the pipes to the elements and damage from falling trees or branches. Replacement of the distribution system pipes will provide the required pressure and help prevent line breaks, which can lead to system failure and be detrimental to public health.	1,000,000	62	186 17	San Mateo	Π	2008
2348 5400728	5400728-001	GRIER MUTUAL WATER CO.	New Well and Storage	New well, storage, and distribution system and or consolidation to larger pws.	М	0	С	Possibility of water shortage and storage for this community water system	500,000	89	190 12	Tulare	ш	2008
2349 1500424	1500424-001	Lands of Promise Mutual Water Associatio	Water Main Replacement	INSTALL 6" MAINS AND 6 -200 TO 500 GAL TANKS.	М	0	С	UNDERSIZED WATER MAINS	271,760	65	190 19	Kern	Ш	1998
2350 3600399	3600399-001	Paradise Mobile Estates	New Well & Pump & Filtration System	Possibly new well & pump & filtration system	М	0	С	The well shut off twice a day. They concerned about water quality (gross alpha : 8.2 + 2.9, but not known uranium Ra 226, Ra 228 levels)	300,000	38	190 13	San Bernardino	V	2004
2351 4300560	4300560-006	Green Mountain Water Company	Replace/upgrade water distribution infrastructure	Engineering study has been completed with recommendations on replacing/upgrading the existing PVC sections of the existing distribution lines. Project will require trenching alongside the existing roadway throughout the service area, installation of 6" PVC distribution lines, installation of pressure reducing stations (water is gravity fed from existing storage tank through distribution lines), connection to existing metered domestic service lines and fire hydrants, backfill trench and restoration of roadway. Old distribution lines will be abandoned.	Μ	0	с	Distribution system infrastructure was built in 1965 of 3" steel and 21/2" PVC piping. Repairs to the PVC section have been necessary to ensure safe adequate water for domestic service. The entire section should be replaced to increase distribution capacity, provide for easier maintenance and repair (such as after a major earthquake), eliminate water loss due to leakage in existing line and ensure water quality to all customers.	400,000	49	190 17	Santa Clara	II	2011
2352 4300560	4300560-005	Green Mountain Water Company	Repair or replace piping in	repair or replace piping in distribution system	м	0	С	repair or replace piping in distribution system	800,000	49	190 17	Santa Clara	П	2003
2353 4300560	4300560-003	Green Mountain Water Company	Development of 2nd water source and chlorination system for this source	develop second source and chlorination system for this source	М	0	С	develop second source and chlorination system for this source	150,000	49	190 17	Santa Clara	II	2003
2354 1900843	1900843-001	CALIFORNIAN MOBILE HOME PARK	Californian Mobile Home Park	The project is a community water system consisting of 100-199 connections and a treated ground water source. The system is in need of an additional water source or additional water storage tank.	м	0	C	The Water System is in need of additional water sources to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA - LA County Water Quality Program.	500,000	148	190 16	Los Angeles	IV	2008
2355 3600297	3600297-002	Gordon Acres (Stewart WC)		Construct new well and two new reservoirs	м	0	с	Inadequate source and storage capacity	150,000	39	195 13	San Bernardino	v	1998

2356 3600297	3600297-004	Gordon Acres (Stewart WC)	Gordon Acres Water Company updated refurbishment Project	Replace almost all of the existing pipe infrastructure. Refurbish or replace existing old wells and pumps. A 50,000 gallon storage tank will be installed per direction of Environmental health. A new well will be installed to replace/support old existing units. Fire hydrants will be replaced as well as a number of disfuctional/non- existant isolation valves.	M	0	c	The Water Company plans to replace the majority of distribution pipes, (approx. 15,000 feet), many sections of which have been in place since the 1950's. Leaks are a chronic problem, often requiring shuting down the system, depribing customers of water. Both wells and pumps are in serious need of refurbishment and upgrades. The system has been neglected for years and funds for spares, repairs and upgrades have not been available. Environmental Health has recommended that a new 50,000 gallon storage tank be installed. Approx. 30 new fire hydrants are required to comply with San Bernardino Fire Codes. A system of shut off valves as needed to isolate leaks and prevent system shut downs when leaks occur. New security fencing is needed for the two pump/storage areas.	200,000	39	195 13	San Bernardino	V	2011
2357 1500578	1500578-001	LONG CANYON WATER COMPANY CORP.		DRILL NEW WELL. OTHER - DESIGN AND	м	0	с	DIMINISHING CAPACITY FROM WELL	50,000	67	197 19	Kern	ш	1998
2358 5500053 2359 5400957	5500053-002 5400957-002	LEISURE PINES MUTUAL WATER CO WEST GOSHEN MUTUAL WATER CO.	New Storage Tank West Goshen Water Supply Reliability Project	Instal a new storage tank and pump station. The proposed project would drill a new 12" backup well to a depth of at least 400" and equip it with a 40hp pump. In addition, a 150,000 gallon storage tank and residential water meters would be installed, ensuring a high degree of water supply reliability for the community. The project would also include environmental and design work, and acquisition of land, if necessary.	М М	0 0	c c	Need additional storage capacity. West Goshen Mutual Water Company's system is overburdened. The primary well is equipped with a 60- HP pump that is just barely able to handle the demand placed upon it by the community's water needs. The backup well is insufficient to provide the redundancy that would ensure water supply reliability for the community. Should the primary well fail, the backup 8" well, which is equipped with a small 15hp pump that is over 30 years old, will not be able to meet the water demands of the community. The 8" well is too small to be upgraded to a larger pump, so drilling a new well is necessary. Additionally, the community has insufficient storage capacity, which further jeopardizes water supply reliability for residents. A storage tank of approximately 150,000 gallons is needed.	50,000 350,000	85 69	200 11 200 12	Tuolumne Tulare	III III	2002 2011
2360 1500483	1500483-001	ALLEN ROAD MUTUAL WATER SYSTEM		DRILL NEW WELL. OTHER - STUDY, DESIGN,	м	0	с	LOW LEVEL OF WATER. NEED ADDITIONAL SOURCE	100,000	59	200 19	Kern	Ш	1998
2361 1500483	1500483-002	ALLEN ROAD MUTUAL WATER SYSTEM	Allen Road MWC- Second Well / Intertie with CWS-	CONSTRUCTION AND OTHER Intertie with CWS- Bakersfield or drill a second well is needed	М	0	С	CAPACITY FOR RELIABLITY the Water System has only one well. A second source of supply is needed.	500,000	59	200 19	Kern	Ш	2008
2362 1400070	1400070-007	Sierra Grande Estates Mutual Water Co.	Bakersfield Sierra Grande Pump Station	Installation of a new 5000 gallon hydro-pneumatic pressure tank with a staged 4 pump system- 25- 750 gpm- and backup power generator set. The pumping system will provide redundancy and capacity while increasing the efficiency of the facility. The project will reduce electric costs and ensure system pressure when the power is out. The project will enclose the pump system and electrical panels for freeze protection and security. The staged pump system will be simpler to maintain than a VFD system for this remote location.	м	0	с	The water system pumps well water into above ground storage tanks, then the water is pumped into the distribution system as required. The current system's hydro-pneumatic tank is rusted and has been removed from service. The system is pressurized by a single 15 Hp pump (NOT VFD) that runs all the time. This single pump supplies all water demands to the system. The pumping system lack redundancy and the system loses pressure when the grid power goes out. The electric panels and pump are not protected from the elements and lack security measures.	290,000	49	200 13	Inyo	v	2009
2363 5500053	5500053-003	LEISURE PINES MUTUAL WATER CO	New Storage and Pump	Install additional storage and pumping facilities.	м	0	С	Need more storage capacity, especially for fire	87,000	85	200 11	Tuolumne	Ш	2004
2364 5400957	5400957-001	WEST GOSHEN MUTUAL WATER CO.	Water Improvement Project	The project would provide a needed reliable water source by constructing a water tank, booster pumps, and new pump in the backup well, along with providing chlorination and needed water meters to regulate the water usage.	Μ	0	С	Water system lacks the capacity in the backup well to meet water system demands. It does not have any water storage and therefore does not meet the waterworks standards or fire protection. The system does not have capability to disinfect the source water or water system. Also the system does not have water meters to equitably generate revenue to sustain the water system and promote water conservation.	475,000	69	200 12	Tulare	Ш	2009

2365 1900100	1900100-002	METTLER VALLEY MUTUAL	Mettler Valley Mutual	The project is a community water system consisting of 15 to 24 connections and a treated ground water source. The system is in need of an additional water source, or additional water storage tank.	м	0	с	The Water System is in need of an additional water source to meet the demands of the community, i.e new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	98	200 16	Los Angeles	IV	2008
2366 4900660	4900660-001	Yulupa Mutual Water Company	Yulupa MWC - Tank Project	Construct two tanks: 96,000 and 65,000-gallon tanks.	М	0	с	Insufficient storage	400,000	60	200 18	Sonoma	Ш	2004
2367 4400572	4400572-002	FERN GROVE WATER CLUB	Aging Pipes	replace current galvinized pipe w/ PVC pipe. Replace metering boxes and 6 or 7 stainless steel tanks	М	0	С	Aging pipes and aging water tanks	500,000	64	211 05	Santa Cruz	Ш	2007
2368 3601010	3601010-001	Crystal Lake Prop Owners	Water delivery pipeline upgrade	The project consists of the installation of approximately 1.6 miles of 8" PVC C900 – Pressure Class 150 Piping material. The system will be installed beneath the current dirt roads that surround the development and in sections so as to leave service to the existing properties until such time that it is completed, tested and turned on. Materials will include 8" PVC C900 – Pressure Class150 as manufactured by PW Eagle or equal, Tees, Gate Valves, Air Vacs, Thrust Blocks, Tracer Wire and Valve Cans, service saddles and Fire Hydrant connections.Isolation valves will be installed at strategic locations so that only sections will be shut-down for a repair versus the entire development.	м	0	C	The original 1.6 mile waterline system was installed in the 1980's using an inexpensive and undersized 4 inch PVC header piping system tied to a 2 inch lateral system feeding (61) lots. This system has proven to be inadequate in providing sufficient water pressure to the homes and fire stand pipes, and has frequent line breaks. Due to the poor design and planning of this system, there is no way to isolate these line breaks and the entire water system must be shut down affecting 61 properties every time a repair is required. The original watersystem was installed with cheap 2 inch PVC pipe connecting 61 properties. About 15 years ago the system was upgraded by adding a second 4" PVC pipe to the system. The 4" pipe was connected in several spots to the 2" pipe. Frequent line breaks are unable to be isolated due to the poor planning of the system upgrade therefore causing us to shut the entire system down.	160,000	61	213 13	San Bernardino	v	2011
2369 0510019	0510019-002	Wallace Community Services District	Multi-Well Activation with Code Compliance	For proper operation of the water system as a whole, the following tasks will be performed.a. Install a new water system controller that will control the three wells in normal and "backup" operation.b. Install flow control capability at each well to provide energy efficient flow control, that, in turn, allows operation that protects the aquifer. Variable Frequency Drive power systems will be installed, along with appropriate control and sensor lines.c. Install flow monitoring capability at each well, per CA DPH requirements.d. Refurbish and bring power to the third well (1,000 foot power run).e. Develop programming to operate the groundwater system in a safe and reliable way.f. Document all improvements, "as-built."	M I	0	C	The District currently operates with only one qualified well. Qualification of a second well is in process. Once completed, the system controller will need to be replaced to properly operate both wells in an optimized way for safety, water quality and aquifer protection. A third well needs to be activated to provide needed capacity were the best producing well to fail (required by State Engineering Standards). This well is in place, but primary electrical power needs to be brought to the site, and the well needs to be re-furbished. We are under a DPH directive to complete qualification of the second well and to begin operations using both wells. The latter requires completion of this project.	225,000	75	220 10	Calaveras	11	2009
2370 4900543 2371 4600019	4900543-002 4600019-001	Sonoma County CSA 41-Salmon Creek Sierra Co. W.W.D #1 Calpine		Improvements of the subsurface diversion. Drill new well, construct new pumping station, and construct new storage tank (140,000 gallons). Replace old riveted steel pipe.	M M	0 0	c c	Marginal quantity of water supply. Inadequate water pumping and storage capacity to serve commercial, residential, and fire protection needs. System is at full production capacity. Outdated	10,000 275,000	99 142	220 18 225 02	Sonoma Sierra	II I	1998 1998
2372 1900636	1900636-001	EL RANCHO MOBILE HOME PARK	El Rancho Mobile Home Park	The project is a community water system consisting of 25 to 99 connections and a treated ground water source. The system is in need of an additional water source, upgrades to their treatment equipment and or water correct table.	м	0	с	watermains leak. The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	76	228 16	Los Angeles	IV	2008
2373 4300575	4300575-002	Twin Valley, Inc.		install new tank & piping.	м	0	с	Recurring TCR MCL violations. Rerank to M from F (9/17/01)	150,000	83	250 17	Santa Clara	Ш	2006

2374 4300575	4300575-004	Twin Valley, Inc.	Replace 100 year old wooden water storage tank	Project Outline:Acquire Fund resources \$150,000Planning setup of new construction of new tank locationAcquire new tank location or use current locationDesign New Tank plansGet Premits and Approvals from County PlanningStart Construction: - excavate tank site for new tanks - Prepare and put new tanks on location - Remove Old tank and clear pad for new tank - Setup plumbing for all new tanks - Setup new tanks on all new pads - Plumb new tanks on all new pads - complete new tanks install and satitize new tanks - put new tanks in operations - check new tanks installation for any problems and fix as discovered - monitor new tanks and operation of new tanks - review transfer of water to upper tanks from new tanks complete any remaining Construction on project	M V X	0	C	Currently there is a 33000 gallon 100 year old redwood storage tank that holds the water pumped from five different wells. This tank leaks, mice, rats, squels, bird and other animals and insect manage to find there way into the tank offen. They contaminate the water in this tank. In the last several years we have put new roof, screen over the sides tops to try to keep these varmits out, but no luck. We have a chlorinator to cholorinate the water because this tank get many creaters in it, in order to keep the water drinkable and sanitized we chlorinate. We need to replace this tank with storage of upto 70,000 to 120,000 gallon tanks of water storage. We currently climb to the top of this tank 3 time a week and collect any varmits floating on top of the water as well as chlorinate the water. All of our population is feed thru this tank. We need some funding help to replace it.Twin Valley has been instructed by the Department of Public Health to replace this tank by august 1, 2010. Our engineer inspector said "this is the worst tank he has ever seen". We need to replace it and the funds to do it. WE have one year to get this job done. Our Engineer of CDPH has given us the word.	150,000	83	250 17	Santa Clara	Π	2009
2375 4900532	4900532-018	Sonoma County CSA 41-Jenner	Replacement of Water Mains - Jenner C S A # 41	The project consists of installing 1000 feet of 6 inch & 4 inch water mains in three locations within the Jenner water system CSA #41. The main 6" line on Hereford Drive and the 4" line on La Porte Road will be relocated to a stable location within the existing roadway/right of way. These pipe lines are currently valved off and are out of service. This portion of the relocation project consists of 200' of 6" main in Hereford Drive - 200' of 4" mai and 300' of 4" main in La Porte Road. The other two relocation projects are located in Rock Point Drive - 200' of 4" mai and 300' of 6" main. Currently, the system relies upon the 4" line in Rock Point Drive to provide water to 20% of the services in this water district. With out the water mains in Herford and La Porte, a failure in the Rock Point Drive are classified as preventive construction. The replacement in Hereford Drive and La Porte Road are critical replacements since these lines are currently inoperable.	; M f n r	0	C	The Jenner Water System serves 100 customers located at the confluence of the Russian River & the Pacific ocean and along highway 1. The geology is typically fragile, there are numerous earth slides within the community. Typically the movement of the soil causes failure to the water mains, especially those located on the side of the road toward the Russian River. Cal- Trans has stabilized numerous locations along hwy 1. The Water district has relocated pipe lines along hwy 1 in three locations and now the hwy is relatively stable. The main 6 inch main connecting the east side of the system with the west side is broken and cannot be repaired in the existing location. There are three locations where the water main must be relocated on the other side of the public roads. The District is currently completing a major upgrade to their surface water treatment plant and are using SRF loan funds to complete this task.	120,000	125	250 18	Sonoma	Π	2009
2376 1500544	1500544-002	ENOS LANE PUBLIC UTILITY DISTRICT		Loop system	М	0	с	Dead end water lines	300,000	82	250 19	Kern	Ш	2006

2377 4300575	4300575-003	Twin Valley, Inc.	Wooden Water Storage Tank Replacement and expansion Storage Facility	EligibilityTwin Valley Inc. project is to replace and expand the current old Redwood Storage Tank (est. 95 years old) with Seven 20,000 gallon storage tanks at TWO DIFFERENT LOCATIONS on the TWIN VALLEY TERRITORY map. These seven 20,000 gallon tanks will be at 620 feet of elevation. These tanks will provide cleaner water without mice, bugs, and contamiants. Also will allow more water for highier demands when needed by users, because current storage limits the amount of water stored durring the pumping thoughout the night. With more storage more firer protection will be available, last summar we had 3 forest fires in our area and did not have enough water for even to fight one.Facilities to be constructed-First location construction-Replace Old Redwood (620 elevation) 33000 gallon storage tank with a 2000 intermediate pumping tank to pump to the 70000 steel tank at the current location, that is all that there is physical space for and is already plumb for with boster pump and 6"pipes to and from the tank. The 70000 Steel tank supplys a different set of customers in the system.Second location construction-Purchase a small lot of land from a Landowner on the Watsonville Road, actually a small hill top which is 610 to 640 feet of allitude for construction of a base for water storage tank last for face riv 2000 sups. under tanks the for the face of under tanks for the tank for a last storage tank with a supply a different set of customers in the system.Second location construction purchase a small lot of land from a Landowner on the Watsonville Road, actually a small hill top which is 610 to 640 feet of allitude for construction of a base for water storage tank		0	c	Twin Valley, Inc. currently has two water storage tanks: One is a 33000 gallon Old Redwood wine tank (est. 95 years old) at 620 feet altitude and Two - a steel 70000 tank at 820 feet altitude. The Old Redwood wine tank need replacement and expansion with additional 6 other 20000 gallon tanks at a different location where there is more physical land space. The current Redwood tank pumps upto the 70000 gallon steel tank which feed another set of water users.Problem #1:Twin Valley, Inc. in the summar months pumps well #2 which has some Nitrates that is blended with Well#3 without nitrates. This blending of Well#2 and #3 together allows the nitrates level to be between 16ppm and 29ppm, which is acceptable standard of water. However the quanity of water bended out of these two wells plus another 3 wells offen fails to meet the quanity demands of the users at certain times of the day. because the limited storage of the size of the tanks vs the quanity of gallons able to pump from the wells over a given time period. Thus causing water outages usually after the morning spike in water demands. With more water tank storage the pumps can continue to pump thru th night, when now the current size of the storage would be full, but with the additional storage to hold the continuious pumping of water more water can	240,000	83	250 17	Santa Clara	Π	2009
				platform for six 20000 gallon water tanks.Notice all				be stored. Then when high demand is reached more						
2378 5602117	5602117-003	STRICKLAND ACRES	Strickland Mutual Distribution Pipe and Lateral Replacement 2009	Upgrade 4" transite pievation 620 balance Water Upgrade 4" transite pipe to 8" PVC; estimated cost \$660,000 based on 5280 linear feet at \$125 per foot. Includes slurry pavement repair Replace Steel laterals with PVC; est. \$150,000 based on 100 laterals at \$1,500 ea Isolation valves; estimated \$13,200 based on eight valves at \$1,650 - Mobilization \$35,000 - Traffic Control \$25,000 - Trench Safety \$25,000(Subtotal Construction: \$908,200) - Water Company Administration / Permits \$50,000 - Project Planning and Design (8%) \$72,656 - Construction Administration & Inspection (8%) \$72,656 - Contingency (15%) \$136,230 Total	M : :	0	c	Water storage will be available to meet the highler The distribution system contains 4" and 6" transite (asbestos cement) pipe, and a variety of steel black pipe and galvanized, and copper laterals. The steel laterals are old and restricted in flow due to corrosion deposits. This project would involve replacement of the 4" transite with 8" PVC, and replacement of the steel laterals with PVC. The objective is improvement of fire flow, and reduction and simplification of future maintenance. Notes: (1) This system serves 126 connections and at least six hundred individuals. The state database incorrectly indicates 256 individuals. (2) We can provide data that supports a disadvantaged	1,227,000	130	252 06	Ventura	IV	2009

Estimated Project Cost \$1,239,742

We can provide data that supports a disadvantaged community classification. The data are from a recent Ventura County sewer project covering Strickland Acres and El Rio, near Oxnard, CA. (3) In this application we are seeking grant monies, with only a nominal contribution from the area served.

2379 3500006	3500006-002	CSA No. 31 Stonegate WS	Stonegate Groundwater Well and Delivery System	Design and construction of a groundwater well, connected by a 2,400 - 4,800 linear foot 6" pipeline from privately owned property to Stonegate's existing potable and non-potable water distribution system. It is estimated that this well capacity would need to produce 250 gpm to safely meet Stonegate's needs. The project also includes an inter-tie with Tres Pinos Water District, providing emergency water supply (fire protection) for Tres Pinos, and Stonegate an alternative potable water supply. As these two systems operate at different hydraulic elevations, requiring a a booster pump or a higher capacity well pump. The project also includes the replacement of meters, providing for the accurate recording of and billing by usage, encouraging water conservation. There are two meters/lot, or 148 meters. Finally, the new system will provide for the decommissioning of the existing water treatment plant.	M 5 2	0	C	The water system problem experienced by the residents of County Service Area (CSA) No. 31, Stonegate, is Category E: Water systems with water outages or significant water quantity problems caused by source water capacity or water delivery capability that is insufficient to supply current demand. The current water supply for Stonegate, County Service Area (CSA) No. 31, is provided through San Benito County Water District and is supplied by the Central Valley Pipeline. The water is piped in and treated for potable use by a water treatment plant owned and operated by San Benito County. This water supply is interruptible and its availability fluctuates. In 2008, Stonegate's water allotment was reduced to 75% of it annual usage. During the months of June, July, and August, its allotment was further reduced to only 30% of its annual supply. The water district has just informed the County that the water allotment for 2009-10 will be 45% of historical usage, or 92 acre feetThe severe water shortage in 2008 resulted in the adoption of Resolution No. 2008-86 by the San Benito County Board of Supervisors on August 5, 2008, declaring a water shortage emergency in CSA No. 31. The water shortage emergency in ScA No. 31.	1,470,000	74	252 05	San Benito	U	2009
2380 3500006	3500006-001	CSA No. 31 Stonegate WS		Re-coat tanks.	М	0	С	Interior coatings on the system's two storage tanks are failing and need to be restored	100,000	74	252 05	San Benito	II	1998
2381 4900558	4900558-001	Belmont Terrace Mutual Water Company	Well Pump Upgrade Project	This project would abandon the 57-year old secondary well and replace our existing primary well pump and booster pumps to include: 1) New main well pump 2) VSD booster pumps 3) Replacement of electrical service/control panels. 4) New standby power generator 5) Automatic chlorine disinfection & alarm system. By upgrading our aging main well/pump motors, and capping the secondary well we can mitigate the potential risk of PCE contamination & nitrate levels. Replacing our main well pump we can eliminate using a lubricant that affects disinfection reflability to our distribution system and comply with State Waterworks Standards. The engineered pump and well design and materials will conform to applicable potable water well Department of Water Resources, and the State Department of Public Health. This proposal is considered 'shovel ready'.	M	0	c	This project would upgrade and improve the efficiency of an aging mutual well pump delivery system which supplies drinking water for 85 homes. The Mutual Water Co. owns two groundwater wells and plans to abandon a secondary well that contains levels of nitrate exceeding the MCL and detectable levels of PCE. The well pump & twin booster pumps electrical service & system controls are currently in jeopordy of failing due to it's age. The well pump currently uses a lubricant that is released into the water. Lubricant accumulates in the storage tank and interferes with disinfection. The propane generator currently supplies back-up power to a stand-by well with problematic water quality. This generator is insufficient to run the main well pump and booster pumps. This community based delivery system has been properly maintained and operated by skilled and licensed homeowners for decades. In recent years water board has been carefully planning with professional engineers to perform the system upgrade to bring our system up to current Water Works	184,169	85	264 18	Sonoma	Ι	2009

Standards.

2382 4900558	4900558-002	Belmont Terrace Mutual Water Company	Distribution System Replacement	This project would vastly improve the reliability of an aging distribution system in order to adequately supply drinking water and fire protection to this community.Bi increasing the size of AC mains to 8" it would increase pressure/volume to protect the 85 homes in the Terrace. New gate valves and hydrants are included in the upgrade. Also included would be a seismic upgrade of the cracked concrete storage tank to improve tank integrity and insure reliability and maintain health standards throughout the system. A delivery system redesign would also eliminate 'dead end' pockets, add needed blow off valves and include back flow devises to prevent cross-connections. These improvements would be necessary to complement the proposed well pumping portion of the overall system improvements. The improvements would insure the communities abilit to independently, safely and reliably provide water to a community water system. The distribution system replacement will conform the all potable well water delivery standards prescribed by the State of California Department of Public Health.	M y y y to d t	0	c	This project would replace an aging, undersized distribution system and bring it up to modern standards. The system was installed in 1952. It has undersized 4" asbestos concrete mains, ineffective wharf style hydrants, and leaky control valves. Concerns also include small cracks in a concrete storage tank(37K gals) due for replacement in this project. The tank needs a seismic upgrade to insure and provide reliability. The system has also experienced multiple copper service line leaks in recent years. The service lines are in need of individual meters at all 85 hookups for purposes of leak detection and as incentives for conservation efforts. The Water Co. has been digitally monitoring the static/dynamic groundwater well levels in recent years to build a data baseline. It appears this well sits on adequate groundwater supply for future delivery. A delivery system redesign would also eliminate 'dead end' pockets, add needed blow off valves and include backflow devises to prevent cross-connections. These improvements would be necessary to complement the proposed well pumping portion of the overall system improvements.Further aging and deterioration of the delivery system could result in undetected leaks and an inability to provide adequate fire protection to protect private property.	2,921,830	85	264 18	Sonoma	U	2009
2383 1900303	1900303-001	LLANO MUTUAL WATER COMPANY	Llano Mutual Water Company	The project is a community water system consisting of 80-99 connections and purchases water from Llano de Rio Water Co #1900849. The system is in need of an additional water source, upgrades to their treatment equipment and or water storage tank.	М	0	С	The Water System is in need of an additional water source to meet the demands of the community, i.e new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	80	264 16	Los Angeles	IV	2008
2384 2701364	2701364-001	PEDRAZZI MWC		Drill a new well and tie it into the existing system.	М	0	С	Water system needs to add a new well to improve supply reliability.	561,050	96	273 05	Monterey	П	1998
2385 4100503	4100503-001	BUTANO CANYON MUTUAL		Install new distribution system of high density polyethylene, with 96 metered connections and a new 40,000 gallon header tank at higher elevation.	М	0	С	Mains in poor condition, not in compliance with WW Standards., Low pressure.	450,000	92	276 17	San Mateo	II	1998
2386 4100503	4100503-003	BUTANO CANYON MUTUAL	Storage Tank Replacemen	t Project involves the purchase and delivery of two (2) new glass-fused-to-steel 60,000 gallon replacement tanks which will have to be down loaded from a 40ft flatbed to a smaller truck for delivery over 3 miles of a very narrow, winding road through a redwood forest. Erection of these two tanks will be completed on site after removal of exsisting steel bolt-up tanks which will need to be recycled. After in-depth study and research, we found this to be the most cost effective way to maintain our safe drinking water for the members of our mutual water company now and for generations to come. We also feel that these new tanks will allow us to continue to provide non-contaminated drinking water to our members.	M	0	c	After completeing a tank inspection and cleaning, it has been determined that our two (2ea) sixty thousand (60,000) gallon bolt-up drinking water storage tanks are in need of replacement due to old age, deterioration and interior rust. Tanks are located in a remote area which increases the cost of replacement due to additional circumstances involved in delivery and erection of these storage tanks. Our remote location has in the past caused us to not be reached by emergency response services in times of disaster. Therefore we feel it is important and necessary to have adequate drinking water storage contained in clean, rust-free, safe storage facilities. The physical state of the interior of these two tanks may also be the reason our Tinalomethanes test results are exceeding the MCL.	200,000	92	276 17	San Mateo	Π	2007

# 2387 3200188 3200188-005 Greenhorn Creek Services District Water Tank installation

### and well pump replacement

Greenhorn Creek Community Services DistrictProject M DescriptionThe study completed by Shaw Engineering found that the existing water system does not have adequate storage facilities to meet the requirements for Operational and Emergency Storage. The Project includes installation of a 100,000 Gallon Storage Tank, 1,600 ft of 6" water main, a new well pump and controls at our existing well number 1. This project also includes the cost of the engineering report. Project to provide a safe and reliable water supply to our community. 0

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Greenhorn Creek Community Services DistrictProblem DescriptionThe Greenhorn Creek Community Services District is located approximately ten miles East of Quincy California. The CSD was formed in 1975 and provides water and fire protection to the community. The CSD contracted with Shaw Engineering in March 2005 to review the water system and make recommendations to correct the problems with our system. The Master Plan identified the need for additional Operational and Emergency Water Storage along with numerous repairs. This project would provide funding to correct the Water Shortage. The CSD contracted with Shaw Engineering in November 2005 to produce a Rate Survey and a Preliminary Engineering Report. The Preliminary Engineering Report, including environmental review, was completed and the CSD agreed to increase our water storage and bring our "Stand By" well into operation. The CSD completed the "218" process in June 2006. In July 2006 the CSD increased water rates to reflect the true cost of Operations and to provide money for Future Capital Improvement Debt Service. In February 2008 we obtained a loan from The USDA for \$250,000 to provide partial funding for the estimated \$265,000 project. I September 2008 Shaw Engineering reviewed the project 213.000

90

280 02

Plumas

2009

and increased the Project Budget estimate from \$265,000 to \$400,000. In January 2009 A surveyor was Campo is an unincorporated community located in southeastern San Diego County, California with a population close to 640. Water service for the community is provided by a County Water Maintenance District via two separate drinking water systems -Rancho Del Campo (RDC, ID: 3700859) and Campo Hills (CH, ID: 3710047). The RDC Water System serves 110 connections including residential, commercial, and public agency customers, including Border Patrol and Sheriff's Stations, Fire station, community purpose facilities, and health care facilities. The RDC Water System was originally constructed by the Federal Government in the early 1900's with ownership subsequently transferred to the County of San Diego in the 1940s. The system consists of two 110 ft and one 170 ft deep active wells with a total design capacity of 330 gpm, approximately 6 miles of distribution mains, and two storage tanks with a maximum capacity of 860.000 gallons. Groundwater from RDC Water System is treated for naturally occurring uranium contamination. The level of uranium and gross alpha monitored in the wells are 22-37 pCi/L and 27-32 pCi/L respectively exceeding MCL. A Boil Water Order for an E Coli present in sample and a Compliance Order for unauthorized release of uranium were issued for the water system in 2006 and 2008 respectively. Due to the age of the system, the existing well pumps are

2,500,000 110 290 14 San Diego V 2009

# 2388 3700859 3700859-001 RANCHO DEL CAMPO WATER SYSTEM Well Improvement and

Consolidation of Campo Water Maintenance District Systems The Rancho Del Campo Water System requires urgent M improvement of aging and worn wells, pumps, and associated equipment. The Campo Hills Water System faces serious water quality problems such as high concentrations of uranium, nitrate, iron, manganese, lead and copper resulting in high operational costs and health and safety concerns. The two systems currently have an emergency interconnection that relies on a booster pump and pressure reducing valves to allow supply to be conveyed between the systems. The deepwell Rancho Del Campo supply can be expanded to provide sufficient capacity to serve both of the water systems, resulting in a high quality, reliable water supply for the entire District service area. The Campo Water Maintenance District proposes construction of additional new drinking water wells. The water basin at Campo Hills area is shallower and contains higher concentration of uranium in comparison with Rancho del Campo. Proposed water wells shall be constructed within the Rancho Del Campo Water System to allow for consolidation of the Rancho Del Campo and Campo Hills Water Systems. The project includes construction of new wells, installation of submersible well pumps, installation of emergency generator, installation of one uranium treatment system, improvement of the system interconnection piping, fittings, and valves, and improvements to associated controls. Each well will

2389 5800924	5800924-002	CAMPTONVILLE COMM. SERV. DIST	Camptonville Water Quantity Compliance & Upgrade	The preliminary budget and work plan submitted are based on an initial evaluation by Walters Engineering, Reno, NV. This project needs an engineered Scope of Work, then the Engineering Master Plan, a CEQA and California Department of Health permit. The Yuba County Water Agency will fund the cost of engineering this project this year. The water treatment plant's capacity will be expanded to provide up to 150,000 gallons of water a day. The expansion beyond the current 108,000 gallon a day is from one additional 22,000 gallon per day slow sand filter box as in the original plans - and installation of a green sand filter to remove the iron and manganese from the well water for another additional 20,000 gallons per day. Adequat space exists at the site for both of these units. The additional slow sand filter box will need to be enclosed and added on to the existing water plant structure. A space already exists for the green sand filter. Both the ewe filters will be plumbed into the existing distributio system. A new, reliable water source will be developed and connected to the treatment plant.Preliminary Wor Plan and ScheduleMonth 1 (September-December, 2012)Task 1.Planning/Design/EngineeringSubtask 1.3 Engineering/Design/EngineeringSubtask 1.3 Engineering/Design of new tank, additional filter boxes and plumbingSubtask 1.4 Determine new well site and	e k	0	C	Camptonville has water quantity problems caused by periodic drought, insufficient water treatment and storage. Two year drought cycles have occurred five times in the last 20 years. In the late summer, Camptonville's water sources decrease substantially in volume. Climate change may increase periods of drought and low water source volume. The existing pipe from Camptonville's main water source, Campbell Gulch, can deliver up to 200,000 gallons of water a day to the treatment plant. Two stand-by wells are unreliable. For short periods, they can produce up to 20,000 gallons a day. These wells are not used except in extreme emergencies due to high iron and manganese levels. The water treatment plant and distribution system were built in 1990. The plant was originally designed for six sand filters but only five were installed. It has a chlorinator and a 64,000 gallon storage tank. The water distribution system has 72 connections, which includes a public school and three businesses. The bolted steel panel storage tank has been inspected and maintained. It is currently serviceable but will eventually need to be replaced. The treatment plant has a maximum output of 108,000 gallons a day. The three year average summer water use is 60,000 gallons a day. Peak usage on multiple summer days has been up to 120,000 gallons a day. The treatment plant at times is unable to supply the water demanded by users.	762,090	72	300 21	Yuba	1	2012
2390 3110042	3110042-006	Tahoe Swiss Village Utility	Tahoe Swiss Village Utility Sierra Vista Ave. Water Storage Tank	<ul> <li>Tahoe Swiss Village Utility (TS) would build a very much needed large diameter water storage tank. This 400,000 gallon bolted steel tank would allow the TS system have water for a full day of peak demands. There would be approximately 600 feet of 8" main installed to distribute water from this new storage facility. There would be valves and the telemetry system would be relocated to the proposed new tank. The exisiting 50,000 gallon tank could then be tanken out of service for a through rehabilitation and recoating Then put back into service.</li> </ul>	n M	0	с	Tahoe Swiss Village Utility (TS) years ago, for a tank site, purchased a vacant lot for \$12,000. This lot is adjacent to a very small 50,000 gallon water storage tank. This tank supplys storage for 95% of the TS system. Peak day demand is 400,000 gallons per day. When there is a source out of service water would not be available to serve its customers. American Waterworks Association standard practice recommend that a water systems have at least one day supply of water to serve its customers. Additionally, fire protection would be enhanced. The state and local fire protection laws require fireflows shall be available for two hours.	875,000	378	300 02	Placer	1	2009
2391 1000298	1000298-001	WOODWARD BLUFFS MHP	Drill a new well to	Drill a new well or interconnection	м	0	С	Single well system, if it fails, the system is out of water.	200,000	167	300 23	Fresno	Ш	2008
2392 1600002	1600002-001	EL DORADO MOBILE PARK	El Dorado MHP Back-up Well	This community is served by one well. If drought conditions persist, the current well could be vulnerable to shortages.	м	0	с	The El Dorado MHP has over 100 connections and serves a population that exceeds 300. Currently the park is served by one well with no back-up. There is an older well onsite that is damaged and could possibly be repaired (or properly distroyed).	500,000	108	300 12	Kings	Ш	2008
2393 5800924	5800924-001	CAMPTONVILLE COMM. SERV. DIST		Discover and develop water supply spring or well. Construct 1200 feet of 6" mainline. Construct new storage tank	М	0	С	Insufficient water supply. Dead ends in watermains. Insufficient storage.	94,000	72	300 21	Yuba	I	1998
2394 3110043	3110043-006	Madden Creek Water Company	Mutual aid booster pump	Bidirectional Booster pump to force water as needed during emergencys into system needing water	м	0	с	Pump station electronics and hardware to push water into neighboring system or from neighboring system in order to develop mutual aid for domestic and fire services during emergency conditions. Would be a joint project with Tahoe Swiss village if approved. Would address problems with storage and redundant sourcing and increase emergency fire flows.	50,000	154	300 02	Placer	I	2011
2395 3110043	3110043-003	Madden Creek Water Company	redundant well	install additional well and monitoring equipment	М	0	с	currently we lack adequate backup supply	500,000	154	300 02	Placer	1	2009
2396 3110043 2397 3900805	3110043-005 3900805-001	Madden Creek Water Company MOREHEAD PARK	additional storage Morehead Park Well Replacement	add storage tank meeting requirements Replace distribution system, drill new well, and add storage tank.	M M	0 0	C C	current storage does not meet atandaeds Old system with leaking distribution, well at end of useful life.	150,000 1,500,000	154 108	300 02 300 10	Placer San Joaquin	I III	2009 2006

2398 3110043	3110043-004	Madden Creek Water Company	highway 89 homewood fire protection	install 8" pipe with fire hydrants at 450 ft intervals M	0	С	currently most of hiway 89 is served by a conglomeration of 2" and lessor main pipeline. This pipe is unable to surply fire flows	1,166,000	154	300 02	Placer	I	2009
2399 4300563	4300563-002	Mt. Pleasant Water Users Association	Seismic retrofit lower tanks	(2) first level storage tanks are potentially able to move M off their foundations in an earthquake of sufficient magnitude. These tanks could also topple over and roll downhill through homes below them. An engineering study needs to be conducted first to determine the appropriate method of securing the tanks, eg. cable tie downs to cement piers. Based on the engineering study conclusions, it's possible that heavy drilling equipment and crane would have to be used to temporarily move each tank so that piers or other anchor could be constructed. The tanks would then have to be secured using appropriate cables or other means of securing tanks to their surroundings.	0	С	First level storage tanks are not strapped down. In the event of a serious earthquake, the tanks could move enough to break incoming and outgoing connections or even tip over and roll downhill.	250,000	70	300 17	Santa Clara	II	2008
2400 1900301	1900301-001	SHADOW ACRES MUTUAL WATER CO		TIE THE DEAD-ENDS TOGETHER AND LOOP OUR ENTIRE M DISTRIBUTION SYSTEM	0	C	9 DEAD-ENDS RESULTING IN LOW PRESSURES AT THE HIGHER ELEVATION AREA	280,000	115	300 16	Los Angeles	IV	1998
2401 4300563	4300563-001	Mt. Pleasant Water Users Association	Old pipe replacement Mt. Pleasant Rd. toward Quimby Rd.	A water distribution line made up of war surplus pipe is M in need of immediate replacement under approximately 1 mile of roadway. The pipe is rusting and has become very brittle. A major break in this line could drain the first level of storage tanks and leave much of the system dry until repairs are completed. This line has suffered increasing breaks recently and is highly susceptible to breakage due to minor earth movement and the heavier road traffic such as garbage trucks. The surplus pipe will be replaced with pvc and isolation valves will be added to provide a long-term, reliable delivery system.	0	С	Old surplus pipe from the 40's and 50's is in use to supply water users. This pipe was never intended to be used for as many years as it has. Breaks are becoming more frequent and more difficult to repair as it is extremely brittle. A large break could result in loss of water to most users and it would drain the first level of storage tanks.	250,000	70	300 17	Santa Clara	Π	2008
2402 2910011	2910011-002	PlaVada Community Association	Water Well and Storage Tank Replacement Project	Specific proposed facilities included in this project are the following: Distallation of a 130,000-gallon steel water storage tank on Assessor's Parcel 47-430-04. Construction of approximately 120 lineal feet of access road and about 200 lineal feet of 4-inch water pipeline to connect the new water storage tank to the existing Association water distribution system on Assessor's Parcel 47-430-04. Construction of approximately 1,900 lineal feet of 6- inch water pipeline on Assessor's Parcel 47-430-06. Construction of approximately 1,900 lineal feet of 6- inch water pipeline on Assessor's Parcel 47-430-06 to connect the new well to the existing Association water distribution system. Installation of a pressure reducing station at the existing booster pump station. Construction of approximately 280 lineal feet of 4-inch water pipeline between Jeffrey Pine Drive and Manzanita Terrace on Assessor's Parcel 47-430-04. Construction of approximately Pine Drive on Assessor's Parcel 47-430-04 to provide ample water pressure for residents along Jeffrey Pine Drive.	0	c	The proposed project includes a new water well, a new water storage tank, water pipelines and appurtenant facilities for the Pla-Vada Community Association (Association) located in the County of Nevada, CA (County). The new well will replace a spring fed water supply that was previously taken out of service at the direction of the California Department of Public Health. The new water storage tank will replace an existing small redwood water storage tank that is substandard and unreliable. The new pipelines and other facilities noted below are required to connect the well and tank to the Association water distribution system and provide adequate pressures.	696,624	230	300 21	Nevada	1	2009
2403 1000056	1000056-001	MEADOW LAKES CLUB		Additional source and upgrade distribution system. M	0	с	Water system currently has only 1 operating well for 132 connections. Distribution system is old.	2,500,000	129	300 23	Fresno	ш	2004

2404 3110042	3110042-005	Tahoe Swiss Village Utility	TSVU Grand Ave. pipeline and highway 89 crossing	The proposed project is to replace 4" steel main ant to install approximately 1400 feet of 8" watermain, valves, fittings, three fire hydrants there is a bore or open trench dig across State Highway 89. The replacement of the old distribution main will enhance the public health and safety of the public, additionally, fire protection will be enhanced. The rate payers will benefit with less energy used in the production water because the pumps will be much more efficient.	Μ	0	с	TSVU has two approved sources of supply and one unfiltered lake source that feed the entire service area. The two approved 250 GPM groundwater sources intersect at a four inch main. The hydraulics at that intersection create for inefficiencies of the two submersible pumps; therefore more electricity is used than necessary. Each pump increases its pressure, working against each other, which in turn means a loss of water production. The pumps are working outside of the recommended pump curve.	412,000	378	300 02	Placer	I	2009
2405 1500542	1500542-002	WILLOW SPRINGS MOBILE HOME PARK	DRILL A WELL FOR INCREASING SOURCE CAPACITY	FUNDS NEEDED TO DRILL A SECOND WELL FOR THIS WATER SYSTEM. THE GOAL IS TO ENSURE SERVED PEOPLE OF A RELIABLE DOMESTIC WATER SUPPLY.	М	0	с	With only one hard rock well as a source of water supply, this public water system is deemed to have unreliable source capacity.	200,000	55	300 19	Kern	Ш	2008
2406 1900301	1900301-002	SHADOW ACRES MUTUAL WATER CO		INSTALL A BOOSTER SYSTEM NEAR THE WHOLESALER'S WATER TURNOUT.	М	0	С	WATER PRESSURE FLUCTUATES EXCESSIVELY (UP TO 0.5 NOMINAL) IN THE SUMMER DUE TO DEMANDS ON BOTH THE WATER WHOLSALER'S SYSTEM AND OUR USER DEMANDS.	130,000	115	300 16	Los Angeles	IV	1998
2407 3110047	3110047-001	Talmont Resort Improvement District		Need new well. Install pressure tank and pressure	М	0	с	Old, single source well - diminshing GPM. Upper	150,000	315	300 02	Placer	I	1998
2408 1700526	1700526-003	Pine Grove Water System	PINE GROVE STORAGE TANK REPLACEMENT	pumps. The project entails meeting the surface water treatment rule, and must be thought of in those terms. The condition of these tanks goes beyond what might be deemed acceptable, and should be given the highest priority. The amount of the project may fluctuate due to the limited access for equipment, however the request is adequate to insure progress can be made.	Μ	0	с	pressure system in deteriorating. The Pine Grove Water System is operated by the Cobb Area Coounty Water District under court ordered receivership. The system is considered "under the influence of surface water", and must meet the Surface Water Treatment Rule. Part of this requirement is to have adequate storage. Currently the four (4) redwood tanks that are in use are in very bad condition, leak excessivly and are structuraly unsound. Due to the terain the tanks are spotted in three different locations, and access to the tank sites is severely limited. The ability to continue to meet the Surface Water Treatment Rule is tenuous at best.	75,000	91	304 03	Lake	Π	2009
2409 5500077	5500077-001	SLIDE INN SNOWBOWL WATER CO		Upgrade and replace existing pipelines and install new tank already purchased. OTHER-Refinance and Design	М	0	с	Water and pipelines 30 to 40 years old. Some existint pipe is not to PUC Standards. Waterlines running above surface-approx 1000 ft	125,000	100	315 11	Tuolumne	Ш	1998
2410 5500077	5500077-004	SLIDE INN SNOWBOWL WATER CO	Slide Inn Snowbowl Water Co Phase 2 - New Mains	Slide Inn Snowbowl Water Company Phase II – New Mains Project Scope. To be able to put in new water mains (20) (water infrastructure) this project will need an engineer consulted, the construction and manpower to remove old piping and replace 20 mains with new piping (valves, piping, modern fire hydrants, valve boxes, etc.), equipment rented for a length of time, other materials (sand, cement, asphalt, etc.), aqua testing when needed, and laborers. The project will require the participation of an engineer, equipment rental company, aqua testing company and laborers. Old piping would need to be removed and hauled away. The water district is located at 5,200 feet in the Sierra Nevada Mountains; we have a window of 9 months out of the year to work on this project. If funding can be made available, we would start this project at the end of March 2011 and work until the beginning of December 2011 and so on until it is completed. We have sent to the California Department of Health a map for your perusal to get an idea of area needing new mains. Having a new water infrastructure (20 new mains) would stop many of the water outages our customers have been experiencing for years and give our customers a reliable water source.	Μ	0	c	Slide Inn Snowbowl Water Company is requesting your assistance to complete our Phase II New Mains Project. Slide Inn Snowbowl Water Company is located in Long Barn, CA on Highway 108 in Tuolume County. We provide water for 134 water connections (500 population) to individual property owners in the municipality of Long Barn. Documentation will show that we have more customers today 134 connections and the population of our area has increased as a result than what you have record for. 90% of the pipe that exists at the water company is antique 4" (Welded Steel Pipe - inadequate) and 40 to 50 years old; as a consequence, through the years has multiple breaks that have been patched everywhere. In more than half the area the piping is only 2". The result is that customers consistently have water outages that last for sometimes hours or even days and the water pressure is low. There are a total of 20 mains in the Slide Inn Snowbowl Water Company and there is not a pipe that hasn't been patched. The mains would consist of a total of 5 miles of pipe being replaced with 6 " pipe giving customers adequate water pressure and allow every house to be readied for a meter. Much of the pipe is visible because of erosion through the years and as a result the piping is exposed and taking a beating. In recent times, we had a home burn to the ground and with that came the wake-up call of not the ground and	365,000	100	315 11	Tuolumne	Π	2011

2411 4600017	4600017-001	R.R. Lewis Small WC		Replace 2300 feet of 2" and 3" pipe with 4" pipe. Install new storage reservoirs. Purchase emergency chlorination equipment	IM	0	с	Distribution system pressure and flow problems. Replace old concrete storage tanks.	230,100	124	324 02	Sierra	I	1998
2412 4600017	4600017-002	R.R. Lewis Small WC	Installation of permanent chlorination And storage facility replacement	Project is a B rated project. The primary purpose is to install a permanent chlorination facility and approximately 1200ft of piping to act as the contact tank prior to being inserted into the distribution system The chlorinated water will be back fed into the the existing piping through connections to cover all services upstream of the new insertion point. All Anderson Spring Water will be chlorinated. In addition, an existing 5000 gallon spring storage tank will be removed and replaced with either two horizontal 10000 gallon o two vertical 15000 gallon steel tanks (Alternates A and B in the bid package). The water company has spent over 5 years finalizing a placement of the chlorinator facility and its design with the county planning and building department as well as securing the necessary permits to complete the project.	M s d r	0	с	Currently operating under a Health Department Order to install permanent chlorination on the Anderson Spring since 2002. Have operated on a temporary system with the temporary permission of the forest service since 1999 in order to comply with health standards	286,500	124	324 02	Sierra	I	2009
2413 4600017	4600017-003	R.R. Lewis Small WC	Wixson and Unnamed Spring storage, piping and chlorination, plus system piping upgrades and deadend	<ol> <li>Complete chlorination of both the Wixson and unnamed springs for the RR Lewis customers bringing all water used within its service area to chlorinated water as Anderson Spring is already being chlorinated.</li> <li>An additional 30,000 gallons of storage available on a spring that collapsed three years ago leaving an entire area supported by minimum water for home use and trucked water for irrigation. Additional spring work will be done this fall to muck out the overburden in the tunnel area again. This storage will replace a 50 year old leaking concrete tank of 15000 gallon capacity whidi will be left on line for the mutual water companies.3. Replacement of 60 year old 2" pipe with a life of 40 years with 4" and 2" PVC piping eliminating a main area of leak repair for the water company and allowing service to the area from either spring as well as eliminating 2 dead end lines.4. Looping 4 other lines to eliminate dead ends and allow for continuous water flow.</li> </ol>	M a h	0	c	Wixson Spring has been consistent in its violation of the bacterioligal standards. The unnamed spring, which is a part of this system, has not been able to be put on line for over 8 years as it will not meet coliform standards. Because this is a "shared" source with mutual water companies, they have refused to permanantly chlorinate, replace a 50 year old leaking concrete tank, or even to disinfect the system when required to do so in that they do not want chlorine in their systems. The State has not forced the issue of compliance with them but has put the issue of compliance at our door step. The proposal includes a complete separation of the system with our own tanks, lines, and chlorination for the benefit of our ratepayers so that we can have unlimited use of our water rights to these springs in order to serve safe water to our customers without having to incur the expense of maintaining the system unsupported. Our main spring, Anderson Spring, is already being chlorinated. The second portion of the project involves installing 2000' of piping to replace 2" orangeburg polypipe installed in the 1950's that is rapidly failing. In addition, there are 2 other dead end piping lines that must be looped (500') to eliminate their dead ends withing the existing distribution system. Our current Prop 50 project will eliminate 1 such situation. The project 18 to sale account is a such situation.	362,728	124	324 02	Sierra	1	2011
2414 3600089	3600089-004	Desert Springs MWC	Pipeline replacement	Replace with C-900 Class 200	м	0	С	Pipes laid 55 yrs ago. They are sending every cent they get to keep nineline up	450,000	65	325 13	San Bernardino	V	2004
2415 2300514	2300514-001	Elk County Water District		Replace distribution system with new mains.	м	0	с	Undersized steel water main in poor physical condition.	650,000	87	326 03	Mendocino	Ш	2001
2416 3301879	3301879-003	Sharondale Mesa HOA	energency power for water pumps	Purchase and Install a propane fueled 440 v 115 kw Engine Alternator, associated propane tank and stepdown transformer(to serve chlorination equip). This unit and its associated equipment will power 1 Electric pump motor and water treatment equip at a time to fill our storage tank. Allowing continued fire protection and drinking water.	Μ	0	с	In the event of a prolonged power outage our community would be without water.Because of our location we only have one power feed into our community. In the event of an Earthquake there is a very high probability we would lose electric power. We would not be able to fight fires, use sewer and would only have drinking water for three days at the most.Installing an emergency power unit would allow us as a community to exist without outside support until utilities could be restored.	100,000	220	330 20	Riverside	v	2011
2417 2610004	2610004-002	JUNE LAKE P.U.DDOWN CANYON	Down Canyon pipeline replacement program	Need to replace and enlarge 1356 feet of pipeline with 6-inch ductile iron pipe.	Μ	0	С	Replacement and enlargement of pipelines needed to improve system performance throughout the Down Canyon service area.	230,000	351	330 13	Mono	V	2009

2418 2610002	2610002-003	JUNE LAKE PUD VILLAGE	Pipeline replacement program	Need to replace and enlarge old, undersized pipeline with 270-feet of pipeline with 8-inch ductile iron pipe and 9,829-feet of pipeline with 6-inch ductile iron pipe. This will improve the availability of fire flows throughout major residential and commercial regions within the Village System.	Μ	0	с	Need to improve the availability of fire flows throughout major residential and commercial regions within the Village System by replacing and enlarging 270- feet of old, undersized pipeline with 8-inch ductile iron pipe and 9,829-feet of old, undersized pipeline with 6- inch ductile iron pipe.	1,742,900	311	330 13	Mono	V	2009
2419 2610004	2610004-003	JUNE LAKE P.U.DDOWN CANYON	Clark Well Construction	Construction of a groundwater well to supplement existing surface water supplies. Project will include drilling, construction and testing of the well.	Μ	0	с	Down Canyon water system experiences significant water quantity problems caused by surface water source capacity that is insufficient to supply current demands. Public notices have been distributed asking customers to conserve water. District established a water management program in 2008 that lists three water conservation stages with regards to supply and demand of available water supplies. Stage 1 - Normal conditions are always in effect.	150,000	351	330 13	Mono	V	2009
2420 1400004 2421 4900570	1400004-001 4900570-003	Charles Brown Water Company Palomino Lakes Mutual Water Co.	Tank #2 replacement	Replace distribution system piping Replace the existing 15,000 gallon redwood tank with a 25,000 gallon steel tank. Preliminary geo-technical work has been completed and shows the site suitable for the increased capacity. The redwood tank will be replaced with temporary storage (a tank or tanker) and dismantled. Following necessary base preparation, a bolt-together steel tank will be erected, filled and tested. Upon successful completion of testing, the tank will be brought on line and temporary storage disconnected and removed.	M	0 0	c c	Inadequate distribution system piping Tank #2, a thirty year old, 15,000 gallon redwood tank, is of insufficient capacity and is nearing the end of its useful life. This tank serves forty-five residential connections and is unable to support peak daily demand without repeated refilling during the day. The tank has minor leaks and seepage which contributes to algae growth on, and in the vicinity of, the tank. The tank has been damaged by woodpeckers and, since it has a large screened vent area, is subject to insect intrusion and to dust and dirt penetrating the screen.	100,000 45,000	100 110	330 13 340 18	Inyo Sonoma	V II	1998 2008
2422 3702354	3702354-002	WARNER SPRINGS ESTATES	Warner Springs Estates/Stone Ridge Well #8 Generator	Purchase and install a generator at Well #8. A concrete base, storage structure, propane and electrical connections, appropriate engineering consulatation, etc. will be needed. Propane lines run throughout the community and is the only fuel source; however, additional lines must be installed to this are and will require trenching, etc. for installation at Well 8. If it is not feasible to do this, a propane tank system will need to be installed at the generator site. This may involve a land environmetal study. Site preparation must be done. Engineers, surveyors and a project manager will be needed, plans drawn and approved, permits obtained, as well as interested professional companies contracted with to complete the work in accordance with all laws and ordinances. Due to Warner Springs Estates location, disposal of construction trash/ hazardous materials is costly, requiring the materials to be transported to approved disposal sites 40 or more miles away. Any damage to community streets will need to be repaired. The \$200,000 is an estimate until professional engineers and other consultants can be funded to advise our homeowners associaton and management.	M	0	c	During power outages, water distribution/access is very limited and when outages are for long periods of time, without a generator to provide power to run the Well #8 pumping system, it is impossible to provide water to residents. Warner Springs Estates/Stone Ridge is located 8 miles north of Warner Springs and 30 miles south of Temecula is the 'San Diego Backcountry.' It is a 55+ incorporated condominium community pf 300 lots and approximately 400 residentsa 'mini city' with it's own wells, sewer treatment plant, electrical transformers, private streets, etc. which was established about 35 years ago. We are totally dependent on our well water with no access to other water sources in the area. During prolonged outages and until our 240,000 gallon water storage tank drains, limited water is a vailable via gravity. Many of our older homeowners and those who are disabled are challenged without water and cannot relocate temporarily when these outages happen. In addition should a wildfire or other catastrophe occur, lack of water is a major concern, not only for our community but also for local, state and federal fire agencies who may access our fast-fill hose connection from Well #8 which pumps 150 gallons per minute.	200,000	227	340 14	San Diego	v	2007

2423 4900570	4900570-002	Palomino Lakes Mutual Water Co.	Tank #1a replacement	Remove the existing 15,000 gallon redwood tank and replace its capacity by adding to an existing adjacent 15,000 gallon bolt-together steel tank. The project involves the removal of the roof of the steel tank and adding an eight foot section to the tank. The additional section will increase the tank capacity to 25,000 gallons The tank center support, overflow tube, ladder and gauge will be extended or replaced as necessary. The roof will be replaced and the tank filled and tested. Upon completion of testing, the steel tank will be brought on line, and the redwood tank dismantled. Preliminary engineering work has been completed and indicates that both the steel tank and its existing base are capable of supporting the capacity increase.	M	0	c	Tank #1a, a thirty year old, 15,000 gallon redwood tank, is nearing the end of its useful life. The surface of the tank is checked and deteriorated from weather damage and exposure. The tank has leaks and seepage which contribute to algae growth on, and in the vicinity of, the tank. The tank has been damaged by woodpeckers and, since it has a large screened vent area, is subject to insect intrusion and to dust and dirt penetrating the screen.	15,000	110	340 18	Sonoma	Ι	2008
2424 1510016	1510016-005	RAND COMMUNITIES CWD - RANDSBURG	Water Supply Pipeline Replacement	The proposed proejct is to replace the existing 7.4 miles of 4-inch pipeline with 6-inch C-900 PVC pipeline from the wells to the storage tanks. This will prevent critical water loss, especially in the current drought conditions, and reduce the potential for coliform bacteria contamination.	5 M	0	c	The existing water supply pipeline runs 7.4 miles from the wells up 1,470 feet of elevation via 3 booster stations to the storage tanks. The transmission pipeline from the wells is 4-inch Schedule 40 PVC and was not properly bedded in the mostly rocky area. RCWD has been experiencing very frequent pipeline leaks and repairs. As a result, the system suffers significant water quality and quantity problems and water supply outages because the water supply pipeline is unavailable or contaminated because of breaks and leaks.A citation for noncompliance was issued in May 2006 for exceedance of the total coliform maximum contaminant level (MCL) that most likely resulted from leaks in the pipelines.	3,900,000	295	344 19	Kern	111	2009
2425 2701254	2701254-001	CARMEL RIVIERA MWC	Raw Water Tank	Drill one or two new wells with the assistance of a Groundwater Geologist to obtain at least 50 gpm of sustainable yield of good quality ground water.	М	0	С	Additional well is needed for system reliability.	250,000	185	350 05	Monterey	II	1998
2426 4400595	4400595-001	VILLA DEL MONTE MWC		Replace distribution system.	м	0	С	Distribution lines need to be replaced - interruptions in	490,256	117	350 05	Santa Cruz	Ш	1998
2427 4400571	4400571-015	DAVENPORT COUNTY SANITATION	Davenport Water Distribution Lines	Davenport Water Distribution Lines Replacement ProjectThe purpose of this project is to replace water distribution lines and service lines in the community of Davenport. Valves and blowoffs will be installed in appropriate locations. Minimum separation requirements will be established or maintained for water lines and sanitary sewer lines or septic systems. All work will occur within County road rights-of-way. Water line design and construction will conform to state standards and the requirements of CDPH. The project consists of the following components which are identified as the highest priority in the Capital Improvement Program: 1. Install blowoffs at the ends o Ocean, Davenport, Fair and Center streets2. Replace 2300' If of undersized (less than 4" diameter) mains serving Old Coast Road (east of Fair Ave), western Marine View, and Third Ave., and other water mains in poor condition. Abandon all existing small diameter water mains along Highway One from Third Ave to First Ave and from Marine View to Fair Ave.4. Replace service lines from the water mains to the property line oredge of easement . 5. Replace main valves6. Install backflow preventers as required in accordance withTitle 17, Chapter V, Sections 7583-7622 of the California Administrative Code7. Identify illegal connections and add them to the system. 8. Keep the public informed	M f	0	c	Devenport Water Distribution Lines ProjectSetting:The community of Davenport in coastal Santa Cruz County has a permanent population of about 400 residents. A 2008 income survey documents that the community has a median household income of \$39,999 which classifies it as an economically Disadvantaged Community. The community is primarily residential. Davenport Sanitation District provides drinking water treatment and wastewater services to the community. Drinking water is supplied from San Vicente Creek . Citizens of Davenport have been under boil-water orders periodically since 2005, because the water treatment plant does not meet the California Surface Water Treatment Rule (Title 22, Sections 64650-64666). The water system does not meet state treatment standards for turbidity, Giardia or Cryptosporidium. Residents receive quarterly notifications warning them of potential health risks associated with the drinking water. The most recent notice was issued in February 2009. The treatment plant will be upgraded in 2009 with funding from: increased rates, assistance from a CDPH SDWSRF loan and grant, and a Prop 50 IRWM grant from the State Water Board. The District has also applied for Economic Stimulus funding for the treatment plant as a precaution, since repayments on Prop 50 grants are "frozen" indefinitely. Problem to be Addressed With This Funding: The water distribution	530,000	130	350 05	Santa Cruz	Π	2009

2428 4400539	4400539-001	MANANA WOODS MUTUAL WATER CO		Replace lines, and install shut-off valves, meters, and purification filters	м	0	с	Pipes are aging and decaying.	50,000	109	350 05	Santa Cruz	Ш	1998
2429 3700924	3700924-004	LAKE MORENA VIEWS MW CO.	Consolidation of Lake Morena Views with Lake Morena Oak Shores	the initial desire was to replace the treatment system but that does not rank well and is expensive for O&M so consolidation is being considered. The other system, Lake Morena Oak Shores, is willing to discuss the concept and participate. Their system is only a block away from our system and should involve a simple tie in. Tie in sould include under 2000' of 8"-12" piping and associated valves.	М	0	c	Lake Morena Views water system consistantly exceeds the MCL for uranium and nitrates requiring continued treatement and blending. The treatment system is old and could need replacement at any time. Costs are such that treatment may not be affordable.	250,000	120	350 14	San Diego	v	2009
2430 3500509	3500509-002	Tres Pinos CWD	Tres Pinos Water District - Waterworks Improvement Project	The waterworks improvement project includes two new t 250,000 gallon water tanks, land purchase for tank site, new 800 gpm well, 12" pipelines: (Southside to Quien Sabe along Bolado; Third St., F to Airline; First St., F to Airline; Airline to Fifth St, down Southside) totaling 7,370 If. This project is needed to provide fire-flow to the residents of Tres Pinos and allow for new growth.	v M	0	с	The waterworks improvement project will supply fire flow to a community that currently does not have adequate fire flow; it will lift the moratorium on new connections which has been in effect for over 10 years. It also includes pipeline improvements which will replace aging pipes to provide reliable water supplies.	1,666,350	113	350 05	San Benito	Ι	2007
2431 5400966	5400966-001	WESTLAKE VILLAGE M H P	Emergency funding for drought related problems	New Well, Tank, Storage, distribution, and or consolidation to larger pws	М	0	С	Emergency funding due to drought related problems, storage, distribution and consolidation to larger pws.	500,000	139	350 12	Tulare	Ш	2008
2432 3301031	3301031-001	BANNING HTS. MUTUAL WATER CO.	System upgrades and storage improvements	Project will recoat/reline the 1 million gallon storage tank, and replace over 4000 feet of distribution and water main lines thus eliminating water loss and contaminations from line breaks.	М	0	С	System is old and failing. A new treatment system has been installed but now pipes need replacing and the water storage tank needs recoating to prevent water loss throughout the system and to minimize Bac T issues.	350,000	153	350 20	Riverside	V	2011
2433 5601105	5601105-001	FILLMORE IRRIGATION CO		Construct a new tank (125,000 gallons) at site that includes soil compaction, pad, erect new tank with earthquake anchors and signal devices for well pump.	М	0	с	Water storage capacity (125,000 gallons) does not meet title 22, water works standards requirements or the system size (150 service connections)	90,000	158	355 06	Ventura	IV	2002
2434 5601105	5601105-003	FILLMORE IRRIGATION CO	Well Replacement	The Board has elected to pursue the drilling of a new well in order to correct possible severe water shortage or outage problems caused by source watercapacity that is insufficient to supply current and/or unanticipated demand.Based on the previous development of Well #3, this is the preliminary estimate of activitis and costs needed to establish a new well: Permits, fees: \$5,000DII (200'): \$150,000 Pump: \$40,000 (based on 200HP motor, casing, pipe, bowls)VSD: \$15,000 (does not include labor nor SoCalEdison incentive)Water works: \$20,000 (gate valves, flow meter, check valve, surge tank)Infrastructure: \$10,000 (slab, pump house)Electrical: \$15,000 (parts & labor, elec panels, entrance)Misc Labor: \$15,000 (welding, connection to existing distribution lines)Total to establish new well: \$270,000Estimate does not include survey costs for well placement and explorary drilling ar well as purchase price for the land and any additional unanticipated labor and parts. This is estimated at approximately \$50,000 in additional to the above amount.	M e r	0	c	In the spring of 2010, well #2 owned by Fillmore Irrigation Company (FIC) began to experience issues with the pump sucking air, causing reduced capacity and potential for extensive damage to our distribution system. Well #2 was drilled prior to 1950 and was re- lined approximately 10 years ago with a mild steel, wire- wrapped liner. There is no existing documentation on the re-lining due to the company which performed the work ceasing operations. Apparently, all documentation was either lost or destroyed resulting in no engineering information as to the reason the well was re-lined nor the condition of the original casing at that time of re-lining.Video logging shows about 95% reduction in capacity for this well. Due to the age of the well, the major contractors in this are feel that there is significant risk in re-establishing this well. Therefore, the FIC Board has taken the well off-line, leaving us with a single source (well #3) that is at or near capacity for FIC needs, especially during the summer months. There is no easy way to establish an interface with a neighboring water company to serve domestic water. The Sespe Creek is adjacent to our service area, not allowing us to interface with the largest supplier in the area the City of Fillmore and the other water company in the area does not serve domestic water.This leaves the Company in dire conditions if our primary well fails.	250,000	158	355 06	Ventura	IV	2011
2435 5601105	5601105-002	FILLMORE IRRIGATION CO		Elevate casing head, pour new slab-realign discharge pipe-eliniate possibility of surface contamination	м	0	с	Slab around Well No. 2 drilled in 1946 is carcked and area at well head is lower than surrounding area (citrus orchard)	25,000	158	355 06	Ventura	IV	2002

2436 0600013	0600013-005	Princeton Water District	Well #1 - Arsenic Exceedance	Planning study to determine lowest cost, long term solution.	М	0	с	Arsenic ARA above 10 for last two quarters.NOTE: Current RAA (as of 9/2012) is OK, was over the MCL but system filled in the bottom section of the well and the RAA is OK now. District inform utility of compliance	500,000	118	356 21	Colusa	I	2012
2437 5500060	5500060-001	MI-WUK HEIGHTS MWC	Water Storage	Construct a new 200,000 gallon storage tank.	м	0	с	Need more water storage for system demand and fire	200,000	150	360 11	Tuolumne	ш	2006
2438 2000690	2000690-001	MD#73 QUARTZ MOUNTAIN	MD-73 water system quality and quanity enhancement	Install iron and manganese removal plant. Drill new hig production well.	gh M	0	с	now. System wells are high in iron the secondary MCL is 300 ppb system is currently at 2790 ppb. System is also exceeding secondary MCL for manganese MCL is 50 ppb and system is currently at 225 ppb. System is also exceeding secondary MCLs for color and turbidity. Color MCL is 15 units and system is at <20 units, and turbidity MCL is 5 NTU and system is currently at 16.07 NTU. Water system currently has inadequate water storage, production and distribution flow capacities to meet fire flow requirements and system demand. Water system is in a critical fire hazard zone which has a history of wildfires.	1,500,000	140	375 11	Madera	III	2007
2439 1700544	1700544-002	Lake County CSA 7 - Bonanza Springs		Conduct capacity analysis and develop master plan, study possibility of consolidation with Loc Lomand water system.	М	0	с	System needs a capacity analysis and master plan to comply with Lake County General Plan. Current deficiencies include extremely high turbidity in the source water.	50,000	151	375 03	Lake	II	1998
2440 0707576	0707576-001	PLEASANTIMES MUTUAL WATER CO		Install 4" minimum lines to replace 2" low pressure	М	0	с	Replace existing small size water main pipe that causes	550,000	190	380 04	Contra Costa	Ш	1998
2441 5400670	5400670-001	TRIPLE R MUTUAL WATER CO.		Blending treatment or drill new wells	М	0	с	Inadequate source reliability - 3 of 7 wells removed from service that exceed nitrate MCL.	100,000	130	400 12	Tulare	Ш	2001
2442 5400544	5400544-002	ALLENSWORTH C.S.D.	Allensworth Water Supply Reliability Project	Per the recommendations of the electrical engineer retained to assess the problem and recommend a solution, the proposed project solution is to install a radio telemetry system that will enable District personnel to read well and pump data from the Distric office, and control pump operation accordingly. This will end the system's dependence on the pressure system to control pump operation. Additionally, to address the water hammer problem, it is recommende that a 1,250 gallon hydro-pneumatic tank be installed a the well site. In addition, replacement and or bypassin of the electrical imbalance protector at Well #2 will be necessary.	M t at 96	0	c	The problem to be addressed by this project is twofold. The most urgent problem is that the newer and larger of Allensworth's two pumps, the 20 HP submersible, will not stay online (located at Well #2, west well), for reasons that have to do with an electrical imbalance and a "water hammer" effect caused by a pressure- based switch system and the long (3 mile) pipe length between the wells and the storage tank. The maintenance man is required to drive the 2-mile dirt road to the well sites to manually switch the pump back on, sometimes as often as 3 times per day. This road becomes impassable in the wet season, and is difficult to travel even in the dry season. Secondly, the well with the smaller pump (#1, east well, 7.5HP submersible) is borderline for arsenic contamination (with levels of 9- 12ppb). To achieve proper blending of the water from both wells, as well as meet the community's demand for water, it is necessary that the pump on Well #2 be functioning correctly.	200,000	110	400 12	Tulare	Π	2009
2443 1900146 2444 1900146	1900146-002 1900146-001	SUNNYSIDE FARMS MUTUAL SUNNYSIDE FARMS MUTUAL		DRILL NEW WELL. REPLACE TANK BOTTOM.	M M	0 0	c c	WELL IS CURRENTLY UNDERPRODUCING. SYSTEM HAS A 500,000 GALLON WATER TANK THAT THE BOTTOM RUSTED THROUGH AND DOES NOT HOLD WATER.	15,000 30,000	139 139	405 16 405 16	Los Angeles Los Angeles	IV IV	1998 1998

2445 1300616	1300616-004	PALO VERDE COUNTY WATER DIST.	Potable Water Pipeline	The project will tie two existing RV Parks into the PVCWD water system. The project will include approximately 2.5 miles of 8-inch C-900 PVC water pipeline from the southernmost termination of the existing PVCWD system. The pipeline will include required valves and other miscellaneous fittings to provide a system that will be able to provide healthy treated water to the RV Parks. A distribution pump station is not required as PVCWD has just installed a new one that is capable of delivering the additional flows for the proposed project, nor is any additional storage is required.	Μ	0	с	There are two mobile home parks approximately 2.5 miles southwest of the termination point of the existing water pipeline that belong to Palo Verde County Water District (PVCWD) - Two Palms and Coco Palm Mobile Home Parks. These parks do not have any water treatment facilities to provide healthy water to serve the residents of this park. These facilities are using well water from a local lagoon that has been found to contain outlawed pesticides and other deleterious contaminants. The proposed project would bring a potable water pipeline from PVCWD to serve the residents of these parks with potable water.	2,000,000	161	410 14	Imperial	v	2009
2446 1300616	1300616-005	PALO VERDE COUNTY WATER DIST.	storage tanks	Improve water quality by removing rust & iron content. Vehicle travel across the only access to the island property causes stress and breaks on the current pipeline.	м	0	С	Our two storage tanks (sizes 29' x 24' H) need major repairs. The metal covers are badly rusted and in need of replacement. The 8" inflow pipes are rusted and need replaced on the inside of the tanks. The bottom & sides need to be recoated. The inside ladder needs replaced due to rust. County Health Dept. requirement.Need to replace the 8" ductile distribution pipe under the 4th St. bridge, which currently ties beneath the bridge. Need a directional bore beneath the waterway, and replace with PE pipe.	450,000	161	410 14	Imperial	v	2011
2447 3600107 2448 1500475	3600107-001 1500475-001	Forest Park MWC KRISTA MUTUAL WATER COMPANY		Construct new sources and storage facilities Remove and replace pump and pump house. Install additional storage tank, replace 5000' of 8" trans. Pipeline, property and ROW for tank with piping. OTHER - Design and Construction	M M R	0 0	C C	Insufficient source and storage capacity Remove and replace pump and pump house. Install additional storage tank, replace 5000' of 8" trans. Pipeline, property and ROW for tank with piping. EXCEEDS FLUORIDE MCL.	150,000 300,000	83 177	415 13 428 19	San Bernardino Kern	V III	1998 1998
2449 4400598	4400598-004P	PURESOURCE WATER, INC	Planning	Drill and equip a new well, including appurtenances necessary to supply water to the system such as booster pump, pressure tank, and control system.	М	0	С	Lack of adequate source capacity resulting in water outages during periods of peak demand.	10,000	79	450 05	Santa Cruz	II	1999
2450 5301003	5301003-002	Lewiston Park MWC	Lewiston Park Mutual Storage Tank	Addding a second storage tank (<100,000 gallons) would allow the water system to manage their source capacity problems in the summer time. Additional storage would also greatly benefit Lewiston's ability to manage fires.Cost Basis:Replacement 100K gallon tank (materials, installation, painting)- \$150KDesign \$10KMob/demob and earthwork \$20KFoundation \$10KPermitting/easements \$5KProject Management \$10K	М	0	с	Problems:1. Source Capacity. Lewiston Park Mutual is supplied by groundwater wells year-round. However, they are unable to meet demand in the summer, and must supplement with surface water. California's drought and declining water table elevations have increased their source capacity problems.2. Fire Flows. Lewiston does not have adequate fire flow capacity. The loss of homes during the Lewiston Fire was extensive, largely due to limited available storage.	205,000	162	450 01	Trinity	I	2009
2451 1900649	1900649-001	GOLDEN SANDS MOBILE HOME PARK	Golden Sands Mobile Home Park	The project is a community water system consisting of 152-199 connections and a treated ground water source. The system is in need of an additional water source, upgrades to their treatment equipment and or water storage tank.	м	0	с	The Water System is in need of an additional water source to meet the demands of the community, i.e. new ground well. All details can be provided by the LPA- LA County Water Quality Program.	500,000	152	450 16	Los Angeles	IV	2008

2452 4400598	4400598-005	PURESOURCE WATER, INC	SCADA Control System	Project would consist of installing sensors of appropriate types at each of two wells, a booster pumping station and at a storage tank. It would connect these stations via land-line data transmission which would be internet-available, so that monitoring could be done from any computer with on-line access. The system would include battery backup so that it would be operational even during power outages.	M	0	c	Present system requires physical on-site monitoring. There is no method of providing emergency notification. It is possible to have either over-pumping or under- pumping. Over-pumping wastes power and water. Under pumping can lead to system shortages and possible de-pressurizing of the mains, leading to the possibility of contamination.There is currently no practical way to monitor pump performance nor to warn of pump or power supply problems. Because of its mountainous terrain, the system is vulnerable to power outages. The power may be off for only a few minutes, but when restored it sometimes has a phase out or reversed phases. These can lead to pump damage.The proposed Supervisory Control and Data Acquisition (SCADAO system would also offer supervisor to observe the system and provide guidance to an on-site worker in case of an emergency. A SCADA control system would provide a simple solution for these problems.	40,400	79	450 05	Santa Cruz	Π	2009
2453 0105008	0105008-001	Castlewood Domestic Water System	Castlewood Storage Tank Replacement	The project would include demoltion of the existing redwood tanks, grading and earthwork, foundation construction, installation of 2 - 100,000 gallon bolted Steel Tanks included cathodic protection and exterior and interior coatings, replacement of the existing SCADA system and installation of a 10 inch drain pipe for overflow.	Μ	0	c	The County of Alameda maintains the domestic water supply for the Castlewood County Service Area through a contract with California Water Service. The system consists of two levels, the lower level supplied by a steel tank and the upper level supplied by two Redwood Tanks. Based on the 2008 Annual Inspection Report performed by the California Department of Public Health, the report observed evidences of leakage at the Redwood Tanks and recommended corrective actions be taken. California Water Service had prepared a redwood Tank replacement feasibility study in 2007. The County of Alameda hired a consultant to provide an engineering assessment of the Redwood Tanks since the age of the structures were in question. The report recommended tha "the structures be taken out of service, demolished and replaced. The redwood water tank structures have poor seismic detailing that could cause failure during a strong seismic event. The seismic capacity required in accordance with current building code standards". Based on this the County is proposing replacement of the Redwood Tanks.	1,700,000	190	499 04	Alameda	Ι	2009

2454 3103836 3103836-003

System Replacement

HIDDEN VALLEY COMMUNITY ASSOCIATION Hidden Valley Community Hidden Valley Community Assoc. (HVCA) project is м Assoc Domestic Supply shovel-ready replacement of our 60-year-old domestic water supply lines, which run in our dual domestic/irrigation system. Public Water Supply Permit #3103836 issued Directives #2 and #3 under Citation #2008-35 to replace the existing distribution system.Phase 1 completed engineering, plans, specs, and pre-qualified bids. Engineering determined CIP alternative of incremental replacement of domestic lines would not be CWA compliant due to close proximity of the two distribution systems. This replacement Project will bring our supply system compliant with primary drinking water standards, and replacement of this aged infrastructure would enhance long term reliability, pursuant to SDWSRF goals in Intended Use Plan This Project installs 16 201 If of 8-in PVC class 900, and 368 If of 4-in PVC. Project will have disinfection capabilities, backflushing, and gasketed bell joints Placement of domestic lines would be at CWA standards of separation from existing deteriorated irrigation lines. Conservation of domestic water is achieved by irrigation water safely remaining for homeowner yards and livestock. HVCA D-1 operator finds this Project will reduce breakages, outages to all homes, susceptibility to contamination into domestic lines, and remove potential contamination from asbestos cement lines.32 new Steamer full-flush fire Water Task Force in 2004 to address its water deficiencies. The Psomas Corporation, Roseville, was

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supplying both irrigation lines of canal water, and domestic water supply to 163 full-time residence homes. Domestic Supply system has mixed pipe types: 4in PVC glued bell, and 4-in asbestos cement pipe (AC), with some 6-in AC at meter. And 6-in and 4-in steel. badly rusted. All domestic water to 430 residents flow through rusted steel and AC sections. Many leaks are on glued bell 4-in pipes. There are no CWA standard gasketed bells. No water meters are on exiting system beyond delivery point, as raw water was initially purchased for treatment by HVCA.Irrigation lines to each residence conserve domestic treated water, but risk cross-connections 164 Backflow Preventers (BEPs) were purchased in Phase 1, but installation deferred due to deterioration, age, type and sub-standard close proximity of existing domestic and irrigation pipes. BFPs are subject of Citation #2008-35 by Placer County Health and Human Services (HHS) and two Directives (#2 and #3) under Conditional Public Supply Permit PWS # 3103836.Purchase of treated water from Placer County Water Agency (PCWA) began 1991, but HVCA distribution lines remain badly leaking, incapable of disinfection, and CWA sub-standard. Frequent repair-inplace breaks allow mud, particulate from sawing, and HVCA water systems were originally constructed in the 1950s. Canal water from PG&F was diverted to a small water treatment plant for drinking water purposes. A separate irrigation water system had a pump also sourced by canal water. The piping for this dual system was a mixture of whatever materials were available and inexpensive. The pipes were side by side in shallow ditches to mitigate trenching in the abundant granite of this area. The lack of maps or any documentation is not surprising. In the 1960s, section by section, the drinking water system was reconstructed with 4" PVC with glued joints. The work was done by the community caretaker and volunteer residents. The lack of any engineering

Hidden Valley Community Assoc (HVCA) urgently

Water Distribution Lines. HVCA owns a water plant

requires complete replacement of 60-year-old Domestic

161 499 02 Placer

1.950.000

2012

3,500,000	161	499 02	Placer	I	2009

#### 2455 3103836 3103836-001C HIDDEN VALLEY COMMUNITY ASSOCIATION Hidden Valley Safe Drinking Water and Regulatory Compliance Project

Hidden Valley Community Association (HVCA) formed a M hired to do an analysis and make recommendations. Based on the Psomas work, and the Task Force's own knowledge of the water systems and study of potential solutions, HVCA decided to pursue building a complete new domestic water system as opposed to patching up a system inadequate for water safety, water conservation, and fire protection. Partitioning the three mile plus system into five or so smaller systems for engineering and construction was considered but dropped as impractical for a variety reasons. HVCA Water Task Force asked the Placer County Water Agency (PCWA) for assistance in 2007. PCWA submitted a concept for a new domestic system that HVCA determined to purse. In 2008 HVCA approved a special assessment of \$118,000 to hire the engineering firm of Giuliani & Kull. Auburn to engineer a new domestic water system. HVCA was surveyed in the fall of 2008 and the engineering was completed in February of 2009. The new domestic system meets code requirements for pipe routing (sewer and irrigation). includes backflow preventers (preventing possible contamination from cross connections on residential lots), hydrants for fire safety and metering of individua lots to encourage water conservation.Before receipt of

for maintenance and safety is evident as the domestic system does not contain any air release valves, hydrants for fire safety, or backflow preventers, and had only two blow off valves for the entire three plus miles of piping. The pipe for this system was placed in close proximity to the irrigation and older domestic pipes.Our 45 year old PVC system experiences numerous glue joint failures common to installations of that era. While there are some isolation valves, the lack of ARVR's and limited blow offs makes proper flushing and sanitation after one of our frequent breakages an immense and sometimes impossible task. In 1991 the water treatment plant was abandoned. The domestic

system was connected to Placer County Water Agency

2456 4910020	4910020-010	Sonoma County Water Agency	Water Transmission System Air Valve Replacement Project	Sonoma County Water AgencyWater Transmission M System Air/Vacuum Relief Valve Replacement Project DescriptionSafe Drinking Water State Revolving Fund LoanThe objective of the Water Transmission System Air/Vacuum Relief Valve Replacement Project (Project) is to upgrade and standardize the combination air/vacuum relief valve (ARV) stations along the Santa Rosa, Cotati, Petaluma, Oakmont, Sonoma, North Marin, and Forestville aqueducts. ARV's are situated at high points along the pipeline and after long, flat sections (about one half mile) of pipe. ARV's are housed in valve vaults. The ARV's relieve air entrained in the water and relieve air from the pipeline during pump start-ups (i.e., line pressurization). The ARV's also allow air to enter the pipeline during pump start downs (i.e., line depressurization). The aqueducts and their associated appurtenances were constructed in the fifties and sixties. Therefore many of the air valve stations are at the end of their useful lives. The aqueducts currently have several styles of air valves from different manufacturers, all of which require different parts and make maintenance difficult. In addition, the California Department of Health Services (DHS) requires air/vacuum relief valves for potable water transmission systems to be vented above grade. The vent piping at some of the ARV stations will need to be modified to meet this requirement.At each station,	0		c	Sonoma County Water Agency/Water Transmission System Air/Vacuum Relief Valve Replacement Project DescriptionSafe Drinking Water State Revolving Fund LoanThe objective of the Water Transmission System Air/Vacuum Relief Valve Replacement Project (Project) is to upgrade and standardize the combination air/vacuum relief valve (ARV) stations along the Santa Rosa, Cotati, Petaluma, Oakmont, Sonoma, North Marin, and Forestville aqueducts. The aqueducts and their associated appurtenances were constructed in the fifties and sixties. Therefore many of the air valve stations are at the end of their useful lives. The aqueducts currently have several styles of air valves from different manufacturers, all of which require different parts and make maintenance difficult. In addition, the California Department of Health Services (DHS) requires air/vacuum relief valves for potable water transmission systems to be vented above grade. The vent piping at some of the ARV stations will need to be modified to meet this requirement.	3,230,000	136	500 18	Sonoma	Ι	2008
2457 4910020	4910020-014	Sonoma County Water Agency	SCADA System Security Enhancement	The EPA-approved Vulnerability Assessment (VA) M recommended that SCWA implement water system security countermeasure improvements that have not as yet been implemented:o Disconnect the SCADA LAN from the SCWA business LAN and restrict access to only those operators who are responsible for SCADA operation. o Train SCADA staff on new SCADA system operationso Install secure password programming on the SCADA system requiring stricter password requirements and automatic password expirationo Reconfigure SCADA operator laptop computers for total dedication to the SCWA SCADA system, with no ability to connect to the SCWA network, non-SCADA dial-up services, or to the Internet. SCWA proposes to implement these measures because they would significantly reduce the risk of cyber terrorists accessing the SCADA aystem through SCWA's a) Internet, b) non- SCADA dial-up services, and c) business network with over 200 computer work stations that can be accessed by employees and other visitors to SCWA's offices.	0		c	The Sonoma County Water Agency (SCWA) is a wholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water system contractors. SCWA operates a Supervisory Control and Data Acquisition (SCADA) system that serves as the computer-based machine interface that controls the related mechanical and electrical assets of the water system, based on real-time feedback and pre-programmed data. The SCWA EPA-approved Vulnerability Assessment (VA) identified the SCADA system as a significant critical asset vulnerable to cyber terrorism and recommended security countermeasure improvements. This project proposes to implement those improvements that have not yet been implemented. The VA documented numerous existing SCADA security measures but also identified the weaknesses that increase the cyber terrorism risk to water system operation: o A router connects the SCADA LAN to the SCWA business network and Internet used by more than 200 employeeso Use of short passwords and lack of password renewal system Remote computer equipment used to access SCADA may not always be secure The SCWA water system and SCADA system operate continuously. The SCADA system garaneters, operations, and alarms, and maintains	100,000	136	500 18	Sonoma	Ι	2009
2458 3110015	3110015-001	Fulton Water Company	Pineywood Well Tank Replacement	we will replace two small water tanks dating form 1937 M with a single larger tank. The current capacity of the two tanks is 22,000 gallons. The new tank will hold 110,000 gallons. We will also install a backup generator with automatic start controls, plus rebuild the existing pump house.	0	·	c	The Fulton Water company has limited storage for the entire water system. This project will increase our storage capacity at this well pumping station from 22,000 gallons to 110,000 gallons. Also we will have an automatic generator power back up system for when power goes off during winter storms, or we loose power from a fire. We installed a new well at this location two years ago, and now we have 320 gm production from the new well. The next phase of improvements will be	150,000	899	500 02	Placer	I	2011

to increase water storage.

2459 1500409	1500409-001	BROCK MUTUAL WATER COMPANY	Brock Mutual Water Company-Consolidation with Vaughn WC	This is for an emergency intertie project. Vaughn Water Company's pipeline is less than 1,000 feet from Brock Mutual WC. As part of the project new distrbution system, meters, and service lines will be installed.NOTE: This record was added by CDPH (Mark Bartson) in response to the email from the water system on September 22, 2008 which indicated that they had intended to submit two preapplications through their CDPH District office - Jesse Dhaliwal Mark Bartson 10/24/08	Μ	0	С	Brock Mutual Water Company's well produces water with nitrate above the MCL of 45 mg/L. The Water Company is in violation of the nitrate MCL.	65,000	155	500 19	Kern	III	2008
2460 2800526	2800526-004	Napa County Public Works-LBRID	LBRID Water Tank Replacement and Distribution System Upgrade Project	This project shall replace all three of the District's redwood water storage tanks with new pre-stressed concrete tanks. One of the 100,000 gallons tanks would be replaced with a 300,000 gallon, the other 100,000 gallon tank would be replaced with a 300,000 gallon tank. The increase in total storage capacity is to ensure adequate water supply for fire protection and residential uses.Additionally, all mechanical and electrical equipment associated with the two lift stations shall be installed for remote monitoring purposes.The project shall also replace broken gate valves within the distirbution system, and repair/replace any compromised fire hydrant units. These improvements will ensure an adequate, continuous, and stable water supply for both residential and fire protection purposes in the future.		0	C	The LBRID distribution system was installed in the mid to late 1960's and consists of 28,000 feet of distribution pipe, two 100,000 gallon and one 200,000 gallon redwood water storage tanks, two lift stations, 96 gate valves, three pressure reducing stations, and 43 fire hydrants. The District is currently pursuing replacement of the water storage tanks and needs to replace the lift stations, install SCADA equipment for remote monitoring of the tanks, replace broken gate valves, and replace fire hydrant units where needed to meet fire demands.All three of the District's water tanks are at the end of their useful life. This is evidenced by the degradation of the redwood staves holding the tanks together, the listing of one of the 100,000 gallon tanks. Additionally, the results of a recent seismic evaluation of all tanks revealed that due to their proximity to several large regional faults (within 20 miles) and also to the Hunting Creek-Berryessa Fault (1.1 miles), at full capacity the structural integrity of the tanks would be compromised during an earthquake of magnitude 4.5 or greater. Failure of any of these tanks would cause an immediate and extended water service interruption for the community. Additionally, the water storage tanks are the only source of water for fire protection, should the tanks fail, or should capacity of the tanks meed to be reduced to meet seismic regulations, the District will not have sufficient water for fire protection.In addition	3,000,000	180	500 03	Napa	I	2009
2461 4910020	4910020-012	Sonoma County Water Agency	Water System Isolation Valves	The Sonoma County Water Agency (SCWA) proposes to strategically locate isolation valves to reduce the vulnerability of its water systems to impacts from natural hazards including earthquakes, floods, mudsildes, landslides and wildfires, and to minimize the potential for uncontrolled release of water.SCWA proposes to install 30 remote operated and seismic isolation valves, both of which require an emergency power supply, such as UPS or battery, to operate. These power supply systems will require regular maintenance. The remotely-operated valves in some of the proposed locations require a large vault and an above-ground cabinet. The size of the vault needed for a motor controlled valves is larger than that for a manual valve. Some of the components of these valves and the control system (such as SCADA antenna) will be installed above ground.	e e	0	C	The Sonoma County Wataer Agency (SCWA) has prepared a Reliability Study, a Vulnerability Assessment, and a Local Hazard Mitigation Plan for its water systems. SCWA believes that the upgrades and safe operations of its systems require an ongoing program in which the most obvious vulnerabilities and those with the highest probability of occurrence are mitigated first followed systematically by vulnerabilities with lower probabilities, or newly identified vulnerabilities based on new information, with a continued improvement in the reliability of the system. The proposed project would implement recommendations in the plan to install isolation valves at strategic locations system-wide to reduce the overall system vulnerability by adding redundancy to the system and by enhancing SCWA's response through better monitoring of its system.	3,100,000	136	500 18	Sonoma	Π	2009

#### 2462 2800526 2800526-005 Napa County Public Works-LBRID LBRID Water Tank

## Replacement and Distribution System Upgrade

This project shall replace all three of the District's М redwood water storage tanks with bolted steel tanks. One of the 100,000 gallons tanks would be replaced with a 110,000 gallon tank, the two remaining tanks (100,000 and 200,000 gallons) would be replaced with tanks of equal capacity. The increase in total storage capacity is to ensure adequate water supply for fire protection and residential uses. Additionally, all mechanical and electrical equipment associated with the three pump stations shall be replaced and a new SCADA system shall be installed for remote monitoring and delivery purposes. The project shall also replace broken gate valves and pressure reducing stations within the distribution system, and repair/replace any compromised fire hydrant units. These improvements will ensure an adequate, continuous, and stable water supply for both residential and fire protection purposes in the future.

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2463 4910020 4910020-015 Sonoma County Water Agency

### tanks, booster pumps -Cotati to Kastania tanks

Water pipeline, storage To ensure the reliable delivery of drinking water, the M project will include construction of an additional pipeline, water storage tanks, booster pumps, and related facilities between the existing Cotati tanks and the Kastania tanks in southern Petaluma. The project would consist of 85,000 feet of 42-inch to 48-inch diameter pipe. Three steel water storage tanks, booster pumps, and appurtenances would be constructed to provide adequate water storage. Tank capacity would range form 4 to 17MG per tank. The project would also include an aggressive water conservation element.

1960's and consists of 28,000 feet of distribution pipe, two 100,000 gallon and one 200,000 gallon redwood water storage tanks, three pump stations, 96 gate valves, three pressure reducing stations, and 43 fire hydrants. The District is pursuing funds for the replacement of the water storage tanks, upgrades to the three pump stations, installation of SCADA equipment for remote monitoring of the tanks, replacement of gate valves and pressure stations, and replacement of fire hydrant where needed to meet fire demands.All of the District's water tanks and pump stations are at the end of their useful life. This is evidenced by the degradation of the redwood staves providing structural support for the three tanks, and the listing of one of the two 100,000 gallon tanks. Additionally, the results of a recent seismic evaluation of all tanks revealed that due to their proximity to several large regional faults (within 20 miles) and also to the Hunting Creek-Berryessa Fault (1.1 miles), at full capacity the structural integrity of the tanks would be compromised during an earthquake of magnitude 4.5 or greater. Failure of any of these tanks would cause an immediate and extended water service interruption for the community. The water storage tanks are also the only source of water for fire protection. Should the tanks fail, or should capacity of the tanks need to be

The LBRID distribution system was installed in the late

2.000.000

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500 03

Napa

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Capacity of current aqueduct between Petaluma and Cotati is exceeded during summer months. The ability of the aqueduct to reliably deliver drinking water is compromised during this period. Customer demand exceeds the design capacity causing significant stress on portions of the transmission system infrastructure in addition to resulting in high energy use. The pipeline has been in continuous service since 1959. Redundant or parallel facilities are needed to be able to take the pipeline out of service for maintenance and to ensure that service will continue in the event of a failure. For the Petaluma aqueduct, in order to meet existing demand, water is currently pumped at a higher velocity than the designated operational velocity. This creates more wear on pumps and reduces the useful life of the pipeline. Even at excessive flow rates, demands at certain times of the year exceed the delivery capacity of the aqueduct.

#### 80,000,000 136 500 18 Sonoma 2009

#### 2464 4910020 4910020-017 Sonoma County Water Agency

### Russian River Creek Crossing

Water Transmission The goal of this activity is to mitigate the loss of an м Pipeline Hazard Mitigation - essential service to 600,000 residents and businesses that would result from a moderate or severe earthquake along the Rodger's Creek Fault causing a failure to the Russian River-Cotati Intertie. This goal will be attained by completing the following mitigation objective(s): 1. Modify the Russian River-Cotati Intertie to improve its ability to withstand the affects of an earthquake and minimize the liquefaction and lateral spread hazard resulting from an earthquake along the Rodger's Creek Fault at the Russian River crossing.Other objectives that will be achieved as a result of the proposed project include:- maintaining water service to the entire population served by the Sonoma County Water Agency (over 600,000 people and businesses) without significant rate increases due to emergency earthquake damage repairs- maintaining firefighting capability - maintaining water free from contaminationavoiding disruption of access to the road and emergency services as a result of pipeline failure avoiding economic losses to local businesses as a result of pipeline ruptureSCWA's FEMA-approved Local Hazard Mitigation Plan states that the Cotati Intertie crossing under the Russian River is one of the highest risk natural hazards concerning Water Transmission System reliability due to earthquake liquefaction and lateral spread of the surrounding soil. According to the

4910020-016 Sonoma County Water Agency

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Mitigation Project

Water Transmission

System Seismic Hazard

To avoid or minimize the harmful effects of an м uncontrolled release of water, the Water Agency proposes to install isolation valves throughout the transmission pipeline system near sites that have a high likelihood of failure in an earthquake. The isolation valves will reduce the risk of adverse impacts of nineline failure/rupture due to ground shaking, fault rupture, liquefaction, and lateral spread caused by seismic events. In the Water Agency's Local Hazard Mitigation Plan, the Water Agency identifies the proposed project as top tier, and the next highest vulnerability to be addressed. The proposed project will install isolation valves throughout more than 90 miles of the water transmission system to reduce the risk of adverse impacts of pipeline failure/rupture due to ground shaking, fault rupture, liquefaction, lateral spread caused by seismic events. Valves will be installed at locations that will increase the Agency's operational capability to restore a reliable water supply, minimize risk to life and property, maximize the number of residents who can remain in service, and prevent water quality impairment that could likely result from a transmission pipeline failure immediately following a major seismic event. Approximately 20 valves, ranging in size from approximately 16" to 48" in nominal diameter, will be installed at an average unit cost of \$90,000 for a construction cost of \$1.8M and \$300,000

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In the Water Agency's Seismic Vulnerability Assessment, lateral spread hazard in fine-grained overbank deposits was determined to be very high. The geology at the Russian River crossing exhibits a very high liquefaction and lateral spread hazard with up to 17 feet of lateral spread displacement. Because of the importance of the pipeline and because the pipeline has welded joints at this location, which could withstand the lateral spread displacements, a non-linear finite element analysis was conducted to assess if the pipeline could withstand the imposed ground displacement. The analysis shows that the strains induced in the pipeline from the lateral spread displacements significantly exceed the allowable strain. Consequently, it is concluded that the pipeline has a high likelihood of failure at the Russian River crossing. Damage at this location will also have a very significant impact on system operations. The Russian River - Cotati Intertie at the Russian River crossing needs to be addressed as a high priority item.

The Water Agency owns and maintains more than 90

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miles of pipeline in the vicinity of and crossing the Rodger's Creek and Bennett Valley Faults. Buried pipelines, such as the Water Agency's aqueducts, are designed for internal pressure with limited capacity to withstand large relative displacements of ground along their length. Most buried pipelines cannot resist large lateral spread displacements and therefore fail. Pipelines typically also have a high failure rate in zones of liquefaction. Consequently, such pipelines are vulnerable to damage when subjected to ground failure resulting from an earthquake. As described in the Water Agency's April 18, 2008 Natural Hazard Reliability Assessment of the Transmission System, MMI Engineering (MMI) conducted an assessment of the hazards along the Agency's pipeline routes. The hazard assessment included a detailed review of available data in addition to targeted geotechnical investigations. Earthquake is the predominant hazard for the Agency's aqueduct including differential settlement caused by liquefaction, large lateral spread displacements associated with liquefaction, surface fault rupture associated with the Rodger's Creek and Bennett Valley faults, and strong ground shaking. Based on analyses

that ranged from using simplified empirical studies and

nonlinear finite element analysis. MMI estimated that

17 to 20 pipeline breaks are likely within the Water

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2466 2810013	2810013-003	Napa County Public Works-NBRID	NBRID Water Distribution System Improvements	This project consists of the construction of a new 1.0 M million gallon pre-stressed concrete tank and associated plumbing to be built next to the water treatment facility. The increase in capacity of the tank is to ensure adequate water for fire protection, peak residential demand, and emergency supply should the water treatment plant become inoperable.Additionally a state of the art SCADA system shall be installed for remote monitoring of the new tank.The project shall also replace all of the pressure reducing stations, all broken gate valves within the distribution system, repair/replace any compromised fire hydrant units, and the 10,000 feet of transmission main that runs from the water treatment plant to the water storage tank.These improvements will ensure an adequate and continuous water supply for both residential, fire protection, and other emergency purposes in the future.	0	c	The District is currently pursuing an addition of a new water storage tank and associated SCADA remote monitoring equipment, replacement of the transmission main leading from the water treatment plant to the storage tank, replacement of all pressure reducing stations/valves, replacement of all pressure reducing stations/valves, replacement of broken gate valves, and replacement of all fire hydrant units to meet fire flow water demands. The existing water storage tank has barely enough capacity to meet current residential and fire flow demands. During a prolonged water treatment plant shutdown, the storage is insufficient to meet demands. Depending on the time of year, the storage tank only has enough capacity to meet residential demands for one to two days. In 2003 the transmission main leading to the storage tank was damaged in a remote area of the District, causing the storage tank to drain. This led to an instantaneous water service interruption that lasted for 3 days. Should a transmission main break occur in the same location again, the District would have no way to replenish the storage tank with treated water. The water storage tank with the only source of water for fire protection, should the tank fail, or should the transmission main break, as in 2003, the District will not have sufficient water for fire protection, the mater broke ja 2003 was in a remote area of the District which is difficult to access. The main	6,400,000	237	500 03	Napa	I	2009
2467 2800521	2800521-003	CIRCLE WATER DISTRICT	Treatment & Source Improvements	Install 100 gpm package plant. Replace two tanks, M construct one new tank. Construct new well source.	0	С	Inadequater source to meet MDD. Storage tanks in poor condition. More storage needed	800,000	190	500 03	Napa	Ш	2006
2468 3110019	3110019-008	Squaw Valley Mutual Water Comp	Navajo and Apache Water Pressure Improvement	The solution consists of moving these homes into the upper pressure zone by the addition of two pressure reducing valves in order to create a larger upper pressure zone. Currently the upper steel tank (300,000 gallons) only supplies the eight Squaw Summit homes with water and it has plenty of capacity to handle the additional homes. Adding a PRV at the intersections of Sandy Way and Navajo Way and a PRV at the south end of Apache Way, 29 homes can be added to the upper pressure zone. These homes then should have water pressure that meets water system standards. The distribution system from Navajo to Sandy can also be looped which in a fire flow situation is ideal because the water will be split through the loop essentially cutting in half the velocities and head loss through the pipes.Pressure reducing valve (PRV) a Sandy and Navajo 56,246PRV at south end of Apache 56,246Construction contingency 44,600 Construction cost 223,069Engineering, admin, and legal costs 66,900Total Project Cost \$289,969	0	c	The Squaw Valley Mutual Water Company (SVMWC) was built in the late 1950s and early 1960s in order to service a subdivision being developed on the northern side of Olympic Valley, CA. Pipes of varying sizes – from 1 inch to 10 inches – and of varying kinds - AC, steel, PVC and ductile iron were installed. Some fifty years later, these pipes are leaking and no longer provide the flow and water pressure needed for to meet modern public health and fire suppression standards. The 2007 California Fire Code requires a maximum distance of 500 feet between fire hydrants in residential areas. The current fire hydrant configuration is variable, up to more than 1,100 feet between fire hydrants. In December 2008, the SVMWC Board adopted a master plan for the water system developed by Auerbach Engineering. They computed the SVMWC average daily demand (ADD) at 431 gallons/day. The estimated Maximum Daily Demand (MDD) is 1,230 gallons/day. A computer model of the water flow and pressure identified a number of deficiencies in the system including extremely low or high pressures at junction nodes and high velocity or head loss in pipelines. Auerbach Engineering prioritized the projects needed to bring the system up to standard. In the Navajo and Apache area 29 homes are serviced with low water pressure. Some of the homes on the high side of the street have less than 20 psi, and the ones on the lower	150,000	263	500 02	Placer	I	2009

2469 3110019	3110019-006	Squaw Valley Mutual Water Comp	Sandy Way Pipe Replacement	The plan is to replace the line at the back of the houses M with 1,605 feet of 8-inch AWWA PVC-C900 main in the	0	С	The Squaw Valley Mutual Water Company (SVMWC) was built in the late 1950s and early 1960s in order to	200,000	263	500 02	Placer	I	2009
				street. Six new fire hydrants will be placed along this			service a subdivision being developed on the northern						
				portion of Sandy Way. Homeowners will be required to			side of Olympic Valley, CA. Pipes of varying sizes – from						
				move their service connections from behind the houses			1 inch to 10 inches – and of varying kinds - AC, steel,						
				to the front. This new line will also service the homes			PVC and ductile iron were installed. Some fifty years						
				on the south side of Sandy Way. There will be 34 new			later, these pipes are leaking and no longer provide the						
				single service boxes equipped with yokes to handle the			flow and water pressure needed for to meet modern						
				installation of water meters. We have hired Shaw			public health and fire suppression standards. The 2007						
				Engineering to begin developing the design for this			California Fire Code requires a maximum distance of						
				project. Surveying is underway to document the			500 feet between fire hydrants in residential areas. The						
				challenges of the terrain and to understand the			current fire hydrant configuration is variable, up to						
				complexities of moving the service laterals from the			more than 1,100 feet between fire hydrants. In						
				back of the houses to the front. Shaw Engineering is			December 2008, the SVMWC Board adopted a master						
				investigating horizontal drilling and other technologies			plan for the water system developed by Auerbach						
				to avoid digging through existing landscaping, having to			Engineering. They computed the SVMWC average daily						
				cut mature trees, etc. When the design is completed,			demand (ADD) at 431 gallons/day. The estimated						
				we will hold neighborhood meetings in order to discuss			Maximum Daily Demand (MDD) is 1,230 gallons/day. A						
				the impact of the improvements on each			computer model of the water flow and pressure						
				home/member. Construct 1605 LF of 8 inch waterline			identified a number of deficiencies in the system						
				within Sandy Way (North) 159,59234 Single service			including extremely low or high pressures at junction						
				connections with yoke for meter			nodes and high velocity or head loss in pipelines.						
				99,4346 new fire hydrants			Auerbach Engineering prioritized the projects needed to						
				42,113 Subtotal			bring the system up to standard. Along the back lot lines						
				301,139Construction contingency			of the houses on the upper side of Sandy way (elevation						
				75,300 Construction cost			approx 6300 feet), 1,605 feet of 2 inch to 6 inch						
				376,439Engineering, admin, and legal contingency			galvanized pipe and 6 inch ductile iron, and 4 inch AC						
2470 5000090	5000090-001	PINEWOOD MEADOWS MHP		UPGRADE DISTRIBUTION PIPING. OTHER = DESIGN AND M CONSTRUCTION	0	С	SYSTEM OF SMALL PIPELINES RESULTS IN LOW PRESSURES.	40,000	176	500 10	Stanislaus	Ш	2006
2471 3110019	3110019-005	Squaw Valley Mutual Water Comp	Christy Lane Pipe	The project consists of constructing a new 8 inch AWWA M	0	С	The Squaw Valley Mutual Water Company (SVMWC)	200,000	263	500 02	Placer	I	2009
			Replacement	PVC-C900 waterline within the southern potion of			was built in the late 1950s and early 1960s in order to						
				Christy Lane that will connect an existing 6 inch PVC line			service a subdivision being developed on the northern						
				on Christy to a 6 inch PVC line on Lanny Lane and			side of Olympic Valley, CA. Pipes of varying sizes – from						
				installing nine single service connections equipped with			1 inch to 10 inches – and of varying kinds - AC, steel,						
				vokes to accommodate water meters. A new 8 inch			PVC and ductile iron were installed. Some fifty years						
				AWWA PVC-C900 waterline will be constructed within			later, these pipes are leaking and no longer provide the						
				Christy Lane north to replace 6 and 4 inch AC pipe and			flow and water pressure needed for to meet modern						
				installation of 12 single service connections equipped			public health and fire suppression standards. The 2007						
				with vokes to accommodate water meters. There will be			California Fire Code requires a maximum distance of						
				four new fire hydrants placed 500 feet apart. Shaw			500 feet between fire hydrants in residential areas. The						
				Engineering has been hired to begin design of this			current fire hydrant configuration is variable, up to						
				project. The first step is accurately surveying the terrain			more than 1,100 feet between fire hydrants. In						
				before the ground is covered with snow. Then a			December 2008, the SVMWC Board adopted a master						
				preliminary design will be developed and the property			plan for the water system developed by Auerbach						
				owners affected will be invited to neighborhood			Engineering. They computed the SVMWC average daily						

demand (ADD) at 431 gallons/day. The estimated

computer model of the water flow and pressure

identified a number of deficiencies in the system

nodes and high velocity or head loss in pipelines.

experienced a serious leak on Christy near the

including extremely low or high pressures at junction

Auerbach Engineering prioritized the projects needed to

bring the system up to standard. In January of 2008 we

intersection with Lanny Lane. The entire water tank

emptied in a matter of hours resulting in water outage

Maximum Daily Demand (MDD) is 1,230 gallons/day. A

meetings to discuss the impact of the new

infrastructure. Some lots may need to change their

front of the house. The advantage will be new fire

hydrants spaced at 500 feet and more water service

for meters 24,337Contruct 8 inch waterline

within Christy LAne (north) 69,414Single service

connections with yokes for meters

new fire hydrants

reliability.Construct 8 inch waterline within Christy Lane

(south) 64,817Single service connections with yokes

32,4494

water service lines from the back of the house to the

2	472 1700568	1700568-004	Riviera West Mutual Water Co.	Replace Redwood Storage Tanks	Replace two of the 60,000 gallon redwood storage tanks in the distribution system.	Μ	0	с	The clubhouse storage tank in the Riviera West MWC distribution system is in poor condition. Upon a site visit, immediate repairs were required by the Department to address a failing roof structure located in the Clubhouse Pressure Zone. There are reports of water leaking from the redwood storage tanks at 50 to 60% of the storage capacity. The storage tanks need to be lined, repaired or replaced to ensure reliable safe drinking water is available to customers at all times. The tank in the upper zone was built in the same year and maintained the same way.	200,000	240	500 03	Lake	II	2009
2	473 3600308	3600308-001	Deer Park Nudist Resort/Buff Creek		Construct new well and tank	М	0	с	Bacteriological problems with source	50,000	100	500 13	San Bernardino	v	1998
2	474 4100531	4100531-001	LOG CABIN RANCH		Installation of emergency generator, valves, piping, watert storage tanks and cleaning of emergency water source.	м	0	C	Need emergency power capabilities.	500,000	15	500 17	San Mateo	Ш	1998
2	475 4910020	4910020-018	Sonoma County Water Agency	Collector Wells Retrofit Project	In order to mitigate the water system's vulnerability to earthquakes, the Agency proposes to develop and implement designs to retrofit four collector wells against liquefaction and lateral spread hazard. The collector wells to be retrofitted were built in 1958. The general construction of the collector wells includes a large diameter (ranging from 13 to 18 feet inside diameter and 18 to 33 inch thick walls) concrete caisson that extends from the ground surface into the aquifer. The caissons range in length from about 108 feet to 123 feet. At the bottom of each caisson, perforated pipes (known as laterals) extend radially into the aquifer. Each lateral is over a 100 feet long and ranges in size from 8 to 10 inch diameter for the older five collectors and 12 to 18 inches for the newest sixth collector. Each caisson supports a pump house with two pumps that draw water collected inside the caisson. The retrofit project proposes to install columns of rock or gravel around each of the caissons to a depth of approximately to stabilize the caissons sagainst liquefaction and lateral spread hazard.	Μ	0	c	A vulnerability assessment of the Agency's water supply facilities was performed. Damage to water collection systems following a major disaster, especially an earthquake, can lead to significant disruption. Structural assessment of the Agency's collector wells shows that four of the six collector wells have a high likelihood of sustaining major damage in the event of an earthquake causing widespread water outage.	8,000,000	136	500 18	Sonoma	Π	2009
2	476 2810013	2810013-002	Napa County Public Works-NBRID	Transmission Main/Storage Tank	Replace transmission line, install new storage tank	м	0	С	Aged transmission main needs to be replacement.	291,000	237	500 03	Napa	П	2004
2	477 2800521	2800521-001	CIRCLE WATER DISTRICT	Many Storage Tank	Cut into bedrock material and replace tank with 70,000 to 100,000 gal tank.	М	0	С	50,000 gal storage tank is leaking badly and is located on fill material in landslide prone area.	300,000	190	500 03	Napa	Ш	1998

2478 5610068	5610068-004	CLOVERDALE MUTUAL WATER Co.	Installation of New Service The project includes:a) Installation of new service lines M Lines, Meters, and to each parcelb) Installation of isolation valves on mains that do not have themc) Installation of meters on all customer service linesd) Obtaining permits and approvalse) Engineering and project management	0	c	Cloverdale Mutual Water Company has been in existence since 1919. Until about 10 years ago, there was no appreciable attempt to replace and upgrade worn-out infrastructure.In 2003, a new tank was installed to replace a badly leaking unit. Additionally, since then, a portion of the mainline has also been replaced. A large problem remains, however, in that the service lines to each parcel are generally in poor condition, and frequently break, necessitating shuting down the system for repairs. Many of these services do not have shut off valves at the point of connection to the main. Aside from the inconvenience to the the customers, the break allows contaminants to enter the pipe. These which difficult to flush out and remove. Occasionally, a break will occur at the point of connection between the service line and main creating a situation where the main needs to be cut and a portion replaced, again allowing contaminants to enter, but to a much greater extent. During the periods while the system is being repaired, the customers are routinely notified that thwater will be shut down for an extended period of time. Another item that makes each shutdown a major undertaking is the fact that there are very few isolation valves throughout the system so, in most cases, large portions of the service area are out of water if there is a break in a single service line. Another problem is that there are no	512,000	130	500 06	Ventura	IV	2009
2479 4910020	4910020-013	Sonoma County Water Agency	Emergency Mobile SCADA The SCWA EPA-approved Vulnerability Assessment (VA) M recommended establishing a back-up SCADA control in a mobile van independent of the administration building and operations center. This would consist of programmable logic controllers, a Remote Terminal Unit, radio equipment, and an antenna. Laptop computers would be used as the operator's station in the mobile van. The SCADA system allows an operator to remotely control operations and monitor system status. A mobile van would provide SCADA redundancy and a self-sustaining independent SCADA system in the event the operations center was burned down, destroyed, or made uninhabitable.The SCWA water system and SCADA system down, and it of process parameters, operations, and alarms, and maintains water reliability.	0	C	The Sonoma County Water Agency (SCWA) is a wholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water system contractors. SCWA operates a Supervisory Control and Data Acquisition (SCADA) system that serves as the computer-based machine interface that controls the related mechanical and electrical assets of the water system, based on real-time feedback and pre- programmed data. The SCWA EPA-approved Vulnerability Assessment (VA) identified power and the SCADA system security. The VA found these assets vulnerable to terrorism and adversarial tactics and recommended security countermeasure improvements. This project proposes to implement one of the recommended improvements that has not yet been implemented.SCWA has the ability to operate its system from the operations center and main administration building. There are redundant power supplies (generators) and protections against power surges (uninterrupted power supplies). However, the VA indicated that in the event SCWA's operations center became nonfunctional, radio communications to its main administration building would not likely be maintained. Global processing, remote control, and monitoring of system activity would be compromised by	300,000	136	500 18	Sonoma	Π	2009

2480 5400903	5400903-003	TRACT 92 C S D	Tract 92 CSD Safe Drinking Water Project	Safe Drinking Water Project	М	0	С	Safe Drinking Water Project	1,000,000	91	500 12	Tulare	ш	2007
				Project Description:				Problem Description:						
				The proposed project would include the drilling of a water test well at a new site in the community. The results of the test well will be utilized to design and construct a new water production well. The well would be equipped with a new pump and storage facilities.	I			Tract 92 Community Service District provides water to the unincorporated area known as Union Addition. This unincorporated community consists of approximately 135 households and one church and is located Southeast of the City of Visalia. This economically disadvantaged community is a mix of retired people, farm workers, and low-income families. The community's water system was established in the early 1960's.						
								The water system as two wells drilled on one site. At least one of the wells is producing water that fails the total Coliform rule. Analysis is pending on the other well. Over the passed 4 months we have consistently failed the total Coliform rule. The two wells were tested and once they failed an additional 5 sites were tested and they failed as well. We have received the Notice of Violations from the Tulare County Environmental Health for the preceding 4 months for the bacterial contamination. We did deliver notices as required by Tulare County Health to the water system users.						
2481 4500195	4500195-005	STARLITE PINES MUTUAL WATER CO INC	Storage for Starlite Pines Mutual Water Co, Inc. Shingletown,CA	The project will require six concrete pads for the storage tanks. Six (6) five thousand Gallon Storage TanksPlumbing materials for connecting the new tanks to the current systemsWinterizing materials for plumbingLaborThere will be not destruction of any old sources.	Μ	0	c	Our current water system has two wells and the Number 1 well has been ouronly source until this Spring and we recently put the Number 2 well into use. We have put 4 (5000) gallon storage tanks on the well #2 but it needs at least two additional storage tanks to store enough water for our sub-division current demands. Our original well, #1, water storage is an open reservoir and we need to store water without risk of contamination to our water supply. Four (5000) gallon storage tanks would protect our water system and store enough water for our current demands on the system. We have very dry summers with little or no rain. We use the water for culinary use as well yard watering and most important fire protection. At the present time there is an extremely high water demand and the storage is not adequate. This is important to meet the California Standards for drinking water. The system was designed over twenty years ago and the sub- division, at that time, had many vacant lots, but less than two years ago there was a boom in the real estate market here and there are very few vacant lots, homes were built and new families moved in and there is a need for more water storage for our systemto meet the increased demand. We have no additional funds to update oursystem.	70,000	170	510 02	Shasta	I	2008

2482 0310006	0310006-002	River Pines PUD	Water Distribution Syste and Storage Improvemer	M Some new water lines and fire hydarnts were installed tts but the services were not moved to the new lines. New water lines would be installed where needed to provide adequate service and fire protection. Valves would be installed to provde reasonable operation and maintenance of the water system. New service laterals and meters would be installed and connected to the larger lines. The old system of small waterlines would be abandoned. The project would also provide a new steel water storage tank and refurbish the existing one to meet system standards and relaible fire protection.	Μ	0	c	Much of the River Pines PUD water sytems dates back to the origion of the town in 1930s. Most of the services are on 2-inch and smaller distributioon lines. System doesn't have enough valves and many of the existing ones don't work. There are dead ends without blowoffs. The system is experiencing many leaks that are difficult to fix and water losses up to 34%. A high chlorine dosage is required because of the condition of the distribution system. The condition of the old system, many leaks, and water losses is a health risk from contamination. The water system lacks adequate storage to meet standard requirements. RPPUD has an old buried concrete tank that is at the end of its useful life. The system also has steel tank but it is corroding and needs work and recoating.	550,000	210	510 10	Amador	11	2011
2483 2000521	2000521-004	Broadview Terrace Mutual Water Compan	y Infrastructure Replacement Project	Approx 10,000 ' of 2" galvanized main will be abandoned and the same length 6" c-900 will be laid in the same easement or road right-of-way. Trenching will be labor intensive due to many granite outcropings and the roots of huge trees near but outside the easements. 90 service connections will be moved from the old main to the new.	Μ	0	с	We have small (11/2 " and 2") galvanized mains that are so corroded that water pressure drops to near zero in sections when several users are drawing water at the same time. Pressure less than 20 psi occurs frequently. These are mostly single family residences with no backflow prevention.	500,000	202	510 11	Madera	Ш	2007
2484 0310006	0310006-003	River Pines PUD	Water Supply Project	The project objective would be to first obtain a new source of water. Test wells would be drilled and a productuion well completed, and backup power provided. If a reliable well with good water quality is not able to be found, then a second phase of providing water treatment would be needed. The slow sand filter could be replaced with a more efficient modern surface water plant that could be started up in less time than a slow sand filter, and could utilize low and intermittent flows. The surface water flows could be supplemented with shallow wells near the stream GUDI wells that could keep the plant going to meet the system needs.	Μ	0	С	RPPUD has several water supply issues and lacks a reliable water supply. The designated primary water source is a slow sand treatment plant that has been nonoperational for three years because the source water stream is dried up in the summer and technical issues with the plant. Well No 2 is only 20 gpm capacity and has recently dried up because of the summer season. Well 6R is the only current water supply and has bag filter plant on it because of coliform contamination from surface water influnce. Well 6R does not have a generator and the water system is without water during power outages, which have extended up to three days in the past. Well 6R is in an area of water contamination, probably from septic tanks, and the bag filter plant is relatively expensive to operate.	800,000	210	510 10	Amador	Ш	2011

2485 4500195	4500195-006	STARLITE PINES MUTUAL WATER CO INC	Updating Current Water distribution and Storage	Starlite Pines Mutual Water Company provides domestic water service for approximately 160 connections within the service area located in Shasta County near Shingletown, California. The Starlite Pines subdivision may be classified as a disadvantaged community based on the guidance provided by CDPH (Map of Service Area mailed to address provided by CDPH). The distribution system is approximately 40 years old and many segments of pipeline are suffering frequent failure. These failures have caused periodic system outages resulting in widespread loss of system pressure. Each of these outage events open up the system to possible microbial contaimination. These continuing pipeline failures have been a major factor in exhausting our reserve fund. The system currently has only 50,000 gallons of storage capacity. Our limited storage capacity causes frequent cycling of pumps and has led to frequent failure of our pumping systems, further eroding our reserve funds. Well #l storage is the original guinte reservoir and tils eroding. The system is not metered. Our customers are currently paying a flat rate of \$30.00 per month. The systems current back up source of power is a disea generator whichis in need of replacement and is necessary to continue to provide waterduring a power failure.	4	0	C	Starlite Pines Mutual Water Company provides domestic water service for approximately 160 connections within the service area located in Shasta County near Shingletown, California. The Starlite Pines subdivision may be classified as a disadvantaged community based on the guidance provided by CDPH (Map of Service Area mailed to address provided by CDPH) The distribution system is approximately 40 years old and many segments of pipeline are suffering frequent failure. These failures have caused periodic system outages resulting in widespread loss of system pressure. Each of these outage events open up the system to possible microbial contaimination. These continuing pipeline failures have been a major factor in exhausting our reserve fund. The system currently has only 50,000 gallons of storage capacity. Our limited storage capacity causes frequent cycling of pumps and has led to frequent failure of our pumping systems, further eroding our reserve funds. Well #I storage is the original gunite reservoir and it is eroding. The system is not metered. Our customers are currently pay a flat rate of \$30.00 per month. The systems current back up source of power is a diesel generator which is in need of replacement and is necessary to continue to provide water during a power failure.	450,000	170	510 02	Shasta	I	2011
2486 4810010	4810010-003	SID - Gibson Canyon	Serenity Hills Tank Replacement (E.3.1.b)	An outside engineering firm will analyze the demand on M the current system to determine the proper size of the replacement tank. The existing area of the tank should be large enough to support a tank that has twice the diameter of the current tank. Once the existing tank is removed, the sub-grade would be compacted and a new steel tank would be constructed. Cathodic protection will be installed to protect the tank from future corrosion.	1	0	c	The 10,000 gallon storage tank is undersized for the system. The pumps that fill the tank must run numerous time throughout the day in order to maintain the system. This tank is vital to the operation of this system.	200,000	159	518 04	Solano	II	2009
2487 1909006	1909006-006	WEST VALLEY COUNTY WATER DISTRICT	West Valley CWD Storage Tank Replacement	The proposed project is to remove the existing storage M tank and replace it with a 286,000 gallon steel storage tank. The new tank will meet Title 22 and seismic requirements	1	0	с	Storage Tank # 2 is in dilapidated condition and needs replacement.	250,000	274	530 22	Los Angeles	IV	2012
2488 3600260	3600260-002	Smiley Park Country Club	Smiley Park Well	We have proposed in a separate application to conduct M a Hydrology Study to identify appropriate sites of groundwater in which to drill a new vertical well. This proposal is a request to drill one vertical well. We expect a qualified drilling contractor to provide the following: 1) Provide and operate well drilling equipment sufficient to drill in the geological conditions in Smiley Park; 2) Drill to a depth recommended by the Hydrology Study; 3) Install the well liner; 4) Install the well head and cap; 5) Install the well pump and decontaminate well. Connections from the well into holding tanks and pumps sufficient to pump the water into Smiley Park's storage tank will be the responsibility of Smiley Park.	n	0	c	Smiley Park Country Club is a private community in the San Bernardino Mountains near Running Springs. This is a community of 165 building sites (125 currently have water connections) in an area of 265 acres. Smiley Park maintains a private water system which is monitored by the county. We maintain our own wells, a 100,000 storage tank, distribution system, and water quality program. Smiley Park Water System currently has only one well to serve its customers (125 connections, 300 residents). Three former wells stopped producing and were abandoned. In 2006, a new well was drilled that currently produces 19 gallons per minute. This is insufficient to meet the full needs of the community. To supplement our water, we are connected to Running Springs Water System and purchase water from the Crestline Lake Arrowhead Water Agency (CLAWA) through the Running Springs System. We need to drill additional wells.	35,000	106	530 13	San Bernardino	v	2007

2489 3600260	3600260-001	Smiley Park Country Club	Smiley Park Hydrology Study	In order to properly plan for additional wells to meet both our current and future needs, we first need to conduct a Hydrology Study by a qualified engineer/geologist. This study will investigate potential groundwater sources and recommend the optimal locations for drilling new wells. We expect the hydrologist to provide the following: 1) Groundwater resource inventory and documentation; 2) Hydrological data analysis; 3) Preliminary water resource and geological features map; 4) Preliminary analysis for development; 5) Potential water well development strategy; 6) Preliminary description of development requirements. After a site is selected, the hydrologist will provide the following services: 1) Preparation of vertical well construction specifications; 2) Preparation of well bid documents; 3) Review of well driller's bids and recommendation; 4) Owner's representative during well drilling.	0	C	Smiley Park Country Club is a private community in the San Bernardino mountains near Running Springs. This is a community of 165 building sites (125 currently have water connections) in an area of 265 acres. Smiley Park maintains a private water system which is monitored by the county. We maintain our own wells, distribution system, and water quality program. Smiley Park Water System currently has only one well to serve its customers (125 connections, 300 residents). Three former wells stopped producing and were abandoned. In 2006, a new well was drilled that currently produces 19 gallons per minute. This is insufficient to meet the full needs of the community. To supplement our water, we are connected to Running Springs Water System and purchase water from Crestline Lake Arrowhead Water Agency through the Running Springs System. We need to locate appropriate sources of groundwater and to drill new wells.	35,000	106	530 13	San Bernardino	V	2007
2490 1900102	1900102-004	WEST SIDE PARK MUTUAL	Distribution System Infrastructure Rehabilitation	The system proposes to perform a water audit; hire leak M detection services; and replace leaking portions of the distribution system including meters, valves, service connections, and pipelines as required to prevent further water losses. Water from Palmdale and AVEK is not available to us. We need to rehabilitate the distribution system to ensure water conservation methods are implemented.	0	с	The distribution system is dilapidated and failing. The system has many water leaks resulting in excessive water losses. The instability of the pipelines, valves, service connections, and meters is negatively impacting our water delivery capability. We do not have a reliable backup water supply. We are not connected to AVEK or Palmdale. Drought conditions have made it critical for us to make extensive repairs to the distribution system and meters to prevent increasing water losses from our failing infrastructure	200,000	144	550 16	Los Angeles	IV	2008
2491 1900102	1900102-006	WEST SIDE PARK MUTUAL	Backflow prevention	We propose to purchase and install backflow M preventers at each service connection. We need this to protect our drinking water from potential contamination from agricultural and animal enclosures, corrals, and animal waste within close proximity of the water supply. This adequate degree of protection will bring us into compliance with waterworks standards.	0	С	This water distribution system does not meet current waterworks standards. The system does not have any backflow preventers. The Distribution pipelines and sole source wells are in close proximity to animal waste storage areas, corrals and other animal enclosures. Properties have individual septic systems; are zoned for agriculture and animals; are in the vicinity of the wells and other distribution components; and have animal enclosures and an animal rescue business onsite. The entire system needs backflow preventers.	80,000	144	550 16	Los Angeles	IV	2008
2492 5010026	5010026-011	City of Modesto, DE Hickman	New Tank & Pump Station Hickman	<ul> <li>Approximately 0.40 MG of tank storage is required in M the existing Hickman water system to meet existing City storage criteria. This volume was calculated using a Reliable Pumping Capacity scenario with a well out of service. This project includes a 0.40 MG storage tank and associated 1.2 MGD pump station including all control valves and piping, electrical and communication equipment, backup emergency generator, disinfection and treatment of water, and piping to tie-in the existing distribution.</li> </ul>	0	C	Criteria has been determined by the City of Modesto for treated water storage and system peaking capacity needs to meet diurnal operational peaks, fire flows, and emergency conditions. Total storage and system peaking capacity requirements can be evaluated based on the following three components: (1) Operational Storage is 25 percent of maximum day demand; (2) Fire Storage is 25 percent of maximum day demand; (2) Fire Storage is the required fire flow times the fire flow duration period, as required by the City's Fire Marshall; and (3) Emergency Storage is 1 x average day demand. The Hickman system currently does not have any tanks or storage reservoirs; therefore, all of its available storage capacity and ability to meet peak operational demands is based on groundwater basin storage and pumping capacity. This dependence on the groundwater basin for storage presents a reliability issue; there is no allowance for possible contamination or other scenario that renders a portion of the basin unavailable.	2,000,000	192	565 10	Stanislaus	Π	2011
2493 5010026	5010026-010	City of Modesto, DE Hickman	New Well - Hickman	This project will consist of drilling a new well, installing a M new 600 gpm well pump, all related electrical and communication equipment, chlorine disinfection system, a backup emergency generator with transfer switch and all onsite and minimal offsite piping to tie-in the new well with the existing system.	0	c	The main issue is the City of Modesto is not capable of providing reliable pumping capacity during peak and maximum day demands. The Hickman servicearea is supplied exclusively by groundwater that is pumped from two existing production wells. The total existing supply capacity is 620 gpm. However, for water supply purposes, this groundwater pumping capacity must be reduced to account for well or wells out of service at any given time due to mechanical breakdown, maintenance or other operational issues. This reduced pumping capacity is defined as the Reliable Pumping Capacity and assumes the largest well is out of service. Under this scenario, the reliable pumping capacity is 190 gpm and is NOT sufficient to meet the existing Maximum Day or Peak Hour demands of 380 gpm and 635 gpm, respectively. Even with both wells on the existing supply capacity (620 gpm) does not meet the Peak Hour demand.	1,333,000	192	565 10	Stanislaus		2011
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2494 1710011	1710011-002	Buckingham Park Water District	Clearwell Expansion, Treatment & Distribution site backup power generation	Construction of a 170,000 gallon +/- clearwell/storage M tank and backup/standby power generators at both the District's treatment facility and it's distribution pump station, which will help alleviate both the District's insufficient treatment and storage capacities.	0	с	Compliance order 02-03-04C0-001 dated July 21, 2004 cited the District's insufficient treatment and storage capacity to adequately, dependably and safely serve it's 425 customers pursuant to Section 64562, Chapter 16, Title 22 of the California Code of Regulations. Said compliance order was issued after it was determined that from 7/4/04 through 7/9/04 the District's pressure zone 2 and 3 dewatered leaving it's customers without water and resulting in a boil water notice which was issued to all District customers on 7/6/2004.	763,000	450	580 03	Lake	ΙΙ	2009
2495 4400502	4400502-010	TROUT GULCH MWC	Replace 2" Main to Emergency Intertie	M main to the closest TGW main, install valves, meter, vault and street crossing. Detail design of this project has been completed, a contractor has been selected and work will start as soon as weather permits (expected in the first week of March).Last week, in the process of inspecting the project site, we discovered that 450 feet TGW water main documented as four inch by the Water System Engineer we hired as part of our Water Permit Transfer / TMF Capacity evaluation, in fact is only two inch PVC. This section of main must be replaced with a six inch line to provide adequate flow to meet demand and keep the storage tanks sufficiently full and provide the desired additional fire protection. Thus, this project being submitted for this Pre-Application is just to address this new requirement of replacing the undersized main. This work must be completed before the advantages of the emergency interconnect can be realized.	0	C	The Trout Gulch Mutual Water Company (TGW) is supplied by two wells. Each must be removed from service for major improvement or replacement. Neither well is reliable enough to serve the system alone. An emergency connection to a reliable water supply is required during the period each well is off line. This connection should remain in place as an emergency response / disaster preparedness measure and fire protection. The first well, drilled in 1934, continues to produce adequately, but has manganese content substantially above allowable limits (currently at 19 times ACL), and is an unacceptable source except in an extreme emergency. It must be taken off-line for some period to install a manganese removal system. The second well, drilled in 1961 and put into service in 1987, has been a sand producer and its production capacity has dropped from 150 gpm in its early years to 41 gpm now. Forced conservation was required to keep consumption within available supply this last summer. Many engineers and well contractors have been consulted and their consensus is that the well will continue to lose production capacity without major improvement or replacement. Current total water production capacity (80,000 gallons per day) is close to current summer demand and the system storage capacity (120,000 gallons) provides only 1.5 days of average demand. In addition, fire protection reserve	45,000	171	584 05	Santa Cruz	U	2009

2496 4400502	4400502-003	TROUT GULCH MWC	Replace 3" Water Main on Lower Trout Gulch Road with 6"	Replace existing 3" main with a 6" or 8" main.Total Project Cost of \$72,000 is based on the approximate length of 900' and recent, local, similar, water main replacement costs.	Μ	0	C	Portions of Trout Gulch Mutual Water Company (TGW) infrastructure date back to the 1930's. Almost all of the mains from these older portions were upgraded per the design of the engineering firm of Washington & Jensen in 1980.One section of water main that was not upgraded is the lower section of Trout Gulch Road. This section along Trout Gulch is the only remaining 3" section. This undersized main supplies water to 22 customers (13 on Trout Gulch and 9 on Valencia).Determine if the size upgrade is needed - since it can be fed directly from Meadow Ranch via 6".It does not meet current standards for distribution mains.One of the Santa Cruz County DEH's requirements for approval of the transfer of Domestic Water Supply Permit from MVWC to TGW on April 1, 2008, is "Review the adequacy of the 3" line along Trout Gulch Road".	72,000	171	584 05	Santa Cruz	II	2008
2497 4400502	4400502-008	TROUT GULCH MWC	Add 100,000 Gallon Storage Tank	Install 100,000 gallon tank at the top of Skyward Drive. This would solve 3 problems: Meet California Water Works Standard. Double firefighting capacity. Water pressure via gravity would be adequate for all but 3 residences. These residences currently have private storage tanks and booster pumps). Project Cost Includes: Alternative site evaluations Site selection Site preparation and easements (if necessary) Tank, delivery, erection and outfitting. Install water main from Meadow Ranch Tank to new tank site = 2,600 feet.	M	0	C	Current water storage capacity of this system (120,000 gallons) does not meet the American Water Works Association Standard, using average California Residential Customer Consumption. This method of analysis had to be used since the former owner of our water system never measured actual water production or consumption by 2/3 of all customers. Note: This system currently provides water to 183 residences (the DWP database still says 171). We have received applications for 4 more Memberships (connections). We will approve these applications as soon as we can determine a fair Membership fee. Beyond these 4 new connections, we expect only 1 to 2 additonal connections for eyear, up to our maximum authorization of 199.Now that we have measured actual water production for one year, storage requirements also have been measured using the AWWA Standard based on this actual production. Using this single year as a basis, we may have enough storage capacity. Thus, having only one year of history, storage capacity should still be based on average California consumption.Water Pressure is not adequate for about 23 customers. Firefighting water storage would provide a maximum of 12 minutes of flow at J.000 GPM if both storage tanks were full. This last summer we did not	130,000	171	584 05	Santa Cruz	IJ	2009
2498 3810001	3810001-041	San Francisco Regional Water System		Build a pump station to pump water either from or to	м	0	С	Need emergency connections to Santa Clara Valley Water District	7,900,000	200	600 04	San Francisco	Ш	1998
2499 3810001	3810001-012	San Francisco Regional Water System		MAKE PREPARATION OF PLANS AND SPECIFICATIONS FOLLOWED BY CONSTRUCTION WORK.	М	0	С	Calaveras pipeline subject to slope failures.	439,000	200	600 04	San Francisco	Ш	1998
2500 3810001	3810001-038	San Francisco Regional Water System		Add a fourth pipeline to the San Joaquin system.	м	0	С	Need fourth SJ pipeline for emergencies.	250,000	200	600 04	San Francisco	Ш	1998
2501 3810001	3810001-037	San Francisco Regional Water System		Repair and re-line the portion of San Joaquin pipeline between San Joaquin river and Tesla Portal.	М	0	C	San Joaquin pipelines lining failing.	3,000,000	200	600 04	San Francisco	II	1998
2502 3810001	3810001-011	San Francisco Regional Water System		Reverse shift in channel by relocation of side cast quarry rock from one side to another, replace natural impedimants to creek flows.	м	0	с	Calaveras pipeline subject to creek fluids/bank failure.	4,000,000	200	600 04	San Francisco	II	1998
2503 3810001	3810001-019	San Francisco Regional Water System		PROVIDE PARALLEL TUNNEL THAT WILL UPGRADE SYSTEM TO RELIABILITY TO AN ACCEPTABLE LEVEL PROVIDE AN ALTERNATIVE FACILITY TO MEET THE SAMF	М	0	С	Need second Irvington tunnel for reliability.	152,000,000	200	600 04	San Francisco	II	1998
2504 3810001	3810001-028	San Francisco Regional Water System		relocate and upgrade the PRVs and other critical valves.	м	0	с	Critical valves cannot be accessed in an emergency.	2,620,000	200	600 04	San Francisco	П	2006

2505 3810001	3810001-046	San Francisco Regional Water System		Determine appropriate locations needing pressure reducing values between the northerly portion of the University Mound distribution system and adjacent higher pressure water supply system.,	Μ	0	С	Need valves to isolate UM system in an earthquake.	370,000	200	600 04	San Francisco	II	1998
2506 3810001	3810001-010	San Francisco Regional Water System		Review the existing piping design for effectiveness and appropriateness. Produce the plans and specifications including rearranging the connection for SVWTP.	м	0	С	Alameda siphans cross Calaveras fault.	33,000,000	200	600 04	San Francisco	II	1998
2507 3810001	3810001-024	San Francisco Regional Water System		REPAIR AND REPLACE THE DETERIORATED VALVES IN ORDER OF CRITICALITY. ADD NEW VALVES FOR FLEXIBILITY ABD RELIABILITY WHERE DETERMINED.	М	0	с	Valves are old and deteriorated at critical locations.	470,000	200	600 04	San Francisco	II	1998
2508 3810001	3810001-025	San Francisco Regional Water System		PROVIDE A NEW SUNSET FEEDER MAIN. BUILD PRESSURE REDUCING STATION AND MAKE CONNECTIONS TO THE UM SYSTEM MAINS	М	0	С	Downtown vulnerable to loss at UM system.	26,000,000	200	600 04	San Francisco	II	1998
2509 3810001	3810001-063	San Francisco Regional Water System		Design and construct expansion of SVWTP to 240 mgd; treated water reservoir; solids handling facilites; and pipelines and pump station expansion.	м	0	C	Plant needs expansion for reliability and redundancy.	265,100,000	200	600 04	San Francisco	II	1998
2510 3810001	3810001-043	San Francisco Regional Water System		Evaluate the need and the type of standby power needed at the various facilities.	М	0	С	Need standby power at several facilities.	2,100,000	200	600 04	San Francisco	Ш	1998
2511 3810001	3810001-172	San Francisco Regional Water System	Sunol Valley WTP Expansion & Treated Water Reservoir	The CDPH's 1995 Cryptosporidium Action Plan (CAP) requires water systems using a surface water source adopt a philosophy of awlays optimizing their surface water treatment plant operations in a manner designed to achieve the maximum turbidity removalto minimiz the risk to exposure of pahtogens, including Cryptosporidium, in the drinking water delivered to their customers. The CAP indicates that a treatment plant to provide optimum removal treatment under all conditions and at all times depend, among others, on the reliability of the system equipment, availability of on-line back-up equipment.The SVWTP Expansion and Treated Water Reservoir Project includes the addition of 40 mgd of process capacity which is needed to meet the plant's 2030 Level of Service (LOS) of 160 mgd sustainable production for 60 days. Sustainable for the purposes of this project mean that the plant can produce 160 mgd within 24 hours of a major earthquake or loss of the Hetch Hetchy Aqueduct supply and sustain that production for the full 60 days even if one of each major process unit (e.g., flocculation/sedimentation basin) is out of service for maintenance or repair. Based on treatment process alternative evaluations in the Alternatives Analysis Report (AAR), Conceptual Engineering Report (CER), am subsequent technical memoranda (TMs), Alternative 10	M d e d D	0	c	Although the San Francisco Regional Water System has about 600 retail customers, it is a wholesale water system that serves a total of 2.4 million customers in the counties of Alameda, San Mateo, Santa Clara, and San Francisco. This project is intended to meet the requirement 7(d) of CDPH Compliance Order #02-04- 96C-001 that requires the SFPUC to provide treated water storage to serve as a balancing reservoir and the design criteria shall be subject to CDPH review and approval. Additionally, this project will allow SFPUC to meet level-of-service goals in the Water Supply Improvement Program that require sustainable treatment capacity. This project is crrently ranked as M Category in the existing SRF Project Priority List.The SFPUC is requesting a grant of \$20 million for this project.	20,000,000	200	600 04	San Francisco	Π	2009
2512 3810001	3810001-006	San Francisco Regional Water System		Perform study and analysis of existing timer trestles to determine their ability to withstand future earthquakes Develop alternatives to achieve this goal followed by design and construction of necessary work.	M 5.	0	С	BD pipeline timber trestles need seismic upgrade.	24,610,000	200	600 04	San Francisco	II	1998
2513 3600262	3600262-001	Snowcrest Hts. Imp. Assoc		Construct source, storage, and distribution facilities	М	0	С	Inadequate storage, undersized mainline, insufficient source capacity	500,000	120	600 13	San Bernardino	v	1998
2514 3810001	3810001-036	San Francisco Regional Water System		Slip-line existing pipelines (put a pipe side), where possible, and to replace it where this is not feasible.	М	0	С	Prestressed concrete pipe has had major failures.	90,200,000	200	600 04	San Francisco	II	1998
2515 3810001	3810001-042	San Francisco Regional Water System		Plan, design. And install diesel generators and buildings at critical water pumping stations.	M	0	С	Need diesel generators at pump stations.	9,040,000	200	600 04	San Francisco	II	1998

2516 3810001	3810001-171	San Francisco Regional Water System	Lawrence Livermore Wate Quality Improvement	er This project involves the design and construction of a ultraviolet (UV) light disinfection system consisting of two, 150 gallon-per-minute (gpm) parallel UV light unit and ancillary facilities. These facilities will be installed within the existing Thomas Shaft Chlorination Building and will provide the needed, one additional log of Giardia inactivation to meet the State surface water treatment regulation requirement. The project will include the design and installation of two, new, deep- well submersible-type pumps rated at 150 gpm each at 600 feet of head to supply water from the SFPUC's Coast Range Tunnel (CRT) to the new disinfection system. On completion, the project will allow delivery of potable water when flows in CRT exceed 240 milion gallons per day.	M s	0	c	Although the San Francisco Regional Water System has about 600 retail customers, it is a wholesale water system that serves a total of 2.4 million customers in the counties of Alameda, San Mateo, Santa Clara, and San Francisco.Under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), the SFPUC must construct new advanced disinfection facilities for its unfiltered Hetch Hetchy supply in order to inactivate Cryptosporidium. The project is intended to ensure the SFPUC is in compliance with the LT2ESWTR Cryptospodidium inactivation requirements in its supply of water to Lawrence Livermore National Laboratory's Site 300 facility. The SFPUC is requesting a grant of \$4,320,000 for this project.	4,320,000	200	600 04	San Francisco	II	2009
2517 3810001	3810001-014	San Francisco Regional Water System		Replace three sections of pipeline.	М	0	С	Crystal Springs pipeline deteriorated beyond repair.	12,600,000	200	600 04	San Francisco	Ш	1998
2518 3810001	3810001-048	San Francisco Regional Water System		Provide seismic anchorage for these water tanks. Provide flexible connections between the tanks, the	М	0	С	Storage tanks need seismic rehabilitation.	3,200,000	200	600 04	San Francisco	Ш	1998
2519 3810001	3810001-003	San Francisco Regional Water System		Replace trestles above low water where required. Replace walkways and guardrails where required. Raise elevation of support where required.	M e	0	С	BD pipeline trestle deteriorated from weather.	6,650,000	200	600 04	San Francisco	II	1998
2520 4500210 2521 1010051	4500210-001 1010051-001	LASSEN PINES MUTUAL WATER CO FRESNO CO WATER WORKS DIST 18		Construct water storage tank. Install new filter, modify clearwell, and add new storag	M e M	0 0	C C	Inadequate storage capacity. Lack adequate treatment and storage capacity.	300,000 461,870	155 236	600 02 620 11	Shasta Fresno	I 111	2002 1999
2522 2710023	2710023-003	TASCO Spreckels Water Company	Install 22 Cross-connectio devices - Spreckels WS	tank. n The Spreckels Water Company has standard detail drawings, specifications for procurement, and preliminary quotations to perform the installation of all 22 backflow devices. Installation and testing will be prepared by March 30, 2009. No environmental documentation is required for this work. Specifications by March 1, 2009. Procurement, installation, and testin to be completed by August 1, 2009. The following is a cost breakdown:Engineering & Administration - \$2,500.00Procurement & Installation - \$175,000.00Testing, Certification & Closeout - \$5,000.00Contingency at 15% - \$27,375.00Total Cost - \$209,875.00	M	0	С	A recent cross-connection survey of the Spreckels Water System has determined that 22 potential cross connections exist within the entire system. Typical of the cross connections found are services utilized for irrigation and connections to commercial properties with interior building sprinkler systems and connections to food processing plants. With the potential of contamination to the drinking water system from back- siphonage at all of these locations, the immediate installation of approved back flow devices is required. The devices range from 1/2 inch to 6 inches in diameter.	209,875	212	660 05	Monterey	Ι	2009
2523 2710023	2710023-001	TASCO Spreckels Water Company	Water Main Replacement Spreckels WS	<ul> <li>Plans and specifications for the replacement of mainlines in the Spreckels Water system are in process and will be completed by May 31, 2009. As these are al replacements of existing mainlines, and all mainlines are under 12 inches in diameter, no CEQA review is required. Procurement, installation, and testing of the replaced mainlines can be completed by December 2009. Project cost estimates are listed below:Engineering &amp; Administration - \$75,000.00Procurement &amp; Installation - \$540,000.00Testing, Certification, &amp; Closeout - \$10,000.00Contingency at 15% - \$94,000.00Total Cost \$719,000.00</li> </ul>	M	0	c	The Spreckels water system was installed in the early 1900's and many parts are more than 100 years old. Many of the water mains are thin-walled steel pipe and are aged well beyond their intended service life. Sections are seriously degraded and a slight increase in operating pressure or a fire flow event results in several broken lines. As leaking and/or broken mainlines can pose a water quality hazard to the system, our engineers recommend that the severely degraded mainlines be replaced. There is approximately 6000 lineal feet of mainline requiring replacement. In addition conservation efforts for the groundwater in the Salinas Valley adjacent to Spreckels are very important due to declining water quality and quantity. This project would allow Spreckels to significanly improve its conservation efforts.	719,000	212	660 05	Monterey	Ι	2009

2524 2210002	2210002-001	PONDEROSA BASIN MUTUAL WTR CO	Pipeline replacement	Remove and replace 2600 feet of substandard piping underneath a main road (Parmabel Street). Current pipe is 2" irrigation pipe and it not up to code with County and State regulations. Install 6" main with 6 fir hydrants and 1 1/2" service laterals to homes. Install : valves. Maiposa County Public Works will be paving th road that this project is on in Jun/July 2009 because th road does not meet current County compaction code.	M re 12 ne ne	0	С	Remove and replace 2600 feet of substandard piping underneath a main road (Parmabel Street). Current pipe is 2" irrigation pipe and it not up to code with County and State regulations. Install 6" main with 6 fire hydrants and 1 1/2" service laterals to homes. Install 12 valves. Maiposa County Public Works will be paving the road that this project is on in Jun/July 2009 because the road does not meet current County compaction code.	186,000	312	665 11	Mariposa	III	2009
2525 1700518	1700518-001	Loch Lomond Mutual Water Co	LLMWC PHASE I INFRASTRUCTURE	The Loch Lomond Mutual Water Co. proposes that the constant need for repairs and the threat of fire justifie the replacement of water mains, some as small as 2- inch, and have been in the ground for over 40-years.	e M S	0	C	Undersize and leaking water mains lead to numerous repairs, and limited fire flow. Phase I proposes no less than 5000-feet of 6" and 8" water main and service replacemnts.	500,000	210	679 03	Lake	II	2009
2526 5610006	5610006-003	YERBA BUENA WATER COMPANY		Purchase a storage tank site and construct a 250,000 t 300.000 gallon tank.	o M	0	С	Need additional fire protection water and 3 days of daily consumption water	650,000	240	690 06	Ventura	IV	2002
2527 3600306	3600306-002	THUNDERBIRD CWD		Construct new line	М	0	С	Undersized transmission line resulting in excessive headloss	90,000	332	720 13	San Bernardino	v	1998
2528 3600306	3600306-003	THUNDERBIRD CWD		Construct disinfection facilities	м	0	с	No disinfection facilities	50,000	332	720 13	San Bernardino	V	1998
2529 3600306	3600306-001	THUNDERBIRD CWD		Construct new 200,000 gallon reservoir	м	0	С	Inadequate storage capacity	160,000	332	720 13	San Bernardino	V	1998
2530 3110011	3110011-003	Tanoe City PUD - McKinney/Quail	McKinney Secondary Source	Inis Pre-Application is for potential SKF funding for Phase 2 of this project, which is the design and construction of an approved permanent surface water treatment plant. Based on the success of the Interim Facility, the concept of surface water treatment has been proven to be a viable solution to the long-term reliability issue with the Crystal Way Well. However, the Interim Water Treatment Facility is not a viable lor term option, and was never planned to be permanent, due the following factors:1. The facility is located directly adjacent to a Sanitary Sewer Pumping Station. The facility is located directly adjacent to McKinney Creek, which typically flows year round. The creek has flooded and submerged the area in 1997 and partially 2005. 3. The facility is installed outdoors and must be decommissioned in the fall due to freeze and snow considerations.4. The decommissioning of the plant in the fall only provides the water system with one approved source during the months of October throug June.5. The facility is located in direct contact with a public use recreation area and a residential condominium complex, and provides significant visual impacts. The project will involve siting, design, and construction of a permanent water treatment facility. The current preliminary design report indicates that a microfiltration plant using UV and chlorination is the	M ng- 2. s in	U	L	The Tanoe City Public Utility District is under directive from CDPH to provide a permanent secondary source. The directive is summarized in Water Supply Permit No. 01-09-01-PER-003 and as amended in Permit Amendment No. 01-09-05-PER-002. In late July of 2003, the Tahoe City Public Utility District's (TCPUD) Crystal Way Well, which serves the McKinney/Chamberlands area of the west shore of Lake Tahoe, experienced a sudden loss of pumping capacity. The sudden loss of pumping capacity was due to a sharp and sudden drop in the pumping level of the well. This indicated that the aquifer in the area was depleted, limiting production capabilities. The pumping output of the well was restricted and the customers in the area were put on a strict rationing. During this period, the TCPUD evaluated options for correcting the situation. A two- phase approach was established, in which an interim water supply alternative was to be pursued as the first phase, and a permanent supply alternative as the second phase.Phase one of the project was handled by TCPUD in conjunction with Gilmore Engineering. Phase one consisted of a State Department of Health Services (DOHS) approved interim water supply to be used until a permanent solution is constructed and in service. During early 2004, the TCPUD conducted pumping and water quality testing of two existing groundwater wells	4,615,375	453	/50 02	Placer		2009
				peferred treatment method based on local water				in the area, the McKinney Well No.1 and the McKinney						

2531 4110012	4110012-004	Cuesta La Honda Guild, Inc.	Cuesta La Honda Guild pipeline replacement	The funding requested in this pre-application would be used to replace substandard pipes in drinking water distribution system. The Guild has identified 14 separate projects that together represent about 30% of entire distribution system conveying treated water. In its entirety, the project would replace 13,000 feet of old 2 inch water mains (galvanized and PVC) with 6 and 8 inch pipe, install 23 fire hydrants, 2 PRVs, and re- connect service to 83 residences. Installation of the new mains would be designed to eliminate dead-ends that are currently present in the system. This portion of the project represents approximately 58% (\$1,922,000) of the total requested funding. Additionally, we are requesting funding to replace approximately 11,000 feet of 2-4 inch pipeline conveying source water to reservoirs and the water treatment plant with a more efficient system that is better protected. The major pipeline supplying water from a remote reservoir to the treatment plant would be re-routed along an existing service road and installed below ground. Besides replacement pipe, we estimate 11 hydrants, 5 gate valves, and 6 air vents will be installed.	Μ	0	c	Cuesta La Honda Guild is a home-owners association formed in the 1930s that currently comprises 285 single- family homes in a rural area of San Mateo County. The association owns and operates the drinking water system. In addition to supplying water to it members, the Guild is the purveyor to several outside users including the local volunteer fire department and public elementary school. The distribution system conveying treated water was originally installed in the 1930's, much of it with substandard materials. Large sections of the system are serviced by 2 inch pipes of varying material (galvanized pipe, PVC, and electrical conduit) that require frequent repair for leaks and occassional issuance of boil orders. Wharf hydrants installed along these sections do not meet current fire fighting requirements. Furthermore, the system contains many dead-ends that complicate the management of the system. The Guild is committed to replacing the original, failing distribution system. The highest priority projects have been funded by expenditures from the Guild's modest capital reserve fund supported by membership assessments. Recently, however, the Guild has needed to use capital reserve funds to implement additional treatment of its source water (local streams) to meet drinking water standards for disinfection by-products. The Guild has been working with DPH regulators to bring chloramine treatment on-line in 2009. Costs	3,329,000	300	750 17	San Mateo	Ι	2009
2532 3110018	3110018-002	Tahoe Park Water Company		Install a storage tank and pipeline. Involves design and construction.	М	0	С	Inadequate storage for proper operation of distribution system.	200,000	436	750 02	Placer	I	2006
2533 1410005	1410005-002	INDIAN CREEK COMMUNITY SERVICE DISTR	RICT	Install 50,000 gallon storage tank and booster pump station.	М	0	С	Low pressure episodes in summer. No storage capacity.	800,000	213	785 13	Inyo	v	2001
2534 3610016	3610016-001	GLEN MARTIN MWC		Construct new reservoir, replace mainline, drill new well	М	0	С	Old storage, distribution system and well	1,000,000	334	793 13	San Bernardino	v	1998
2535 2400172	2400172-004	Sandy Mush Detention Center	Merced County Correctional Complex Arsenic Treatment Project	The project will replace temporary piping systems connected to an existing treatment plant with permanent infrastructure improvements, a buffer bank for blending various concentrations of well water exceeding the Federal MCL, an additional treatment vessel to assure continual supply of domestic water to the facility, and Direct Digital Controls (DDC) for remote monitoring of the system. These improvements will reduce the arsenic concentrations in the water to acceptable levels, in compliance with the Federal and/or State MCL, whichever is more stringent. A significant amount of reconfiguration of the existing water distribution system will be required to combine the water from all three wells into a single point of confluence for the most cost effective treatment system. The County of Merced has already obtained plans and specs for the reconfiguration of the water supply system utilizing adsorptive processes. Merced County is ready to move forward with this project and commencement of construction activities for the improvements can occur as early as October 1, 2010.	Μ	0	C	Arsenic levels in all three ground water wells that serve the County's correctional facilities currently range from 15 ppb to 49 ppb. These levels exceed the Federal Maximum Contaminant Level (MCL) for arsenic, which is 10 ppb. This water system serves both the juvenile justice complex and the adult correctional facilities for the entire County of Merced. No other source of water exists in this isolated vicinity. The ground water in this area of Merced County contains naturally high levels of arsenic. The site of the two correctional facilities is served by a total of three wells and three 100,000 gallon storage tanks. All three wells produce water with elevated levels of arsenic. Two looped 8 inch (8") water mains provide both domestic and fire suppression water to each facility. No irrigation water is associated with this system.[An arsenic treatment plant is currently in place.]	500,000	157	800 11	Merced	Ш	2011
2536 5010007	5010007-004	Hillsview Homes	Hillsview Emergency Generator	Purchase and install one 150 KW diesel generator to	м	0	с	System lacks emergency power for its 2 wells and has	60,000	217	840 10	Stanislaus	ш	2002
2537 1010052	1010052-001	Sierra Cedars CSD	Scherator	CONSTRUCT A NEW WELL AND UPGRADE THE DISTRIBUTION SYSTEM.	М	0	с	LACK OF SUFFICIENT WATER SOURCE CAPACITY AND AN INADEQUATE DISTRIBUTION SYSTEM.	250,000	250	875 11	Fresno	III	1998

2538 0310005	0310005-003	Pine Grove Comm Serv Dist	12" Water Line - Irish Town Road to State Highway 88 Bore	This distribution infrastructure project, Phase 2 M Construction, will consist of installing 2,600 feet of 12" water line from the County road to the bore under State Highway 88. The bore is in place, awaiting connection.	0	C	This is Phase 2 of a two-phase distribution and infrastructure project to bring increased water volumes to existing developed residential and commercial areas. Current water lines do not provide the volume of water needed for proper water flows and pressure. This new water line would also upgrade our ability to provide required fire flows to these existing neighborhoods, which we currently cannot provide. Pine Grove C.S.D. is located in the foothills, where there is a lot of timber and brush creating high fire hazards.	212,000	358	900 10	Amador	Ш	2009
2539 0310005	0310005-002	Pine Grove Comm Serv Dist	12" Water Line - Tank to Irish Town Road	This project, Phase 1 Construction, will consist of M installing 1,357 feet of 12" water line from the District's storage tanks to a County road.	0	С	This is Phase 1 of a two-phase distribution infrastructure project to bring increased water volumes to existing, developed residential and commercial areas. Current water lines do not provide the volume of water needed for proper water flows and pressure. This new water line would also upgrade our ability to provide required fire flows to these existing neighborhoods, which we currently cannot provide.Pine Grove C.S.D. is located in the foothills, where there is a lot of timber and brush creating high fire hazards.	114,000	358	900 10	Amador	III	2009
2540 0310005	0310005-001	Pine Grove Comm Serv Dist	New water storage tank.	The old water storage tank would be removed and M replaced with the new tank on C.S.D. property. Site preparation should be minimal, as we are simply exchanging tanks.	0	с	These funds would be used for replacing a water tank that is at least 25 years old. This tank was a used tank when installed and is showing strong signs of deterioration and should be replaced to protect the integrity of this public, potable water storage tank.	250,000	358	900 10	Amador	Ш	2009
2541 3110020	3110020-013	Squaw Valley Public Service District	Well 3R Replacement Project	Well #3, located on the valley floor and belonging to the M Squaw Valley Public Services District (SVPSD), was completed in 1958 by the State of California as a source of water supply for the 1960 Winter Olympics. It was constructed prior to most of the existing commercial development in the valley. Since the well was completed, the facilities at the ski area, including the paved parking lots, have encroached on the well. The various facilities are perceived by the SVPSD as potential threats to the chemical quality of the groundwater resources exploited by them. Well #3 was constructed without a sanitary seal. At an age of over 48 years old, the well has exceeded its expected life span and the SVPSD has determined it necessary to redrill Well #3R per CDPH standards to provide a continued reliable and safe drinking water supply for the valley.	0	C	Well #3 was drilled in 1958 by the State of California as a source of water for the 1960 Winter Olympics. The existing Well #3 was constructed without a sanitary seal which does not meet the requirements in California Department of Water Resources Bulletins 74-81 and 74- 90. Well #3 is located within the Squaw Valley Ski Corporation Parking lot and a sanitary seal is vital to the protection of water quality.	750,000	745	926 02	Placer	I	2009
2542 1910075	1910075-012	LOS ANGELES CO WW DIST 21-KAGEL CAN	NYON	Replace approximately 3450 linear feet of existing 11/4- M inch water main with new 6-inch or 8-inch pipeline	0	С	The existing 11/4-inch pipeline is aged, undersized, and cannot provide adequate flow for domestic use and fire protection	390,000	249	998 16	Los Angeles	IV	2001
2543 1910075	1910075-005	LOS ANGELES CO WW DIST 21-KAGEL CAN	IYON	THE PROJECT CONSISTS OF INSTALLING 1400 LF OF 12- M INCH PIPELINE TO THE TANK ALONG ANOTHER ALIGNMENT.	0	с	THE PIPELINE THAT FEEDS WATER INTO DISTRICT 21'S WEST TANK HAS RUPTURED DUE TO A SLIDE. THIS OCURRED DURING THE 1995 STORMS. THE DISTRICT PRESENTLY DOES NOT HAVE ADEQUATE FIRE PROTECTION.	285,000	249	998 16	Los Angeles	IV	1998
2544 1910075	1910075-011	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	Replace approximately 4800 linear feet of existing 11/2- M inch water main with new 6-inch or 8-inch pipeline	0	C	The existing 11/2-inch pipeline is aged, undersized, and cannot provide adequate flow for domestic use and fire protection	540,000	249	998 16	Los Angeles	IV	2001
2545 1910075	1910075-006	LOS ANGELES CO WW DIST 21-KAGEL CAN	IYON	RETROFIT TWO TANKS WITH FLEXIBLE CONNECTIONS M AND MOVE OVERFLOW DRAINS TO THE SIDE OF THE TANK FROM THE FLOOR.	0	С	THE CONNECTIONS TO THESE WATER TANKS ARE VERY RIGID AND SUSCEPTABLE TO RUPTURE DURING AN EARTHQUAKE.	112,500	249	998 16	Los Angeles	IV	1998
2546 1910075	1910075-013	LOS ANGELES CO WW DIST 21-KAGEL CAN	IYON	Replace approximately 3800 linear feet of existing 4- M inch water main with new 6-inch or 8-inch pipeline	0	C	The existing 4-inch pipeline is aged, undersized, and cannot provide adequate flow for domestic use and fire protection	430,000	249	998 16	Los Angeles	IV	2001

2547 1910075	1910075-014	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	Replace approximately 2000 linear feet of existing 2- inch water main with new 6-inch or 8-inch pipeline	м	0	С	The existing 2-inch pipeline is aged, undersized, and cannot provide adequate flow for domestic use and fire protection	200,000	249	998 16	Los Angeles	IV	2001
2548 1910075	1910075-009	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	INSTALL APPROX. 4,000' OF 24" PIPELINE AND APPURTENANCES	М	0	с	EXISTING 14" PIPELINE IS UNDERSIZED TO PROVIDE	2,457,000	249	998 16	Los Angeles	IV	1998
2549 1910075	1910075-015	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	Replace approximately 3000 linear feet of existing 4- inch discharge main	Μ	0	С	The existing pipeline that discharges from the District's northerly well is aged, undersized, and in need of replacement	300,000	249	998 16	Los Angeles	IV	2001
2550 1910075	1910075-001	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	REPLACE 2100 FT OF UNDERSIZED 2" WATER MAIN WITH ADEQUATE 6"/8" WATER MAIN.	Μ	0	с	ADEQUATES 2" WATER MAIN CANNOT PROVIDE ADEQUATE SERVICE TO CUSTOMERS OR FIRE	148,500	249	998 16	Los Angeles	IV	1998
2551 1910075	1910075-002	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	REPLACE 1-1/4" WATER MAIN IN WEST TRAIL WITH ADEQUATE 6"/8" PIPELINE.	Μ	0	с	THE EXISTING 1-1/4" WATER MAIN CANNOT PROVIDE ADEQUATE SERVICE TO CUSTOMERS OR FIRE PROTECTION.	45,000	249	998 16	Los Angeles	IV	1998
2552 1910075	1910075-016	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	Replace approximately 3800 linear feet of existing 2- inch water main with new 6-inch or 8-inch pipeline	Μ	0	с	The existing 2-inch pipeline is aged, undersized, and cannot provide adequate flow for domestic use and fire protection	430,000	249	998 16	Los Angeles	IV	2001
2553 1910075	1910075-003	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	INSTALLATION OF PIPELINE ALONG KAGEL CANYON RD FROM EXISTING INTERCONNECTION WITH THE CITY OF LA TO PROVIDE ADEQUATE FIRE PROTECTION.	М	0	с	THE EXISTING BACKBONE PIPELINE SYSTEM THAT SERVES THE DISTRICT IS AGED AND UNDERSIZED AND DOES NOT PROVIDE ADEQUATE FLOWS FOR FIRE PROTFCTION.	700,000	249	998 16	Los Angeles	IV	1998
2554 1910075	1910075-004	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	TO INSTALL 2800 +/- LF OF SIX AND EIGHT-INCH PIPELINE WITH SERVICES AND FIRE HYDRANTS	Μ	0	С	THE EXISTING PIPELINE IS AGED, UNDERSIZED (2"), AND DOES NOT PROVIDE ADEQUATE FLOWS FOR DOMESTIC USE AND FIRE DEMAND.	194,000	249	998 16	Los Angeles	IV	1998
2555 1910075	1910075-010	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	Upgrade existing emergency interconnection with the City of Los Angeles and expand booster capacity	М	0	С	The District has three wells and one emergency interconnection with the City of Los Angeles Department of Water and Power. The existing emergency connection is undersized and in need of upgrade	400,000	249	998 16	Los Angeles	IV	2001
2556 1910075	1910075-007	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	UPGRADE EXISITING EMERGENCY CONNECTION WITH LADWP AND EXPAND BOOSTER CAPACITY ACCORDINGLY.	Μ	0	С	THE EXISTING EMERGENCY INTERCONNECTION WITH THE LADWP IS UNDERSIZED AND IN NEED OF UPGRADE. LOW PRODUCTION AND HIGH NITRATE LEVELS IN TWO OF THE WELLS COULD NECESSITATE RELIANCE ON THE LADWP CONNECTION WHICH COULD RESULT IN SEVERE OUTAGES.	400,000	249	998 16	Los Angeles	IV	1998
2557 1910075	1910075-017	LOS ANGELES CO WW DIST 21-KAGEL CAN	YC	Recoat interior of 0.15 MG and 0.30 MG tanks to protect water quality and public health	Μ	0	с	The existing 0.15 MG and 0.30 MG water reservoirs are very old with corroded tank walls which may affect water quality and public health	170,000	249	998 16	Los Angeles	IV	2001
2558 1910244	1910244-004	GREEN VALLEY CWD	Refurbish Pressure Reducing Valves	All three valves would be inspected by a trained technician and the pressure reducing pilot replaced and adjusted if necessary and a back pressure pilot installed and adjusted to the proper pressure.	Μ	0	c	The District has three Pressure Reducing Valves (PRVs) in the system. They are located between pressure zones and were designed to allow water to flow from a higher zone to a lower zone in case of a loss of pressure in the lower zone(s). They have been inoperable for some time and need to be refurbished and modified so they will function properly. They should have two features; one to allow flow from the higher zone to the lower zone in case the pressure in the lower zone drops to a value lower than normal and two; to provide back pressure control that would close the valve if the upper zone pressure dropped below a pre set value so that the upper zone would not be depleted of water. This would happen if the lower zone dition. The existing valves do not have the back pressure feature. The main break or some other emergency condition. The valve functions automatically by pre set pressure values.	10,000	485	1,000 15	Los Angeles	IV	2007
2559 1910244	1910244-001	GREEN VALLEY CWD		Expose, remove and replace old lines; refurbish and modify three pressure reducing valves adding pressure sustaining features and low flow bypass; install additional water storage tanks next to existing tanks	М	0	с	WW standards defects. Aging distribution system creates the potential for contamination caused by leaks of breaks. Insufficient storage.	201,250	485	1,000 15	Los Angeles	IV	1998

2560 1710018	1710018-006	Lake County CSA 2 - Spring Valley	Spring Valley Water Distribution System Upgrades	The distribution improvement project includes:Installing M a new pipe to create a loop between Quail Trail and Spring Valley Road;Installing a pipe on New Long Valley Road to create a loop between Pawnee Trail and Spring Valley Road;Increase pipe diameter along Wolf Creek Road; andInstall pressure regulating valves at three locations along Spring Valley Road.	0	c	In 2006, the Lake County Special Districts Administration investigated the Spring Valley Water System's distribution system. This project implements recommended improvements outlined in the Hydraulic Analysis Report. Improvements include looping areas of distribution system, increasing pipe size in other areas, and installing pressure regulating valves in areas of high pressure.HEALTH BENEFITS include a more reliable source of water throughout the distribution system.ECONOMIC BENEFITS include construction of the improvements including materials and labor.COMPLIANCE BENEFITS include a more reliable distribution system with significantly fewer dead ends and stable pressure zones.	2,000,000	420	1,018 03	Lake	Ι	2009
2561 1710018	1710018-005	Lake County CSA 2 - Spring Valley	Improve Storage and Distribution Facilities	Increase storage and distribution facilities to improve M delivery during high demand periods.	0	с	Quantity of water supply is inadequate during peak demand periods.	1,500,000	420	1,018 03	Lake	П	2007
2562 2110005	2110005-008	Bolinas Community PUD	Arroyo Hondo Transmission Line Replacement	A replacement section of 6-inch PVC pipe of M approximately one-half mile in length will be installed within the district's utility road easement between the upper and lower catchments at the Arroyo Hondo Creek.	0	с	In 1982, the district's then-existing raw water transmission line from its source (the Arroyo Hondo Creek) to the water treatment plant was largely destroyed during federal disaster storm events. The entirety of the line was replaced, with the exception of approximately one-half mile of 6-inch steel line between the district's upper and lower catchments. This section of line is now exposed in multiple places adjacent to the creek and is vulnerable to falling trees and severe storm events. A loss of this line would severely jeapordize the district's access to its raw surface water supply.	300,000	587	1,200 18	Marin	Ι	2009
2563 2110005	2110005-011	Bolinas Community PUD	Horseshoe Hill Road Wate Main Replacement	r The existing water line will be abandoned in place and a M new line of approximately 4700 linear feet will be installed within the County right-of-way.	0	С	The existing water line serving the customers in this area was installed 100 years ago under what is now private property; our district's access to this line is limited and our ability to service and maintain it is compromised. In addition, the existing line does not meet current AWWA requirements.	175,000	587	1,200 18	Marin	II	2009
2564 2110005	2110005-009	Bolinas Community PUD	Wharf and Brighton Road Customer Service and Saddle Replacement	Replace approximately 100 existing customer service M lines and saddles that are failing due to corrosion caused by sea/ground water intrusion to ensure reliable water service to these customers and reduce water losses in the distribution system.	0	c	Approximately 100 district customers are located in the downtown area, along Wharf and Brighton Roads, at sea level in this coastal community. The existing service lines and saddles for these customers are badly corroded due to sea/ground water intrusion and currently are failing, resulting in significant water losses and requiring the district to conduct frequent emergency repairs. In addition, the County of Marin plans to repave Wharf Road within the next year or two, so our district needs to replace these corroded service lines and saddles prior to this repaving project. The project is necessary to ensure reliable water service to these 100 customers and reduce water losses in our distribution system.	250,000	587	1,200 18	Marin	Ι	2009

2565 2110005	2110005-012	Bolinas Community PUD	Olema-Bolinas Road Wate Main Replacement/Upgrade	r Approximately 1600 linear feet of existing 4-inch water main will be abandoned in place and a new, 6-inch water main will be installed. Thirteen customer services and saddles also will be replaced as part of thi project.	s	0	c	The existing water main in this section of our distribution system is a 4-inch diameter line, which provides inadequate flow for fire suppression purposes. Our engineers have recommended that this approximately 1600 linear feet of water main be abandoned and replaced with a 6-inch diameter line. The local fire protection district strongly endorses this application; at present, due to the inadequate flow, fire response protocol requires that water be tendered in to this area and/or emergency water storage is required of adjacent property owners. The local K-8 public school and thirteen residences are located in this area. This project is urgent due to the fact that the County of Marin is scheduled to install a federally-funded bike path during late July and August 2009 in this same location: it would be much more expensive and disruptive to our customers to replace this water main after the bike path has been installed. Accordingly, we seek funding to replace this water main during July 2009.	300,000	587	1,200 18	Marin	Ι	2009
2566 2110005	2110005-010	Bolinas Community PUD	Install Additional Filtratior Unit at Water Treatment Plant	Purchase and install new fifth microfiltration unit at existing water treatment plant to increase water treatment plant's treated water production capability.	Μ	0	C	Our water treatment plant is equipped with four microfiltration units which are capable of producing a combined maximum output of approximately 160 gallons per minute of treated water. During summer and fall months, this output capability typically falls when we supplement our surface water source with reservoir water the reservoir water quality is inferior due to algae bloom and other source conditions. At the same time, we typically experience an increase in customer demand during these months. Due to the combination of decreased production ability and increased demand, the district frequently cannot meet demand and necessarily issues requests for voluntary water conservation. Note: this is not a raw water supply availability problem, but rather a production capability problem.	250,000	587	1,200 18	Marin	Π	2009
2567 5010023	5010023-001	City of Modesto, DE #6, So. Turlock	Turlock Replacement Well	This project will include drilling a deeper well with a larger casing and pump motor to provide reliable pumping capacity for this area. Related site improvements include chlorine disinfection system, upgrading electrical as required by code for the new pump, install a backup emergency generator with transfer switch and any onsite piping to tie-in the new well to the existing system for distribution.	Μ	0	c	The main issue is the City of Modesto is unable to provide reliable pumping capacity during peak and maximum day demands. There are currently two wells available for the southern area of Turlock in which the City of Modesto provides water. In the event of an emergency, any one well can NOT provide reliable pumping capacity. The existing maximum day demand for this area is 355 gpm. Assuming one well offline due to no backup power at either site, the maximum reliable pumping capacity is currently deficient by providing only 240 gpm.	1,000,000	342	1,279 10	Stanislaus	111	2011

2568 4710006	4710006-014	McCloud C.S.D.	McCloud - Replacement of Upper Elk Spring Pipeline	Full replacement of the existing pipeline with ductile iron pipe within the existing footprint is the presumed most cost-effective and environmentally friendly project.	Μ	0	C	The community of McCloud is blessed with pristine water but currently cursed with an antiquated water supply system installed from our springs and springhouses sometime between 1927 and 1937 when the community was a company-owned town. In a 1998 McCloud Water Supply Infrastructure Improvement Requirements report, the community's Upper Elk Spring pipeline was identified as having an additional 10 years of life remaining. In 2006, an engineering study identified the 6,300 lineal foot pipeline as a 10", thin walled steel pipe that connects the Upper Elk Springhouse to the Lower Elk Springhouse. Most of this pipeline was very shallowly installed below ground. Some sections sit on the ground surface with soil mounded over it providing minimal, inadequate protection. Two sections of the pipeline are suspended above waterway crossings; one is supported by a rotting wooden truss system and the other exhibits extensive cable wear which has caused sectional pipe sagging. The 1998 report recommended replacement of noted multiple unscreened air valves in disrepair and one of the aerial pipeline crossings for more immediate replacement than the then-10 year anticipated lifespan. These concerns have not been addressed to date, presumably due to the economic fragility of the community. McCloud's population of 1300 cannot solely sustain the enormous financial impacts of this	3,500,000	641	1,300 01	Siskiyou	I	2012
2569 4710006	4710006-005	McCloud C.S.D.	Replacement of Lower Elk Spring Pipeline	Full replacement of the existing pipeline with ductile iron pipe within the existing footprint is the presumed most cost-effective and environmentally friendly project.	Μ	0	C	McCloud's Lower Elk Spring pipeline was installed sometime between 1927 and 1937 when the community of McCloud was a company-owned town. The approximately 14,000 lineal feet of 14", thin walled steel pipe connects the Lower Elk Springhouse to the Water Storage Tank. In 2003, a water meter and 10" pressure relief valve were installed on the pipeline approximately 220' upstreamof the Water Storage Tank. No other major improvements have been made to the pipeline. Most of the pipeline is seated in a very shallow trench or on the surface with soil or corrugated metal sheeting mounded over the pipe providing minimal and inadequate protection. Aerial pipeline sections cross seasonal drainage ditches with cable suspension support systems. Deterioration of the pipeline is a constant source of maintenance issues for the McCloud Community Services District requiring significant funding and staff time, throwing "good money after bad" rather than addressing replacement. The pipeline is susceptible to leaks, holes and failures due to lack of protection provided by minimal coverage in some areas and none in others. These circumstances create a serious issue of vulnerability. Damage to the pipeline caused by tree roots, rocks, falling timber, heavy equipment, all-terrain vehicles, large mammals, age and high pressures is frequent. The pipeline does not meet the State's requirements for a reliable and	5,250,000	641	1,300 01	Siskiyou	I	2008

2570 4710006	4710006-015	McCloud C.S.D.	Planning/Technical Assistance for Phased Water Distribution System Replacement	Planning/Technical Assistance for Phased Water Distribution System Replacement	Μ	0	C	McCloud's company-owned mill town legacy includes deeded inheritance of approximately 63,000 lineal feet of an antiquated water distribution system installed in the 1940s without benefit of design planning or engineering. The existing helter-skelter pipelines include mains running through now private properties since the company divested itself of ownership. Homes and businesses exist atop infrastructure. Valves are located on private properties and frequently under residential and commercial structures. Infrastructure was deeded to McCloud with minimal documentation to facilitate accurate location of water main, service lines and appurtenances. Although the McCloud Community Services District (MCSD) employees have developed a map book based on the limited documentation provided and additional field observations, it is difficult and sometimes impossible to accurately establish the location of mains, service lines and appurtenances. An inordinate amount of staff time must be spent performing open trench investigations of infrastructure prior to performing what should be minor repairs or replacements since unknown factors often cause significant, negative consequences. One area of town requires the closure of 24 valves to shut the water off for a single repair. MCSD is currently "throwing good money after bad" as budgeted capital replacement funds are used to repair and replace infrastructure	35,000	641	1,300 01	Siskiyou	I	2012
2571 4710006	4710006-013	McCloud C.S.D.	McCloud - Replacement of Lower Elk Spring Pipeline	Full replacement of the existing pipeline with ductile iron pipe within the existing footprint is the presumed most cost-effective and environmentally friendly project.	Μ	0	C	McCloud's Lower Elk Spring pipeline was installed sometime between 1927 and 1937 when the community of McCloud was a company-owned town. The approximately 14,000 lineal feet of 14", thin walled steel pipe connects the Lower Elk Springhouse to the Water Storage Tank. In 2003, a water meter and 10" pressure relief valve were installed on the pipeline approximately 220' upstream of the Water Storage Tank. No other major improvements have been made to the pipeline. Most of the pipeline is seated in a very shallow trench or on the surface with soil or corrugated metal sheeting mounded over the pipe providing minimal and inadequate protection. Aerial pipeline sections cross seasonal drainage ditches with cable suspension support systems. Deterioration of the pipeline is a constant source of maintenance issues for the McCloud Community Services District requiring significant funding and staff time, throwing "good money after bad" rather than addressing replacement. The pipeline is susceptible to leaks, holes and failures due to lack of protection provided by minimal coverage in some areas and none in others. These circumstances create a serious issue of vulnerability. Damage to the pipeline caused by tree roots, rocks, falling timber, heavy equipment, all-terrain vehicles, large mammals, age and high pressures is frequent. The pipeline does not meet the State's requirements for a reliable and	5,250,000	641	1,300 01	Siskiyou	I	2012

2572 4710006	4710006-006	McCloud C.S.D.	Planning/Technical Assistance for Phased Water Distribution System Replacement	We currently seek assistance to determine the feasibility of phasing replacement in multiple, stand- alone projects, evaluate an approach to environmental study requirements relative to phasing and provide technical assistance in the development of a phased approach process if feasibility is established. We are committed to forward momentum toward completion of replacement without pause. Grant funding would speed progress toward the goal while significant public health hazards loom as competitors in the race to the finish.	M	0	c	McCloud's company-owned mill town legacy includes deeded inheritance of approximately 63,000 lineal feet of an antiquated water distribution system installed in the 1940s without benefit of design planning or engineering. The existing helter-skelter pipelines include mains running through now private properties since the company divested itself of ownership. Homes and businesses exist atop infrastructure. Valves are located on private properties and frequently under residential and commercial structures. Infrastructure was deeded to McCloud with minimal documentation to facilitate accurate location of water main, service lines and appurtenances. Although the McCloud Community Services District (MCSD) employees have developed a map book based on the limited documentation provided and additional field observations, it is difficult and sometimes impossible to accurately establish the location of mains, service lines and appurtenances. An inordinate amount of staff time must be spent performing open trench investigations of infrastructure prior to performing what should be minor repairs or replacements since unkown factors often cause significant, negative consequences. One area of town requires the closure of 24 valves to shut the water off for a single repair. MCSD is currently "throwing good money after bad" as budgeted capital replacement funds are used to repair and replace infrastructure	35,000	641	1,300 01	Siskiyou		2008
2573 4710006	4710006-008	McCloud C.S.D.	Replacement of Upper Elk Spring Pipeline	We seek grant funding assistance to replace this pipeline to mitigate immediate, known hazardous conditions.	Μ	0	C	The community of McCloud is blessed with pristine water but currently cursed with an antiquated water supply system installed from our springs and springhouses sometime between 1927 and 1937 when the community was a company-owned town. In a 1998 McCloud Water Supply Infrastructure Improvement Requirements report, the community's Upper Elk Spring pipeline was identified as having an additional 10 years of life remaining. In 2006, an engineering study identified the 6,300 lineal foot pipeline as a 10°, thin walled steel pipe that connects the Upper Elk Springhouse to the Lower Elk Springhouse. Most of this pipeline was very shallowly installed below ground. Some sections sit on the ground surface with soil mounded over it providing minimal, inadequate protection. Two sections of the pipeline are suspended above waterway crossings; one is supported by a rotting wooden truss system and the other exhibits extensive cable wear which has caused sectional pipe sagging. The 1998 report recommended replacement of noted multiple unscreened air valves in disrepair and one of the aerial pipeline crossings for more immediate replacement than the then-10 year anticipated lifespan. These concerns have not been addressed to date, presumably due to the economic fragility of the community. McCloud's population of 1300 cannot solely sustain the enormous financial impacts of this	3,500,000	641	1,300 01	Siskiyou	1	2008
2574 1710022	1710022-001	Lake County CSA 20 - Soda Bay		Perform capacity analysis and update master plan. Construct components to accommodate capacity needed by the consolidation.	м	0	С	Need to perform capacity analysis and update master plan to evaluate consolidation potential with other water systems, like Kelseyville and Finley. Re-finance DWR loan.	1,000,000	596	1,342 03	Lake	II	1998
2575 4010003	4010003-012	SAN MIGUELITO MWC		Institute an aggressive leak detection and repair program for entire system.	М	0	C	Distribution system needs adequate maintenance and operation program to prevent Water Works standards failure	10,000	611	1,385 06	San Luis Obispo	IV	1998
2576 4010003	4010003-005	SAN MIGUELITO MWC		Construct a separate, new boost station to take advantage of higher pressure state water.	М	0	С	Needs to have adequate distribution system operational facilities to comply with Water Works standards.	20,000	611	1,385 06	San Luis Obispo	IV	1998

2577 3400229	3400229-001	RIO COSUMNES CORRECTIONAL CENTER		Construct a new 300 gpm well with a treatment plant for Iron, Arsenic and Manganese. Involves design and construction.	Μ	0	С	Single well source. Not reliable.	250,000	13	1,400 09	Sacramento	I	2006
2578 5510002	5510002-004	TUD - Ponderosa	Distribution System Upgrade (replace wrapped steel pipe) with Storage	REPLACE OLD WRAPPED STEEL PIPE, UPGRADE d STORAGE FACILITIES, AND INSTALL TWO NEW STORAGE TANKS.	M	0	С	DETERIORATED STORAGE AND DISTRIBUTION SYSTEM FACILITIES. NEED ADDITIONAL STORAGE CAPACITY.	610,000	611	1,461 11	Tuolumne	Ш	1998
2579 2810001	2810001-001	Howell Mountain Mutual Water Company		Install 1MG tank at plant. Replace distr. system. Bring earthen dams up to standards. Extend the height of Lake Henne dam. Rebuild the supply piping system for the lakes to the treatment plant.	Μ	0	С	Clearwell is significantly undersized. Distr. system consists of small dia. steel lines and transite pipe in poor condition. Test data for dams on two lakes indicates that they may fail in a significant seismic event. More raw water storage is needed	12,400,000	389	1,500 03	Nара	II	1998
2580 3710039	3710039-006	Pine Valley Mutual WC	low pressure	.5 MG storage tank, pump station, an 8" diameter pipeline at higher than upper elevations.	М	0	С	Low pressure in upper elevations of water distribution system.	1,000,000	691	1,500 14	San Diego	V	1998
2581 3610117	3610117-003	DEVORE WC		Construct new transmission lines from sources to storage, relocate PRVs	м	0	С	Insufficient transmission facilities, pressure too high and too low in some areas	347,500	459	1,500 13	San Bernardino	V	1998
2582 3610117	3610117-001	DEVORE WC		install diesel booster at Devore Rd PRV, Install earthquake valves on reservoirs and 215FWY bridge, add new mainline valves, install soft start on Pump 3	М	0	С	No aux power on low zone wells, No earthquake valves on reservoirs, Insufficient mainline valves, Soft motor controller needed on Pump#3	26,500	459	1,500 13	San Bernardino	v	1998
2583 2110004	2110004-017	Stinson Beach County Wtr Dist	Calles & Patios Pipeline Replacement Project	The District replaces approximately 300 feet of old and undersized potable water pipeline (1 to 2-inch diameter) annually with 2 to 4-inch pipe using its own staff forces and equipment. Staffing, time, and budget limitations only allow the District to replace approximately 300 feet of pipe annually and there are approximately 4,200 feet of pipeline needing replacement. The funding requested for this project (\$126,000) would allow for relocating approximately 4,200 feet of potable water pipeline using a contractor to perform the work. This project addresses water system and water conservation improvements, and reliability issues.	м	0	с	The homes in the Calles and Patios area of Stinson Beach are situated on the sand spit beach. The water mains and laterals in the Calles and Patios area are over 50 years old, undersized, and deteriorating. The deteriorating condition of the pipelines causes problems with backflow prevention devices and causes flow restrictions that result in non-compliance with fire flow requirements. Additionally, the old pipelines were not originally installed at proper depth and often leak. Because the pipelines are installed in sand, the leaks can go undetected for long periods of time.	126,000	721	1,500 18	Marin	II	2009
2584 1910023	1910023-002	AVERYDALE MWC		Buy 1 acre of land, drill and equip a new well, and construct additional storage.	М	0	С	Aging well pumps, storage facilities and distribution system. Additional supply needed for fire protection.	325,000	291	1,500 16	Los Angeles	IV	2001
2585 2110004	2110004-015	Stinson Beach County Wtr Dist	Seadrift Pipeline Relocation	The District relocates approximately 400 feet of mainline potable water pipeline (6-inch and 4-inch diameter) annually with its own staff forces and equipment. Staffing, time, and budget limitations only allow the District to relocate approximately 400 feet of pipe annually. The funding requested for this project (\$450,000) would allow for relocating approximately 2,000 feet of potable water pipeline using a contractor to perform the work. This Project is currently on the CDPH's Proposition 50 Project Priority List.	Μ	0	С	Existing on-site wastewater systems in the Seadrift area of Stinson Beach do not meet the 10-foot minimum setback requirement from potable water service pipelines. The District relocates approximately 400 feet of potable water pipeline every year such that the setback requirements are met.	450,000	721	1,500 18	Marin	Ι	2009
2586 4100517	4100517-002	MENLO COLLEGE		Study by professional engineering firm to determine possible solutions is being conducted.	М	0	с	Mains in poor condition., inadequate not in compliance with WW Standards.	300,000	45	1,500 17	San Mateo	II	1998
2587 4100517	4100517-001	MENLO COLLEGE		Study by professional engineering firm to determine	М	0	С	Water storage tank upgrade, needs to correct aging	300,000	45	1,500 17	San Mateo	Ш	1998
2588 1210008	1210008-005	Garberville Sanitary District		Repair existing tanks and construct additional 100,000 tanks	м	0	с	Storage tanks need repairs and the storage capacity is insufficient to meet the maximum daily demand	175,000	409	1,500 01	Humboldt	I	2000
2589 3610117	3610117-002	DEVORE WC		New 125k reservoir at top of Greenwood Ave, new well	М	0	с	Insufficient storage in upper zone	175,000	459	1,500 13	San Bernardino	v	1998

2590 1210008	1210008-010	Garberville Sanitary District	Bear Canyon Aerial	The proposed project would consist of replacing the old M	0	С	On March 4 2010 and again on December 28, 2010 the	3,030,000	409	1,500 01	Humboldt	I.	2012
			Replacement Project	aerial line supplying the north side of Bear Canyon. The			district experienced a catastrophic six inch transmission						
				project elements will include preliminary engineering,			main line failure. the failure was caused by a 10 acre						
				environmental, design, and construction of a new			landslide in a remote canyon that divides southern						
				mainline and storage tank. The existing aerial line			Garberville from northern Garberville services. The						
				would be decommissioned in place as part of the			failure left many state and county essential services						
				project. The new route for the waterline would consist			with out water. Cal Trans, Cal Fire, the Pacific Gas and						
				of constructing a new water main in Redwood Drive			Electric area service center, and the Humboldt County						
				from Maple Lane to Alderpoint Road, over Highway 101,			Roads Operations Center were with out water along						
				bypass the Arthur Road pump station, and continue			with 101 residential services. A Boil Water Order was						
				along Alderpoint Road to Wallen Road, and up Wallen			issued by the district. The failure was mitigated by						
				Road to the Wallen Road tank site. The length of			installing a temporary three inch pipe that is laid above						
				waterline necessary would be 14,060 lineal feet.			ground. The 6 mainline feeds an aerial line from						
				Approximately 1,330 LF of this waterline would be			downtown to the northerly bank of Bear Canyon near						
				within bridge structures. The project will also replace			the CDF fire station. This aerial line was constructed						
				the existing storage tank at the Wallen Road Tank site.			prior to 1936. David N. Lindberg, Certified Engineering						
				The existing tank is a 20,000 gallon redwood tank. The			Geologist evaluated the slide on March 8th and						
				tank was erected in the 1970s when the Wallen and			December 29, 2010 and recommended that the						
				Johnson Subdivision was constructed. The tank is filled			waterline be relocated to the east as far as possible as a						
				by the Wallen Road booster station which pulls water			temporary solution. Mr. Lindberg further						
				from the Alderpoint Road tank. The site is at 1,150 feet			recommended that the long term solution was to						
				above MSL. The Wallen Road booster station was also			relocate the waterline crossing of Bear Canyon to a						
				constructed in the 1970s and will need minor			more stable and accessible location. CDPH District						
				rehabilitation as part of the project. The Arthur Pump			Office staff has observed the slide area and has						
				Station will be decommissioned as part of the project.			concerns that the system will see failure of the slide						
				This will decrease the O&M costs for the district. This			during the winter of 2011, which will result in						
				project is intended to be attached to the new mainline			approximately one quarter of the system customers						
2591 2110004	2110004-014	Stinson Beach County Wtr Dist	Fitzhenry Creek #2	The project consists of installing approximately 60 feet M	0	С	One of the District's critical facilities is an 8-inch potable	40,000	721	1,500 18	Marin	П	2009
			Pipeline Crossing	of new 8-inch diameter potable water pipeline and			water pipeline that crosses a small creek, sometimes						
				fittings and 60 feet of new 4-inch diameter raw water			referred to as Fitzhenry Creek #2. The 8-inch potable						
				pipeline and fittings. The new pipeline and fittings shall			water pipeline crosses Fitzhenry Creek #2 in an						
				be cement-lined ductile iron with asphaltic coating. The			alignment that follows a foot trail. The creek passes						
				pipelines shall be constructed on cast-in-place			under the foot trail (and the 8-inch potable water line)						
				reinforced concrete piers to form a long span across the			in two small corrugated metal culverts. In addition to						
				creek. The new water pipelines shall tie into the			the 8-inch potable water pipeline, the District also has a						
				District's existing buried pipelines on each end and new			4-inch raw water pipeline in the same alignment and						
				gate valves shall also be installed to allow the new			parallel to the 8-inch potable pipeline. In recent years,						
				sections of above-ground pipeline to be isolated in the			Fitzhenry Creek #2 has overtopped the small corrugated						

metal culverts and the foot trail, subjecting the potable

and raw water pipelines to potential damages and

threatening the ability of the District to provide a

reliable supply of water to a large portion of its

customers.

sections of above-ground pipeline to be isolated in the event of emergency or repairs. Custom-fabricated steel

piers. The plans and specifications for the project are

approximately 90% complete as of February 2009.

saddles are required to accept the new pipe on

2592 2110004	2110004-020	Stinson Beach County Wtr Dist	Black Rock Raw Water Tanks Replacement Project	The project involves replacing the District's aged 30,000 t gallon redwood storage tanks (two tanks totaling 60,000 gallons). The redwood tanks will be replaced with a series of smaller, plastic storage tanks having lesser total capacity than the existing redwood tanks. The redwood tanks will be dismantled on site and disposed of properly. Some minor grading of the existing tank site will be required as part of the project. The new tanks will require a concrete pad foundation and proper seismic anchoring. The tank replacement project will also require replacing and realigning small sections of the existing raw water pipelines that serve as the inlets and outlets to/from the tanks. The project addresses water conservation, efficiency, and reliability improvements. This Project is currently on the CDPH's Proposition 50 Project Priority List. The plans and specifications for the project are approximately 75% complete as of February 2009.	o M o	0	c	The raw water storage facilities of the Stinson Beach County Water District (District) include two (2) large redwood storage tanks, each having a capacity of 30,000 gallons. The redwood storage tanks (referred to as the Black Rock raw water storage tanks) were originally constructed around the turn of the century and need to be replaced. The Black Rock raw water storage tanks need to be replaced because they exceed their useful lives, they leak water, are uncovered, and are vulnerable to a seismic event.Surface water from two of the District's four surface water supplies is stored in the Black Rock raw water storage tanks prior to delivery to the District's water reatment plant. The water tanks are situated together on a small District- owned easement. The existing tanks do not have seismic anchoring. The water tank site is on a hillside, not easily accessible for construction equipment, and is in close proximity to local residents. Previous conceptual designs for replacing the tanks have met opposition from local neighbors. To address the aesthetic issues raised by its neighbors, the District plans to replace the 2 large redwood tanks with a series of smaller, plastic water tanks of lesser total capacity.	114,800	721	1,500 18	Marin	Π	2009
2593 2110004	2110004-016	Stinson Beach County Wtr Dist	Ranch Raw Water Tank Replacement Project	The project involves the design and construction costs associated with replacing the District's aged 410,000 gallon bolted steel raw water tank with a new steel tank having equal capacity as the existing tank. The bolted steel tank will be dismantled on site and properly disposed of. Some minor grading of the tank site will be required as part of the project. The new tank will require a concrete foundation and proper seismic anchoring. The tank replacement project will also require replacement and realignment of the pipeline systems that deliver water to and from the tank. The project addresses water system and reliability improvements. This Project is currently on the CDPH's Proposition 50 Project Priority List.	M k	0	c	The raw water storage facilities of the Stinson Beach County Water District (District) include one (1) large bolted steel raw water storage tank, having a capacity of 410,000 gallons. The storage tank (referred to as the Ranch raw water storage tank) was originally constructed around 1956 and needs to be replaced. The Ranch raw water storage tank needs to be replaced because it has exceeded its useful life and is vulnerable to a seismic event.Surface water (and occasionally groundwater) from one of the District's four surface water supplies is stored in the Ranch raw water storage tank prior to delivery to the District's water treatment plant. The Ranch water tank is the District's primary source of storage for raw water and is situated on a small parcel of land owned by the District. The water tank site is in a ravine that is subject to slides and not easily accessible for construction equipment. The District plans to replace the bolted steel raw water tank with a new steel tank.	490,000	721	1,500 18	Marin	Ι	2009
2594 5510003	5510003-002	TUD - Tuolumne City Water System	Muller Water System reliability	CONSTRUCT PIPELINE AND PRESSURE REDUCING STATION TO INTERCONNECT THE TWO SYSTEMS.	М	0	С	NEED AN INTERCONNECTION WITH THE MULLER WATER SYSTEM FOR RELIABILITY AND TO IMPROVE SYSTEM PRESSURE IN THAT PORTION OF THE DISTRIBUTION SYSTEM.	80,000	669	1,576 11	Tuolumne	III	1998
2595 5510015	5510015-002	TUD - Cedar Ridge Water System	WTP Upgrades and connect STP to Crystal Fall:	CONSTRUCT A PUMP STATION AND PIPELINE TO S INTERCONNECT THE CEDAR RIDGE SYSTEM TO THE CRYSTAL FALLS SYSTEM.	Μ	0	с	THE WTP IS APPROACHING ITS MAXIMUM CAPACITY AND MAY NEED UPGRADING TO MEET THE SWTR REVISIONS IN THE FUTURE.	240,000	666	1,581 11	Tuolumne	Ш	1998
2596 5510015	5510015-001	TUD - Cedar Ridge Water System	Additional Storage	CONSTRUCT A 200,000 GALLON STEEL STORAGE TANK.	Μ	0	С	INSUFFICIENT STORAGE DURING EMERGENCIES AND ANNUAL DITCH OUTAGE.	124,000	666	1,581 11	Tuolumne	111	1998
2597 4710002	4710002-001	City of Dunsmuir	Dunsmuir, City of	Construct storage facilities for upper pressure zone.	М	0	С	Occasional outages and no storage in upper pressure zone.	700,000	1,285	1,923 01	Siskiyou	I	1998

2598 4710002	4710002-003	City of Dunsmuir	Dunsmuir Water	Water mains will be replaced at a 6 inch, 8 inch, 10 inch Diameter and in some cases relocated to a more accessible location. To increase safety of drinking water, longevity of system and fire safety.	Μ	0	с	Replace aged distribution system (nearing end of useful life), some water mains are failing continually. Existing lines have a 6 inch Outer Diameter thin wall with approximately 140 pounds PSI. Water main is located within 3 feet of an existing sewer main. Due to terrain and utilities location of existing water main does not allow construction of new main in same area.One region has a 2 inch water line with no fire fighting capabilities.Our elementary school has very limited fire fighting water resources.	2,547,000	1,285	1,923 01	Siskiyou	I	2011
2599 5410014	5410014-005	Tipton Community Services Dist	New Municipal Water We - Tipton CSD	II The Tipton Community Services District (District) has identified the need for a new groundwater well for domestic water supply purposes. The District's proposed project consists of designing and constructing a new groundwater well. At this time, a well site has not been identified. The project cost estimate includes the cost to install a 10-inch transmission pipeline (1,320 lineal feet) to connect the proposed well to the existing water system. The cost estimate also includes a test well and abandonment of one existing well. The well site will include a 600-foot deep municipal well, pump and electric motor, an 8,000 gallon hydropneumatic tank, chlorination and associated safety equipment, piping, valving, flow measurement, site work, fencing and a fire hydrant. The proposed Project will include the preliminary engineering necessary to complete the well including: technical design, reports, California Environmental Quality Act procedures, surveying and permits. The preliminary engineering will culminate with the preparation of final plans and specifications for bidding purposes. As part of the Project, the District will select a general contractor through a public bidding process.	м	0	C	The Tipton Community Services District (District) provides domestic water to the residents of the unincorporated community of Tipton. The District's water system serves approximately 2,400 people. The District utilizes two (2) groundwater wells to supply its water system. The wells produced 193.9 million gallons in 2008. The revisions to the Title 22 Water Works Standards (effective March 9, 2008) requires that the public water system has the capacity to meet the system's maximum day demand (MDD) and peak hour demand (PHD) (see Section 64554(a)). The standards also require that the system shall be capable of meeting MDD with the highest capacity source off-line (see Section 64554(c)). Based on the Year 2008 water production records (the District does not have water usage records) and the Year 2007 pump tests, the existing water system cannot meet the title 22 Water Works Standard discussed above. The two (2) wells were drilled in 1959 (Well No. 2) and 1986 (Well No. 4) and are 50 and 23 years old, respectively. The District needs a new groundwater well to meet current title 22 Water Works Standards. A new well is also necessary to relieve the District's dependency on its older wells.	1,017,000	587	1,992 12	Tulare	III	2009
2600 5410014	5410014-001	Tipton Community Services Dist		CONSTRUCT NEW WELL. OTHER - DESIGN AND	м	0	С	NEEDS ADDITIONAL CAPACITY TO MEET DEMANDS. NO	329,000	587	1,992 12	Tulare	Ш	1998
2601 5410014	5410014-002	Tipton Community Services Dist		REPLACEMENT OF THE EXISTING PIPING WITH NEW PIPELINES AND A CROSSING OF HWY. 99. OTHER - DESIGN AND CONSTRUCTION.	М	0	с	STANDET FOWER. PIPE CROSSING HWY. 99. OLD AND UNDERSIZED WATER MAINS	366,000	587	1,992 12	Tulare	Ш	1998
2602 4910019	4910019-002	Forestville County Water District	Forestville Water District Young Tank Replacement	Dismantle existing redwood storage tank and construct a new welded steel tank with a storage capacity of approximately 300,000 gallons. Reconstruct tie-in pipeline and appurtenances.	М	0	С	An existing 100,000 gallon redwood water storage tank has been in service for over 40 years. It has developed leaks which are no longer repairable. The tank also sustained slight exterior damage when it was struck by a nearby tree felled during a recent storm. Although the longer term effects on the structural integrity of the tank due to this event are unknown, the on-going risk to the District is high. This tank represents 50% of the water storage capacity directly serving the high pressure zone on the west side of the service area. The District is also in need of additional overall storage capacity to offset seasonal water delivery limitations form the Sonoma County water Agency.	500,000	909	2,000 18	Sonoma	ΙΙ	2009

2603 4910019	4910019-001	Forestville County Water District	Forestville Water District Kay Lane Water Main Replacement	Install approximately 2,300 feet of 8" diameter water pipe, three (3) 8-inch isolation valves, one (1) blow-off and four (4) fire hydrants.	М	0	C	Two existing small diameter private water mains provide water service to District customers whose properties are up to 2,300 feet from the nearest point of the District's distribution network. These private mains were installed over 30 years ago and run beneath a street that borders the District's service area. The length and age of these private mains continually expose the customers to an elevated risk of substandard water quality and service reliability. One of the mains crosses over Jones Creek, which is therefore at-risk to the effects of direct discharge of chlorinated water that would result from any leakage. Other property owners in the service area also front the same street in which the private mains are located but are unable to afford a water service connection due to regulations that establish limits on the distances that separate distribution system, customer meter and customer property. This portion of the District's service area also lacks suitable water supply for fire fighting purposes. The District would like to replace the private mains with a pipe that meets District standards, providing not only improved service to existing customers, but also enabling other property owners in the service area to acquire water service. This new pipe would eventually be extended back to another main in the distribution network, creating a service loop that would provide increased reliability to a larger portion of	362,000	909	2,000 18	Sonoma	Π	2009
2604 1710010	1710010-008	Lower Lake County Water District	Distribtution System Replacement	Replace with new pipe sized to meet current system demands	м	0	С	Eight miles of old, undersized pipe in poor condition.	4,000,000	886	2,025 03	Lake	Ш	2002
2605 5610003	5610003-002	VENTURA CWWD NO. 17 - Bell Canyon	Ventura County Waterworks District No. 1 - Reservoir Safety Upgrades	This project will include:1. Installation of a flexible 7 connection (EBBA Iron "Flextend") for the reservoirs inlet-outlet piping.2. Installation of secured, enclosed ladders at the reservoirs.3. Installation of SolarBee circulation equipment. Completion of the Project will help:1. Protect the integrity of the reservoir in earthquakes.2. Provide safe access to the reservoirs3. Maintain chlorine residuals, provide for dispersing/mixing of chemicals, and control nitrification.4. Protect the health and and safety of customers and employees.	Μ	0	С	Ventura County Waterworks District No. 17 (District) provides domestic water and fire protection to the community of Bell Canyon, a high fire hazard area. There are three inherent problems with the District's reservoirs1. The reservoirs do not have a flexible connection to the water system to protect them from damage.2. The reservoirs do not have a secured access ladder to provide safe access. 3. Stratificaiton and stagnant zones are causing loss of disinfectant residuals.	171,000	711	2,154 06	Ventura	IV	2009
2606 5610003	5610003-003	VENTURA CWWD NO. 17 - Bell Canyon	Ventura County Waterworks District No. 1 - Waterline Replacement	This project will include the construction of 7 approximaely 10,000 linear feet line in segments at various locations throughout the District's water system. The work consists of installation of water lines, gate valves, air and vacuum relief valves, fire hydrants, reconnecting water service lines and appurtenances; and removal and construction of a pressure reducing station. The work also includes, but is not limited to replacement of fittings, disinfecting and testing, potholing, sheeting and shoring, insertion of temporary shut-off valves, temporary by-pass of testing supply line, removal and reconstruction of existing improvements, traffic control, disposal of all excess excavated or removed materials, and construction of temporary and permanent pavement resurfacing.Completion of the project would ensure a reliable system, thereby protecting the health and safety of our customers.	Μ	0	с	Ventura County Waterworks District No. 17 (District) provides domestic water and fire protection to the community of Bell Canyon. The system was constructed in 1977. Certain reaches of the system is composed of cement mortar coated and lined pipe traversing deep canyons. Some of the areas which were accessible in the 1970's have been developed and access to our lines by road is impossible. Failure in any of these crossings would cause water outages to several of our customers, and repairs would be extremely challenging and prohibitively expensive.	2,000,000	711	2,154 06	Ventura	IV	2009

2607 3310047	3310047-005	Cabazon Water District	Northwest (2156) Pressurd Zone I-10 / Railroad Crossing	e The project proposed is simply to add a parallel 16" M bore and jacked waterline next to the existing 8" waterline. This will ensure that a sufficient quantity of water can be moved to and from the Northwest Pressure Zone. The total length of the bore and jack is estimated at 600 lineal feet to cross both Interstate 10 and the railroad. The area is known to contain extremely rock material. Appropriate permits will	1 0	с	The District has a total of approximately 1,050 service connections. Of these, nearly all are located in the three pressure zones located below the Northwest (2156) Pressure Zone, which is the District's highest pressure zone. However, one-half of the District's water production and supply is from the Northwest Pressure Zone.	907,000	875	2,229 20	Riverside	v	2007
				need to be obtained from both CalTrans and the railroad company. The total estimated construction costs consist of material costs, equipment costs, labor costs, bonds and insurance costs, and construction contingencies. The total estimated project costs consist of construction costs, engineering costs, administrative costs, environmental costs, and legal costs.			The District's existing Well Pumping Plant #2 is located adjacent to the Robertson's Ready Mix gravel operation on the southerly side of Interstate 10, south of the easterly portion of Cabazon Factory Stores. Well Pumping Plant #2 pumps to the District's existing Reservoir #2, which is located on Millard Pass Road on the northerly side of Interstate 10, east of the Cabazon Factory Stores. Currently, the only path for water to travel from Well #2 to Reservoir #2, and the three, lower pressure zones, is through an old, 8" pipeline that travels underneath Interstate 10 and the railroad located immediately south of Interstate 10.						
							The condition of the old, 8" pipeline traveling underneath Interstate 10 and the railroad is not known; however, due to its age and the limited flow of water that can be conveyed through the pipeline, its condition is suspected to be poor. There is no backup or alternative means for the water to travel between the						
2608 5610015	5610015-013	VENTURA CWWD NO. 19 - SOMIS	Ventura County Waterworks District #19 - 860 Reservoir Replacement	This project is to construct a 200,000 gallon bolted steel M water tank on a concrete foundation per AWWA D103- 89 standards. The tank shall have a nominal diameter of 38' and a height of 24 feet. A cone roof, sloped to drain toward the shell shall be provided. The reservoir shall be built completed with all pipe connections, access openings, nozzles, taps, drains, ladders, vent, liquid level indicataors, and other accessories and appurtenances as shown on the plans. When completed this project will provide for additional storage capacity in the 860 zone. When completed, this project will reduce energy costs and conserve the water supply and the dependance on imported State water.	1 0	c	Ventura County Waterworks District #19 (District) was establised in 1981 when it assumed ownership of the Rancho Las Posas Mutual Water Company. When the District acquired ownership, the existing water system was deficient in several areas: inadequte sizing, deterioting pipeplines about 80 years old, and lack of supply and storage. Since its formation, the District has been making improvements in various parts of the system to bring it into compliance with the Title 22 requirments. The proposed reservoir will replace an existing one which was built in 1975. The bolted steel reservoir has served its useful life. It is badly corroded, has leaks and could be out of commision at any moment. Loss of the reservoir in this system would impair the storage capacity of the zone, compromising the storage requirements, and thus endangering the health and safety of those who receive water from the	250,000	775	2,266 06	Ventura	IV	2009

current reservoir.

2609 5610015	5610015-010	VENTURA CWWD NO. 19 - SOMIS	Ventura County Waterworks District No. 1 - Pipelines Replacement	This project will include the replacement of 9 approximately 72,000 linear feet of aged water distribution line in segments at various locations throughout the District's water system. The work consists of installation of water lines, gate valves, air and vacuum relief valves, fire hydrants, reconnecting water service lines and appurtenances; and removal and construction of a pressure reducing station. The work also includes, but is not limited to replacement of fittings, disinfecting and testing, potholing, sheeting an shoring, insertion of temporary shut-off valves, temporary by-pass or supply line, removal and reconstruction of existing improvements, traffic control disposal of all excess excavated or removed materials, and construction of temporary and permanent pavement resurfacingCompletion of this project will ensure a reliable water supply, meeting all Health Department requirements.	M d	0	c	The Ventura County Waterworks District No. 19 (District) provides water services to the community of Somis. The District is a small water system serving approximately 1000 customers. All costs for the repacement of the waterlines must be borne by these customers. The District's water system is deteriorating because of aging and tuberculation. Certain segments of the lines were installed 80 years ago; consequently, valves, blow-offs and fire hydrants are malfunctioning. Operations and Maintenance cost have been on the rise. As is typical of an aging system, the District is experiencing pressure problems, water quality and capacity issues, and frequent water line breaks. The main reason the replacement project has been delayed is the cost of the project and the financial impact on the District's customers.	10,000,000	775	2,266 06	Ventura	IV	2009
2610 5610015	5610015-002	VENTURA CWWD NO. 19 - SOMIS		Construct 900 LF of 8 inch water line to replace existing 2-inch line on East St.	M	0	с	Distribution system needs upgrades to comply with the W.W.S.	54,000	775	2,266 06	Ventura	IV	1998
2611 5610015	5610015-005	VENTURA CWWD NO. 19 - SOMIS		Construct 1.0 MG reservoir and 7,200 LF of 14 inch transmission line	м	0	с	Needs additional storage capacity to meet Water Works standards.	1,223,000	775	2,266 06	Ventura	IV	1998
2612 1510007	1510007-001	FRAZIER PARK PUD		REPLACE WATER MAINS WITHIN OUR DISTRICT - REPAIR/REPLACE WATER STORAGE TANKS ADD FIRE HYDRANTS. OTHER - DESIGN AND CONSTRUCTION	М	0	С	OLD WATER MAINS MADE OUT OF 10 GAUGE STEEL SOME AS SMALL AS 2"; INADEQUATE FIRE PROTECTION, WATER STORAGE TANKS DETERIORATING	800,000	1,362	2,348 19	Kern	Ш	1998
2613 0310021	0310021-004	Amador County Service Area #3/Unit 6	Camanche Low Pressure Zone Project	The proposed project includes the addition of approximately 10,600 lineal feet of 12 inch water main which connects one of the best well production areas with a central portion of the overall water system. This will allow the water tanks to be filled and meet system demands. System pressures are expected to be greater than 40 PSI with this pipeline in place. The estimated cost for the new water main is \$850,000. No additional montoring, treatment, or booster pump stations are proposed with application. A seperate application seek funding for this system to add treated water storage. If that storage is added in conjunction with this project, then storage can be consolidated and existing tanks (leaking and in poor condition) can be eliminated.	M .s	0	с	The Camanche Water System will experience water pressures below 20 PSI at times when filling tanks within the system. The system was originally designed to serve multiple pressure zones through muliple wells, tanks, and hydropneumatic stations. Since its installation, wells are not being utilized due to water quality concern or lack of capacity. Currently the water system relys on water transfers from new, better quality, or higher producing wells. The pipe system connecting these different systems is not adequate to meet existing demands and fill tanks at certain times of the year. This problem can be resolved through an additional pipeline: 10,300 lineal feet, 12"diameter.	750,000	723	2,386 10	Amador	Ш	2008

2614 0310021	0310021-005	Amador County Service Area #3/Unit 6	Consolidate and Replace Leaking Redwood Tanks	Construction of a two million gallon bolted steel storage M tank. The new tank would consolidate storage from several existing tanks. This proposed tank would provide adequate to provide domestic pressures and fire flows currently unavailable with the current tanks. The existing tanks leak nearly 2,000,000 gallons monthly which will eliminated with the installation of this proposed tank.	0	c	Currently the total system tank storage capacity in Lake Camanche is 677,000 gallons. There are six storage tanks which are mostly unlined, ventilated, 40 year old redwood tanks. The tank staves have begun to rot, and to separate due to the tanks not remaining full at all times. Peak day demands are 774,000gpd. Currently the existing tanks leak an estimated 2,000,000 gallons monthly. Some tanks are not located near system wells and water must be transferred via pipelines. Filling existing tanks and meeting domestic demands can result in pressures below 20 PSI. The existing storage is insufficient and would require two million gallons of storage if it were constructed to Agency standards. A single two million gallon storage tank could be placed in the system such that storage could be consolidated in this one area and eliminate all of the existing tanks. The elimination of the existing storage tank is possible if a pipeline is added which is proposed under a seperate application.	1,750,000	723	2,386 10	Amador	Ш	2008
2615 3610051	3610051-001	VALLEY OF ENCHANTMENT MWC	Abandon 2 inch galvanizer water line Highway 138, abandon 2 inch galvanizer main between Tetley and	Pipeline replacement and installation, service line connections, install 10 new fire hydrants, 15 service lines will need to be jacked underneath a main state highway which requires a contractor to complete, upgrade undersize mains for necessary fire flow, repave, lay asphalt.	0	С	Upgrade extremely old 2 inch mains which were installed in the 1940's. Replace them with 6-8inch mains to improve potable water distribution to customers and to be able to adequately provide fire flow requirements to a community located in a catestrophic high fire danger area. Other improvements will be to connect the project water mains to a loop system to greatly improve water quality and more efficient distribution to customers by eliminating dead end mains. Our system is very old and outdated, these projects will greatly improve the water distribution and service to our customers. The scope of the projects are greater than what our staff of 2 field personnel can complete. All of these projects require us to contract out these projects.	350,000	885	2,400 13	San Bernardino	v	2008
2616 3310004	3310004-006	Box Springs Mutual WC	Box Springs Mutual Water Company - Facility Improvements	M deteriorating distribution system. If funded, this project will add in the modernization of a would replace the current pump station with an entirely new system that meets all applicable codes and requirements of this type of installation and provides adequate fire flow. A separate project to replace aging distribution infrastructure is also being submitted for funding. The new system will consist of a new 800 gpm pump, as well as a 3,650 gpm pump for emergency conditions, all with new motor control centers, instrumentation, and other modernized control equipment. A 200 KW backup generator would also be included in this design; in the ability to continue to deliver an adequate level of service to meet local requirements. These systems would be housed in a new pumping structure to protect this valuable equipment and provide a safe working environment for the employees of the BSMWC.	0	c	The Box Springs Mutual Water Company (BSMWC) serves the severely disadvantaged community of Moreno Valley, near Riverside, California. The current service area is 430 acres, with approximately 600 service connections. BSMWC has an existing well and Western MWD imported water connection that pump into 2-400,000 gallon water storage tanks. The booster pump station that currently delivers water from the tanks into the distribution system needs replacement. During the most recent pump station evaluation, the BSMWC Pump Station was evaluated as being in very poor condition for the following reasons: • Piping is corroded and inaccessible for repair. • Auxiliary mechanical equipment is aged and corroded. • Valves are corroded, worn, leak, and do not operate effectively; it is not known if some valves operate at all. • The electrical system and controls do not meet current electrical codes • The housing structure is a corroded, corrugated metal building with aged wood framing. The structure is deemed inadequate to protect valuable equipment, does not meet current building codes, does not provide adequate spacing between electrical panels and other obstacles; and does not provide adequate ventilation.	2,270,000	602	2,477 20	Riverside	v	2007

2617 3310004	3310004-004	Box Springs Mutual WC	Box Springs Mutual Water Company - Nitrate Removal	<ul> <li>This project would fund the installation of a nitrate treatment system on well #17 to reduce the nitrate contamination level of the water prior to disinfection and distribution. This system will likely consist of a skid mounted selective contaminant well head ion exchange system to significantly reduce the level of nitrates in the source water. In addition to the treatment system, a new building enclosure, concrete, and other associated appurtenances would be funded through this project to construct a complete operational system that operates efficiently and effectively.</li> <li>In order to economically produce high quality water, only a fraction of the total flow pumped from well #17 must be treated. Approximately 300 gpm of treated water would be belended with raw water to provide a potable water supply of 800 gpm that will meet all necessary regulations.</li> <li>This treatment process would allow the BSMWC to directly distribute water generated entirely from local</li> </ul>	M 2	0	c	The Box Springs Mutual Water Company (BSMWC) serves the severely disadvantaged community of Moreno Valley, near Riverside, California. The current service area covers 430 acres and supplies water to approximately 600 service connections. BSMWC currently obtains water from 2 sources. The primary source of water is obtained from a local ground water source, pumped through Well #17. However, Well #17 has nitrate concentrations ranging from 9 to 10 mg/l of nitrate as N. It is believed that historical agricultural sources are the primary cause of nitrate contamination. Located in the northern portion of the service area, this well can provide a continuous water supply to meet the demands of the service area of over 800 GPM. BSMWC also purchases imported water from the Western Municipal Water District (WMWD) through a 6" interconnection at the eastern edge of the service area. The primary purpose for purchasing water from the WMWD is for blending the two water supplies to reduce the nitrate concentration of the delivered water	1,960,000	602	2,477 20	Riverside	v	2007
				directly distribute water generated entirely from local sources without blending with water obtained from WMWD. Although this would eliminate the need to obtain water supplies from outside sources, the connection to WMWD would remain available for emergency uses.				reduce the nitrate concentration of the delivered water prior to distribution to customers. As set by the United States Environmental Protection Agency, a Maximum Contaminant Level (MCL) of 10 mg/l of nitrate as N has been set, however the California Department of Heath Services permit held by						
2618 3310004	3310004-005	Box Springs Mutual WC	Box Sprigns Mutual Water Company - Distribution System Improvements	This project will modernize an aging distribution system that is significantly passed its useful life by replacing a significant fraction of the corroded and deteriorated pipes that are currently in service. These infrastructure improvements will reduce water losses, water outages, and potential water contamination issues related to the	1 M	0	С	The Box Springs Mutual Water Company (BSMWC) serves the severely disadvantaged community of Moreno Valley, near Riverside California. The current service area covers 430 acres and supplies water to approximately 600 customers.	7,350,000	602	2,477 20	Riverside	v	2007
				extremely tragile state of the existing distribution system. This project would fund infrastructure improvements that consist of failing pipelines, valves, fire hydrants, and other related equipment. A separate project to real/cas an arguing nume ration is also being				The industry standard for the useful life of a distribution pipeline is generally accepted as 40 years; a significant portion of the 51,953 linear feet of the BSMWC distribution system is composed of pipe that is 40 to 60 years old and has out lived its useful life. From 1998 to						
				submitted for funding. The necessary replacements will allow the water distribution system to operate more efficiently by				2001, there have been 81 distribution or service line breaks for the 430 acre service area and in the past 4 years, nearly 200 acre-feet (up to 13% of total annual usage) of water have been lost.						
				significantly reducing water losses and pumping costs using modern corrosion resistant materials and appropriately sized distribution pipes. Approximately 36,700 feet of 8" and 12" PVC pipe will be used to replace existing failed 4" and 6" lines.				Most of the pipes in the system are made of unlined- steel and have developed internal tuberculation. The tuberculation has caused continued deterioration and a reduction of as much as 50 percent of inside pipe diameter in some pipes. The reduction in internal pipe						
				These improvements will increase emergency fire flows within the systems service area by reducing friction losses in the system. This would be a vast improvement from the current conditions and contribute significantly to the improvement of this disadvantaged area.				diameter increases pumping and maintenance costs and reduces service pressures and available flow rates to customers. The external surfaces of the steel pipe are also uncoated, and due to the corrosive nature of the native soil, is subject to corrosion which has also contributed to pipe failure.						

2619 4510002	4510002-006	Mountain Gate C.S.D.	Mountain Gate - drought preparedness project	proposed project ; replacement of 2200ft. 12 in ductal M iron pipeline .replace 30+yr old booster station with new, in alignment with new pipeline routing.remove all exposed pipe and demolish old pump station	n	0	с	drought conditions at primary intake at shasta lake has eroded transmission main support. this pipeline is in iminent danger of failing. loss of this transmission main will stop all raw water reaching the treatment plant. this pipeline is exposed on what is normally lake botton, but now is in a drainage chanell. relocation of this main to higher ground out of the drainage is required.pipe relocation will also require replacement of a booster station . in jan.09 board of directors declaired this project an emergency condition that would compromise public health and safety should the pipeline fail	934,000	664	2,500 02	Shasta	I	2009
2620 4510002	4510002-003	Mountain Gate C.S.D.	Mountain Gate - Bella Vista intertie	construct booster station building with 3phase power M capable of 1000gpm.install 1000gpm pump ,switch gear and drive .install intertie pipeing , valves and backcheck devices .install 2way intertie meter. install security fence	n	0	с	failed intake structure drought conditions unreliable source water requires emergengy backup to protect public health and safety.currently an intertie exists with bella vista water district. this intertie is not able to furnish water to mtn gate as we are at much higher pressure than they are in this location.a new intertie is required with pumping capacity power and perminant structure	225,000	664	2,500 02	Shasta	I	2009
2621 4410008	4410008-004	Mt. Hermon Association, Inc.	Replace Tanks	Replace 2 deteriorated tanks with one new 500,000 gal M	1	0	с	System has 2 old bolted steel tanks (250,000 gal ea.)	475,000	590	2,500 05	Santa Cruz	Ш	2006
2622 4510002	4510002-010	Mountain Gate C.S.D.	Copper Canyon Distribution Upgrade	The Project would include upgrading the existing 4-inch M distribution lines to 8 inches. This Project would also allow the District to then upgrade Fire Prevention and Fire Suppression flows to the Copper Canyon area of the District: which would be included in the overall Project.	1	0	с	A pump station in the Copper Canyon area of the District was upgraded in 2005, but has not solved the problem of low, domestic flows: which include the needed pressure for fire protection. The existing pipes in the area are only four inches in diameter, and need to be enlarged to 8 inches in order to comply with state requirements and provide a minimum of 20 psi.	675,000	664	2,500 02	Shasta	I	2011
2623 3710036	3710036-004	Borrego WD	Conduct a feasibility study to investigate alternative imported water routes	The two major water districts mentioned earlier have been contacted and appear willing to assist in 'wheeling' water through their system to a pipeline to Borrego Valley. The objectives of this planning/feasibility study include: (1) the identification of a water source for Borrego, such as from Indian Tribes located on the Colorado River, State Water Contractors, etc.; (2) the evaluation and selection of the most appropriate pipeline routing from the either district to Borrego (three have been preliminary identified); and (3) the preparation of a preliminary design of the best routing alternative.	η	0	C	The community is totally reliant on a sole source aquifer for drinking water. This aquifer is being depleted by agricultural, recreational and domestic pumping, 70%, 20% & 10% usage, respectively. The groundwater levels are dropping by 3-5 feet per year. The annual overdraft is estimated to be from 12,000 to 14,000 acre feet per year and it is possible that there may be as little as 35 years of usable water left in the aquifer. While both the BWD and the County of San Diego have adopted groundwater mitigation requirements for new development in the area, the County's requiring new development's water use to be off-set by fallowing farm land on a one-to-one basis and BWD's requires the payment of a fee, there is a significant new demand from previously approved dwelling units that are not subject to the County mitigation. This potential new demand will increase the current overdraft by about 3,500 afy. BWD studies have shown that with the recently adopted water conservation program for domestic water use, there are no solutions to the overdraft problem, except the importation of water from one of the two major water districts, a distance of 40 to 50 miles from the Borrego area. This conclusion has been confirmed by the Department of Water Resources.	250,000	2,017	2,535 14	San Diego	v	2008
2624 5510005	5510005-004	TWAIN HARTE COMMUNITY SERVICES DIS	TR Water Line Replacement	Install new 6-inch PVC water lines. (Goodell) M	1	0	с	Low pressure and water supply problems caused by old and deteriorated 2-inch steel lines.	30,000	1,530	2,568 11	Tuolumne	III	2003
2625 2310007	2310007-013	North Gualala Water Company	Anchor Bay Tanks	Construct two(2) new 141,000 gallon bolted steel M storage tanks including piping, automated controls, alarms, and monitoring systems.	1	0	С	Existing storage capacity will not meet domestic and fire flow requirements. Per CDPH Compliance Order #02-03- 08CO-002 section 64554 and section 116555 (a)(c) CCR Title 22.	575,280	1,033	2,595 03	Mendocino	II	2009

2626 2310007	2310007-010	North Gualala Water Company	Enchanted Meadows Storage Tank Upgrade and Watermain Replacement	Demolish and construct a new surge tank meeting earthquake standards including automated controls, alarms, and a monitoring system. Replace a substandard connecting water transmission main to meet CPUC fire flow requirements.	Μ	0	C	The existing 30,000 gallon surge tank with booster pump is of questionable structural integrity and needs replacement. Existing tank can not be earthquake retrofitted. Existing tank is constructed of redwood with varying decay problems. Tank leans beyond perpendicular. Because a temporary plastic liner has been placed inside the tank, total tank decay is imminent. Two booster pumps, which transport water to a 141,000 gallon storage tank at higher elevation, are required to be upgraded to pump an adequate flow through the connecting main between another surge tank, the surge tank to be replaced, and the upper tank of adequate volume. An existing 4 inch water transmission main is substandard in size for a distance of approximately 3,000 feet between the decaying wood tank and the larger 141,000 gallon steel bolt-up tank which could supply adequate fire flow and domestic service flow if the main were large enough to transmit the necessary volumes for public health and safety. This project will replace the four inch diameter transmission main with an eight inch diameter transmission main.Insufficent storage and water transmission capacity to meet AWWA & CDPH standards per CDPH Compliance Order #02-03-08CO- 002 section 64554 CCR Title 22.	548,000	1,033	2,595 03	Mendocino	Ι	2009
2627 2310007	2310007-014	North Gualala Water Company	Water Main Replacements - Compliance Order	Replace exisiting under sized water mains with new water mains with sufficent capacity. This project is to only provide adequate service to existing customers ar bring the system into compliance with the State Office of Drinking Water Standards and California Public Utili Commission Standards.	M ty	0	C	This project is to replace aging under sized water mains that can not meet domestic demands while under minimum fire flows, or which cannot even meet minimum pressure standards for domestic service during times of peak domestic demand. These deficient water mains violate Calif. Department Public Health and Safety Code Title 22 CCR sections 64554 chapter 16, section 116555(a)(3) and have been ordered to be brought into compliance per Compliance Order #02-03- 08CO-002. These projects are all in or adjacent to paved roadways where botanical impacts are not likely but must be reviewed by a qualified botanist and impacts must be fully disclosed. They are to serve existing populations where build-out is substantially complete and generally will have no growth inducing impacts. They are solely for improvement of health and safety to meet minimum State Office of Drinking Water and California Public Utility Commission Standards. They will not require any new source of water. Therefore they will be eligible for a Categorical Exemption from CEQA,unless botanical resources are found. No Federal cross-cutting requirements will be triggered unless botanical resources are found.	2,982,808	1,033	2,595 03	Mendocino	Π	2009

2628 3510004	3510004-007	Aromas Water District	Rea Tank Replacement Project	Replacing old redwood tank with new steel tank: The project consists of setting up disinfected temporary distribution reservoir and switching controls for complete operation without the existing redwood tank. Construction project would include clearing, grubbing, demolition of existing redwood tank, connecting to existing underground piping, new outlet piping, site grading and re-compaction, road construction and pavement, relocate existing electrical, controls, telemetry, erection of steel bolt-up 214,000 gallon tank, fencing for security. This project: 1) New 214,000 gallon tank fencing for security. This project: 1) New 214,000 gallon tseel tank meets AWWA Standards D 100-05, whereas the existing redwood tank does not. 2) Steel tank reduces possibility of increased coliform levels caused by bacteria in redwood. 3) Secures System reliability for this pressure zone, as the existing tank leaks badly and is deteriorating. 4) Loss of the redwood tank will mitigate the danger of capacity loss due to earthquake and fire loss. 6) Loss of the existing redwood tank would cause flooding damage to surrounding homes. 7) Improve security by placing a fence around reservoir site. 8) Reduced costs for long-term maintenance of steel vs. redwood tank. 9) The District has experience purchasing, erecting and	M , r	0	c	This project replaces an old (1970) leaking redwood 60,000-gallon storage tank with a new bolted steel 214,000-gallon tank serving potable water for domestic use. This project: 1) Provides compliance with Title 22 CCR, Section 64585,Article 6. Distribution Reservoirs, Design and Construction 2) The new steel tank meets the AWWA D-103 standard and requirement, while the existing redwood tank does not. 3) The new tank will secure system reliability for this pressure zone, as the existing tank leaks badly and is deteriorating. Recent soils tests show leaking water penetrated the surrounding soil to a depth of 4'. 4) This pressure zone serves nearly 20% of the District service area population, emergency failure is significant. 5) A steel tank will mitigate the danger of capacity loss due to earthquake and fire loss. 6) Emergency failure of the existing redwood tank would cause flooding damage to surrounding homes. 7) Security will be improved by placing a fence around reservoir site where none exists now. 8) While no violations have occurred, a new steel tank reduces the risk of potential contamination from the redwood tank.	298,000	884	2,700 05	San Benito	Π	2009
2629 3610063 2630 1510046	3610063-002 1510046-006	GOLDEN STATE WATER CO - MORONGO D Lost Hills Utility District	EL SUR Reliable Capacity Well No. 3	Replace mainline The LHUD will be completing a Water System Master Plan through a Prop 84 Grant. This study will include a component on Firm Water supply which will confirm the need for an additional water well. Other water system improvements will also be identified. The Firm Capacity Well No. 3 will require environmental documentation. Since the LHUD is pursuing State and Federal funding, the CEQA plus documentation is anticipated. Coordination with the Semitropic Water District will be required for drilling a new well in its district. A Kern County Well drilling Permit will be required and modifications to the Arsenic WTP permit will be addressed once the well is drilled and put into service.Design of a new well will take approximately 6 months. Construction of the well can be completed in approximately 5 months after the contractor receives a notice to proceed. Total time for planning, design and construction is a minimum of 18 months.	M M	0	C C	Old, undersized mainline The Lost Hills Utility District (LHUD) provides domestic water to the town of Lost Hills, I-5/Highway 46 cormidor from 10 miles east of I-5 to approximately 10 miles west of I-5. Water is pumped from two wells, located on 160 acres, 10 miles east of I-5/Highway 46 interchange. This site is located in the northeast corner of Gun Club Road and McCombs Avenue in the Semitropic Water Storage District Service Area. The two existing wells are rated at 500 gpm. LHUD is in need of a 3rd well in order to maintain firm supply. Industry standard defines firm supply for a water system comprising of wells, as the total pumping capacity minus the largest well. Therefore, the LHUD has a firm supply of 500 gpm with one well operating. Based on monthly water production data and projections to the Maximum Day Demand, the LHUD water demand periodically exceeds the existing firm capacity of 500 gpm. Based on CDPH Revised Water Works Standards, Maximum Day Demand (MDD) to Maximum Month Demand (MMD) peaking factor of at least 1.5 is recommended. LHUD monthly production data indicates several maximum month demands greater than 15 million gallons per month (mgm). These demands occurred in 5 months between 2003 and 2007 in July or August. A 15 mgm equates to maximum	570,000 800,000	823 360	2,716 13 2,772 12	San Bernardino Kern	V III	1998 2012
2631 3110013	3110013-004	Tahoe Cedars Water Company	hawk eldorado st transmission line	install 1500 feet 6" pipe with 2 additional hydrants	М	0	С	area is under served with hydrants at end of run being fed by undersized pipe	400,000	1,114	2,775 02	Placer	I	2009
2632 3110013	3110013-007	Tahoe Cedars Water Company	lewis and gray streets upgrade	install 6 or 8 inch mains and fire hydrants at 500 ft intervals	М	0	С	Area has small water mains and no fire hydrants	690,000	1,114	2,775 02	Placer	I	2009
2633 3110013	3110013-006	Tahoe Cedars Water Company	Timberwolf ave upgrade	replace and update 3000 ft of steel 6" water main with a mix of 6 & 8 inch main	М	0	С	replace leaking/problematic water main.	750,000	1,114	2,775 02	Placer	I	2009
2634 3110013	3110013-003	Tahoe Cedars Water Company	Additional needed water source	1. Destruction of well that did not produce installed in 20082. Installation of new well.3. Installation of system	М	0	С	<ol> <li>redundant source is needed.2. Peak demand nears or exceeds supply3 Fire flow</li> </ol>	500,000	1,114	2,775 02	Placer	I	2009

monitoring equipment

2635 3110013	3110013-002	Tahoe Cedars Water Company	backup power for pump station	install new propane/natural gas generator	м	0	с	current diesel backup power for pump is failing and a clean air problem, we have been told to discontinue	100,000	1,114	2,775 02	Placer	I	2009
2636 5410009	5410009-011	Pixley Public Util Dist	Water Main Replacement	Correction of the problem includes looping of dead end and replacement of waterlines 4-inches and smaller. Wharf hydrants will also be replaced.	s M	0	с	use. The existing water system was constructed in the late 1940's and early 1950's. The lines range from 2-inch steel to 12-inch pipelines, however, most are 4-inch and 6-inch pipelines. The small pipelines and multiple dead ends impose a large pressure loss to the water system. These pipelines are not sufficient for fire flow deliveries. The old steel lines may also be a source of water leaks and potentially a source of contamination throughout the District. Many of the hydrants are wharf hydrants that are insufficient for fire flow demands.	2,070,000	801	2,793 12	Tulare	Ш	2009
2637 2010003	2010003-002	BASS LAKE WATER COMPANY		Construct a new 8-inch diameter raw water pipeline.	М	0	С	Intake pipeline to the surface water treatment plant is old, undersized, and has numerous leaks throughout its length.	800,000	989	2,800 11	Madera	Ш	2001
2638 4110019	4110019-001	O'Connor Tract Co-Operative Water Co.		Install 3650 feet of new pipe and reconfigure system to abandon old pipe.	М	0	С	Deteriorating and undersized pipes.	500,000	331	2,969 17	San Mateo	Ш	1998
2639 2110006	2110006-015	North Marin WD - Pt. Reyes	Water Treatment Plant - emergency power hookup	Install connection for emergency generator to speed restoration of service.	м	0	С	No emergency power at treatment plant.	10,000	762	3,000 18	Marin	Ш	1998
2640 2110006	2110006-026	North Marin WD - Pt. Reyes	Pt Reyes Pump Station Upgrades	This project proposes to replace the motor control centers at the Pt Reyes Pump Station. This replacement will enable the pumps to restart when the power is restored after an outage, restoring water service to the 750 customers who would otherwise have to wait until the pumps could be manually fixed, a task made more difficult due to the remote location of the town of Pt Reyes.	M t	0	с	The Pt Reyes Pump Station is the sole pump station that provides water to 750 services in the distribution system. Due to the age and condition of the electrical distribution equipment at this pump station, if a power outage were to occur catastrophic failure of electrical equipment would interrupt water service to all of these customers. The Pt Reyes Pump Station needs to be upgraded to continuously provide enough water delivery capacity to supply current demands.	72,000	762	3,000 18	Marin	II	2009
2641 2110006	2110006-016	North Marin WD - Pt. Reyes	dedicated emergency	Purhcase power generator dedicated to West Marin.	м	0	С	No emergency power at treatment plant.	35,000	762	3,000 18	Marin	Ш	1998
2642 2110006	2110006-029	North Marin WD - Pt. Reyes	Upsize 2" Mains	This project proposes to replace the 6,640 feet (1.25 miles) of aging 2" main with new 6" main. This upsizing will enable enough flow capacity to serve the current demand. The upsizing will also bring the distribution system into compliance with Water Works Standards of a minimum main size of 6" diameter.	M	0	С	There currently exists over 6,640 feet (1.25 miles) of circa 1950's 2" galvanized steel water main in the distribution system. These mains are undersized and severely corroded, causing significant water supply and reliability problems. It is very difficult to meet current demands.	300,000	762	3,000 18	Marin	II	2009
2643 2910002	2910002-001	City of Nevada City	The Nevada City Drinking Water Plant Upgrade	The City of Nevada City's water treatment plant was totally rebuilt in the mid 1970's. The plant is designed to produce 2MGD; because the plant is essentially manually operated.In recent years, the City has been considering a complete rebuild of the water treatment plant system. The following upgrades need to be corrected:1. The plant has a 53 acre feet storage pond and during winter months, algae blooms and causes taste and odor problems.2. Three storage tanks of approximately 1.5 MG each, are mechanically controller with frequent spillage results in wasted water.3. The filter system is in need of replacement requiring frequent back-washes during the day.4. The water system has mechanical transmission problems to the fa sides of town because of the old pipe system.These corrections to the entire plant need to be completed to help make the City's water supply of higher quality and to insure adequate water supply for the next generations.	M	0	c	To increase the capacity of the plant to produce sufficient amount of water during the summer peak demand and to increase our storage facilities and to refurbish and automate the thirty-five (35) year old plant.	3,625,000	1,205	3,001 21	Nevada	1	2008
2644 3610030	3610030-001	MARIANA RANCHOS CWD	Distribution system replacement	Replace mainline	м	0	с	Old, substandard mainline	347,200	650	3,019 13	San Bernardino	v	2007

2645 4010012	4010012-002	HERITAGE RANCH CSD	0.42 MG Storage Tank Replacement	Heritage Ranch Community Services District is requesting funds to replace the existing 0.42 mg bolted steel tank with a new 0.5 mg welded steel tank. The following would be included in the project:• Decommission existing bolted steel tank.• Construct new 0.5 mg welded steel tank with new foundation, coating, cathodic protection, separate inlet and outlet, mixing system, SCADA, and other appurtenances.• Once new tank is constructed, take existing 2 mg tank out of service for inspection, cleaning, coating, and minor repair work including separate inlet and outlet and mixing system.• Construct a fence around perimeter of facility.	M	0	С	Heritage Ranch Community Services District (District) provides water service to a population of approximately 3,500 persons with an average annual water demand of 618.5 AFY. Their average day demand and peak hour demand are 0.56 mgd (388 gpm) and 1.96 mgd (1,361 gpm). The District operates a 2 ng storage reservoir that supplies gravity pressure to the entire distribution system. Adjacent to the 2 mg tank is a 0.42 mg bolted steel tank that has been taken out of service due to substantial rust and leaks. At this time, the District does not have a permanent secondary source of water storage to allow the District to take the primary tank out of service for maintenance and cleaning. It has been 9 years since the tank has been taken out of service and cleaned. To maintain the integrity of their primary water storage facility, a full inspection, cleaning, and minor repair work is required in the near future as identified in the District's Water Master Plan, prepared in September 2008 as a first priority project. Additional upgrades that should be completed on the 2 mg tank include expansion joints for protection against earthquakes, separate inlet/outlets to meet current Water Works Standards, and an internal mixing system to help improve water quality during the low demand season. In order for the District to properly maintain the existing tank and bring the tank up to current Water Works Standards, the District needs a secondary water	1,448,775	1,695	3,100 06	San Luis Obispo	IV	2009
2646 4010012	4010012-001	HERITAGE RANCH CSD		Construct back-up vertical well	М	0	С	Nacimiento Lake allotment depleted by dwonstream rights. River drys gallery well inactive.	150,000	1,695	3,100 06	San Luis Obispo	IV	2002
2647 2710018	2710018-001	Seaside Municipal Water System	Additional Well - Insufficient Supply	Install new well.	м	0	С	Insufficient source capacity - water purchased through emergency connection.	841,500	788	3,300 05	Monterey	Ш	1998
2648 5510012	5510012-007	TUD - Upper Basin Water System	Storage Tank - Crystal Falls System	S CONSTRUCT A ONE MILLION GALLON STEEL STORAGE TANK.	М	0	с	INADEQUATE STORAGE FOR INTERCONNECTION TO THE CRYSTAL FALLS SYSTEM.	420,000	1,455	3,446 11	Tuolumne	Ш	1998
2649 5510012	5510012-008	TUD - Upper Basin Water System	Connect Leisure Pines	CONSTRUCT A PIPELINE TO INTERCONNECT THE LEISURE PINES SYSTEM TO THE UPPER BASIN SYSTEM.	М	0	с	THE ADJACENT LEISURE PINES WATER SYSTEM HAS INSUFFICIENT SOURCE CAPACITY TO MEET SUMMER DEMANDS.	38,000	1,455	3,446 11	Tuolumne	Ш	1998
2650 5510012	5510012-002	TUD - Upper Basin Water System	Raw Water Storage at WT	P CONNECT THE EXISTING LAKEWOOD RESERVOIR TO THE WTP INTAKE VIA PUMP AND PIPELINE.	М	0	С	DURING DITCH OUTAGES, THERE IS INSUFFICIENT RAW WATER STORAGE AT THE WTP SITE.	57,000	1,455	3,446 11	Tuolumne	Ш	1998
2651 5510012	5510012-006	TUD - Upper Basin Water System	Cedar Rock Service Area Tank	RELOCATE A 60,000 GALLON BOLTED STEEL TANK TO THE SITE TO PROVIDE RELIABLE SERVICE.	М	0	С	THE CEDAR ROCK SERVICE AREA IS SUPPLIED BY A PUMP STATION THAT EXPERIENCES POWER FAILURES AND SUBSEQUENT WATER OUTAGES.	52,000	1,455	3,446 11	Tuolumne	III	1998
2652 5510012	5510012-001	TUD - Upper Basin Water System	Conntection to Brentwood Pond	CONSTRUCT A 4 INCH DIAMETER PIPELINE AND INTAKE STRUCTURE TO OBTAIN WATER FROM BRENTWOOD POND.	М	0	С	THE SYSTEM NEEDS ADDITIONAL WATER SUPPLY DURING THE ANNUAL DITCH OUTAGE EVENT AND DURING OTHER EMERGENCIES.	22,000	1,455	3,446 11	Tuolumne	III	1998
2653 5510012	5510012-014	TUD - Upper Basin Water System	New Upper Basin WTP Clearwell	The District has property that could be used for the construction of a new three million gallon clearwell. The new clearwell could be used for the current Upper Basin WTP and the future sub regional WTP. The project would include piping required to deliver water in-between each location.	м	0	с	The Upper Basin WTP has a very small, 210,000 gallon, clearwell for the rating of the plant. During summer production because of high demands and winter due cold temperatures and high turbidly, the plant operators must be very careful with the amount of water that is used for backwashing. If too much clearwell water is used to backwash there will not be enough water / time to meet contact time for demand.	5,100,000	1,455	3,446 11	Tuolumne	III	2009
2654 5510012	5510012-009	TUD - Upper Basin Water System	Booster Stations	RECONSTRUCT THE PRESSURE SYSTEM.	М	0	с	THE PRESSURE BOOSTER SYSTEM LOCATED ADJACENT TO THE SUGAR PINE RIDDLE TANK HAS DETERIORATED.	26,000	1,455	3,446 11	Tuolumne	Ш	1998
2655 5510012	5510012-005	TUD - Upper Basin Water System	Distribution System Replacement - Brentwood	REPLACE STEEL PIPELINES IN EQUAL INCREMENTS OVER A 5 YEAR PERIOD.	М	0	С	FREQUENT LEAKS IN STEEL SECTIONS OF THE BRENTWOOD DISTRIBUTION SYSTEM COMPOUNDED BY NUMEROUS SEPTIC TANK SYSTEMS IN THE AREA.	918,000	1,455	3,446 11	Tuolumne	Ш	1998

2656 4710008	4710008-002	City of Mt. Shasta	Big Lakes Well and Pressure Zone Project	The project will include the installation of a new municipal well, 1000 gpm pump with 150 hp motor, 800 lineal feet of 12 inch pvc water line and necessary appurtenances.	M J	0	С	The Mt. Shasta water system has an area that is subject to periodic low pressure due to it's elevation and location in the end of the distribution system, as well as significantly deteriorated pipes. This project is intended to correct system deficiencies that lead to inadequate water supply and pressure, and possible contamination and other serious health and safety issues that could result from backflow or backsiphon conditions that could occur.	728,250	1,675	3,642 01	Siskiyou	I	2009
2657 4710008	4710008-004	City of Mt. Shasta	Kingston Road System Improvements	This project includes the installation of approximately 5650 lineal feet of 10 and 12 inch pvc water line and related appurtanences. This project is part of a multi phased approach to solving system deficiencies that have the potential to cause significant health and safety issues. Other project phases include the Kingston Rd. System Improvement Project, the North Mt. Shasta Balancing Reservoir Project and the Big Lakes Well and Pressure Zone Project.	M y	0	С	This project will correct inadequate pressure, fire flow, and supply issues in a deteriorated section of the distribution system that has the potential to cause serious public health and safety issues.	996,000	1,675	3,642 01	Siskiyou	I	2009
2658 4710008	4710008-003	City of Mt. Shasta	North Mt. Shasta Balancing Reservoir Project	This project includes the installation of a 1.0 Million Gallon storage reservoir, tank site improvements, and the necessary tank supply line.	Μ	0	c	This reservoir will provide adequate storage, fire, flow, and emergency storage for an area of the distribution system that potentially could adversely affect public health and safety. This project would also benefit, enhance, and be an integral part of the Big Lakes Well and Pressure Zone Project.	1,345,000	1,675	3,642 01	Siskiyou	I	2009
2659 2310005	2310005-001	Willow County Water District	Willow County Water District Water Tank Replacement Project	The Willow C.W.D. proposes to demolish the existing 100,000 gallon storage tank, and replace it with a new 350,000 gallon water storage tank.	М	0	С	The Willow County Water District existing 100,000 gallon water storage tank built in 1950, no longer meets tank safety standards. This tank has the potential of being a threat to neighboring property owners.	375,000	1,051	3,797 03	Mendocino	II	2009
2660 1010034	1010034-002	San Joaquin, City of	Well No. 4 Replacement	The proposed project would drill a new well within the City of San Joaquin. As much of the mechanical and electrical equipment from the existing well will be used at the new well as possible.	Μ	0	с	The city's existing Well No. 4 has a history of sporadic detections of total coliform and pseudominas bacteria. E.coli was detected in a sample taken in September 2010. The well was drilled in 1978, and over the last 20 years the city has patched holes in the casing to prevent intrusion of groundwater in areas above the perforations. The City is currently under Compliance Order 03-23-100-009 to correct the microbiological contamination in Well No. 4, and the well is currently off-line. The city has 2 other wells that can meet demand if both wells are operational. However, if one well is out of service, then Maximum Day Demand with fire flow can not be meet, as required by California Waterworks Standards. The city does not have any storage facilities.Due to the expenditures to repair the existing casing, the city is not willing to spend additional funds to address the contamination on this well.	750,000	927	3,870 23	Fresno	II	2012

2661 1010034	1010034-001	San Joaquin, City of	San Joaquin Well No. 6	The proposed project will provide an additional source M of water for the City of San Joaquin. This project will drill and develop a new water well approximately 500 feet in depth. The anticipated production is 1,200 gpm. The standing water level is about 175 feet and the anticipated pumping level will be about 260 feet below surface. Final design of the pump and motor will be determined after the development of the well. However, it is anticipated that a 150-hp electric motor will be needed for the vertical tubine pump, the pump will be set about 330 feet below surface. Electrical controls will include a variable-speed drive to maintain constant pressure and conserve energy.Site improvements will include grading and fencing.	0	C	California Water Works Standard Sec. 64554(c) requires that a community system be capable of meeting Maximum Day Demand with the highest producing well not in service. Currently the water system is not capable of meeting the Maximum Day Demand with fire flow if one of the exisiting wells is off-line. The Maximum Day demand with fire flow is 3,000 gpm. The system can deliver 3,500 gpm with all three wells operating and 2,400 gpm if one of the wells is off-line. With this project an additional 1,200 gpm supply will be provided. In June 2004 Well No. 4 was off-line for unscheduled maintenance, and had just been reassembled but not in service, when a fire occured at a fuel distributorship in the city. Public Works personnel were required to drive to the well site and manually engage the well to provide water to fight the fire. In addition, the oldest well in the system was drilled in 1968 and has been in continuous use since then. Although the well is producing good quality water, it is approaching the limits of the typical useful life for a well. The City is concerned that this well may fail.	750,000	927	3,870 23	Fresno	"	2009
2662 3110010	3110010-001	Tahoe City PUD - Main	Bunker Water Tank Replacement	The Tahoe City Public Utility District (District) plans to construct a new 1.2M gallon welded steel water tank to replace an existing redwood water tank (Bunker Tank). The existing tank has been evaluated to be severely undersized for today's Fire Protection Standards and highly vulnerable to seismic and forest fire events. The new tank construction will include: 1.2 MG Welded Steel Water Tank, approximately 300 linear feet of new water main piping, engineered structural foundation, fence protection, new paving of the existing dirt access road, and a graded site clear of the surrounding forest fuels, all of which will be applicable to current code requirements.	0	C	The Bunker Tank, originally constructed in the early 1950's, is a major component of the Tahoe City (sub- regional) water system and contributes to the potable and fire flow storage water needs for approximately 2,500 residential and commercial connections. It is the only redwood tank and the oldest tank maintained by the District, and has reached the limits of its reliable use. The existing 500k gallon tank's capacity is roughly half of the capacity necessary to meet current Operational, Fire, and Emergency Storage requirements. To meet storage requirements the new tank will require a nominal capacity of approximately 1.2M gallons. According to the "Seismic Analysis for Rocky Ridge, Tahoe Tavern, Four Seasons and Bunker Water Tanks" dated January 2006, by Nolte Associates, Inc., the existing tank does not meet current seismic code requirements and is highly vulnerable to design level seismic events. The report recommends replacement instead of retrofit due to the age of the facility, interior corrosion, structural capacity, and deteriorating site conditions. To meet current seismic regulations the proposed tank will be constructed of welded steel and situated on a site that has been engineered and structurally prepared. Based on the current Water Works Standards, the tank does not meet current AWWA design criteria for seismic	2,173,450	2,663	3,997 02	Placer	I	2009

2663 5610005	5610005-005	MEINERS OAKS CWD	Storage tank Replacement	t The proposed project is to replace 2 of the 500,000 gal M storage tanks, and the 80,000 gal tank, including valves and required monitoring components, and demolish the old leaky leaning tanks. The construction will take place on the same site as the existing tanks. By constructing sufficient storage, the water system will ensure reliable water supply for consumers demand, without the added financial burden of purchasing water from another source. Other sources for purchase are not reliable during the current extreme drought conditions. The replacement tanks would greatly reduce the risk of Coliform exposure due to holes in the existing storage tanks.	η	0	c	The system storage consists of 3-500,000 gal, 1-250,000, and 1-80,000 gallon ground storage tanks. All are interconnected with the distribution system. All are in dilapidated condition to the point of near failure. The condition of the tanks is critical and causes significant water quantity problems during summer demand. Due to lack of sufficient, reliable storage, the system suffered significant water shortages, was required to purchase ~54 ac/ft of water in 2006, and anticipates needing doing so again this year just to meet minimum demand. Two of the 500,000 gal storage tanks are next to each other and leaking. Both have significant structural defects indicated by leaning, sides bowing, and leaking bolts. The third of the 500,000 tanks had to be taken offline due to it's critical condition of leaning more than 7 degrees. The 80,000 gallon tank is extremely dilapidated and has several large holes in its side and is susceptible to Coliform contamination. All four remaining online tanks are used to capacity on a daily basis. Loss of service from any of the tanks will result in critical water outages to the community. Chlorine residual levels must be kept high to prevent coliform violations from contamination.	1,500,000	1,283	4,000 06	Ventura	IV	2009
2664 1310011	1310011-007	Coachella VWD: I.D. NO. 11	Haven Drive, Riviera Circle and Grand Avenue Main Replacements	The Haven Drive, Riviera Circle and Grand Avenue Main M Replacements project includes installing approximately 300 feet of 6-inch and 2,300 feet of 8-inch ductile iron water main including valves, services, hydrants and related appurtenances. This project is categorically exempt under Article 18, Section 15282 of the CEQA Guidelines as a pipeline installation less than a mile in length. A Notice of Exemption will be prepared per CEQA guidelines and filed with Riverside County prior to construction.	1	0	c	The Improvement District No. 11 (ID 11) water system consists of three wells, 16-inch and 18-inch transmission main, distribution piping and one 1.0 MG storage reservoir. ID 11 serves approximately 4,000 customers currently isolated from CVWD's main domestic water system. ID 11 domestic water infractructure is more than 50 years old and consists of 4-inch and 6-inch asbestos concrete pipe that has exceeded its useful life and is in very poor condition. New pipelines are needed to replace this failing infrastructure.	250,000	2,624	4,198 20	Imperial	v	2009
2665 1910248	1910248-005	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT 4,200 FT. + OF 12 INCH PIPELINE ON M SANTIGO ROAD TO SIERRA HIGHWAY AND THE NORTH TANK.	1	0	с	SANTIGO RD. PIPELINE. A PROPOSED PUMP STATION AT SANTIGO RD. AND SOLEDAD CANYON RD. WILL PUMP WATER INTO THE DISTRICT'S NORTH TANK VIA AN OLD, EIGHT INCH PIPELINE WHICH IS UNDERSIZED.	320,000	1,377	4,282 16	Los Angeles	IV	1998
2666 1910248	1910248-004	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT APPROXIMATELY 2,700 FT. OF 12 IN. M PIPELINE.	1	0	с	CROWN VALLEY RD. PIPELINE. THE EXISTING PIPELINE THAT CONVEYS WATER FROM THE CROWN VALLEY PUMP STATION TO THE NORTH TANK IS AGED AND IN NEED OF REPLACEMENT. IF THIS MAIN FAILS APPROXIMATELY ONE HALF THE DISTRICT'S CUSTOMFES WILL BE WITHOUT WATER	220,000	1,377	4,282 16	Los Angeles	IV	1998
2667 1910248	1910248-003	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT A 500,000 GALLON WATER TANK TO M PERMIT SAND TO SETTLE AND ALLOW CONTACT TIME FOR CHLORINE.	1	0	С	THE DISTRICT'S THREE WELLS PRESENTLY DISCHARGE INTO THE DISTRIBUTION SYSTEM, WHERE SAND ENTERS THE PIPELINE CAUSING OPERATIONAL AND RELIABILITY PROBLEMS	540,000	1,377	4,282 16	Los Angeles	IV	1998
2668 1910248	1910248-001	LOS ANGELES CO WW DIST 37-ACTON		INSTALL A PRESSURE REDUCING VALVE STATION, M CONNECT TO THE HIGH PRESSURE ZONE, AND INSTALL APPROXIMATELY 420 FT. OF EIGHT INCH PIPELINE TO ISOLATE THE NEW ZONE.	1	0	с	CROWN VALLEY P.S. SEVERAL HOMES IN THIS AREA HAVE LOW WATER PRESSURES AS THEY ARE LOCATED WHERE TWO PRESSURE ZONES INTERCONNECT.	50,000	1,377	4,282 16	Los Angeles	IV	1998
2669 1910248	1910248-006	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT ANOTHER PUMP STATION A SANTIAGO RD. M AND SOLEDAD CANYON RD.	1	0	с	SANTIAGO RD. PUMP STATION. PRESENTLY, THE DISTRICT RELIES ON ONLY ONE PUMP STATION (AT CROWN VALLEY RD.) TO TAKE WELL WATER INTO THE NORTH TANK. A SECOND PUMP STATION AT ANOTHER LOCATION WILL INCREASE THE RELIABILITY OF THE SYSTEM.	390,000	1,377	4,282 16	Los Angeles	IV	1998

2670 1910248	1910248-007	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT 2,600 FT. + OF 12 INCH PIPELINE ALONG AN ALTERNATE ROUTE TO MAKE THE SYSTEM MORE RELIABLE.	М	0	с	SYRACUSE AVE. PIPELINE. THERE IS PRESENTLY ONE PIPELINE THAT CONVEYS THE DISTRICT'S WELL WATER TO THE NORTH TANK. IF THIS LINE BREAKS MORE THAN 1/2 THE DISTRICT'S CUSTOMERS WILL BE WITHOUT WATER	200,000	1,377	4,282 16	Los Angeles	IV	1998
2671 4410002	4410002-003	Cal-Am Water Company - Felton	Well Replacement-Felton Acres	Contruction of a new 10 inch replacement well to a depth of approximately 300 LF and appurtances thereto. Appurtances include, but are not limited to, wellhead, electrical supply, control and disinfection equipment, Construction includesa a new 10 ft X 10 ft masonary wood joist building.	М	0	С	The water system's source water is approximately 95% surface water. During period of drought which reduce streamflow, pursuant to DWR water rights permit conditions, the water system is required to reduce and/or cease the diversion its primary stream source. The proposed project would replace an existing groundwater well constructed in 1962 whose productivity has deteriorated, and has not responded to prior cleaning and rehabiliation . The proposed project would reestablish groundwater source productivity for use during dry year.	300,000	1,343	4,340 05	Santa Cruz	Ι	2009
2672 4410002	4410002-005	Cal-Am Water Company - Felton	Felton System SCADA	contruction and installation of a comprehensive SCADA system and appurtances thereto. Central hub location will be the Kirby Surface Wawter Treatment Plant, and seven (7) remote locations.	м	0	С	The Felton Water system does not have a comprehnsive Supervisor Control and Data Acquistion System to provide for enhance monioting and control of water supply, treatment and distribution.	300,000	1,343	4,340 05	Santa Cruz	II	2009
2673 4410002	4410002-004	Cal-Am Water Company - Felton	Kirby Treatment Plant Kirby Treatment Plant SolarKi	Contruction of a 40kw roof mount solar system and appurtances thereto.	М	0	С	Installation of a 40kw solar system at the water system's surface water treatment plant to provide for sustainable electrical supply and the reduction of the agency's carbon footprint pursuant to AB32.	250,000	1,343	4,340 05	Santa Cruz	II	2009
2674 4410002	4410002-002	Cal-Am Water Company - Felton		Replace San Lorenzo water main.	Μ	0	С	Water outages due to lack of pressure because of undersized main	270,000	1,343	4,340 05	Santa Cruz	Ш	1998
2675 2410008	2410008-001	MEADOWBROOK WC	Main Extensions	The new area is very rural with pockets of homes on large lots/acreage. It is difficult to ascertain the best way to reach the largest numbers of homes at the lowest practical cost and in a timely manner. We need to have a comprehensive plan done to examine the feasibility of going under Highway 99 with a main extension; examine how to reach the most homes most effectively; evaluate any alternatives such as a "system within a system" (new well(s) to serve new homes.). Ideally, the study would lead to a preliminary project design enabling us to take the next step toward financing the actual work.	M	0	с	In April 2008 Meadowbrook Water was granted a greatly increased service area. The purpose of the request for funding is to examine the most feasible and cost effective way to extend our services to our new areas. Much of the area is rural; identifying the most densely populated areas and serving them first would be optimal. Many of the private wells in the area are drying up and with water at a premium, it is safer and more cost effective to be able to provide a hook up to our system. Another benefit is the ability to monitor the water table more closely, as typically, most private well owners do not do so.	50,000	1,539	4,400 11	Merced	11	2008
2676 3410007	3410007-002	Del Paso Manor County Water Di	Water Reliability Project	This project will install upgraded electrical control system and install a standby power temporary connection for water supply to existing critical ATT telecommunications facilities cooling equipment.	М	0	с	Existing well equipment is approximately 60 years old and at the end of useful service. Failure of this facility will adversely impact a regional communication center.	201,600	1,795	4,458 09	Sacramento	I	2009
2677 3710004	3710004-002	Del Mar - City of		Please see attached	М	0	С	Add seismic actuated valves to increase system	260,000	1,846	4,580 14	San Diego	v	1998
2678 2010010	2010010-002	MADERA VALLEY WATER COMPANY	New Construction Well #7	We are planning to construct a new well site. The new well would replace the two wells which have become unsable. The new well would include a variable frequency drive and standby back up diesel generator. There would also be installation of pipeline to incorporate the well into our existing system.	Μ	0	С	We have two wells in our system that have become unusable. These two wells are over 30 years old. If we try to use these wells the drawdown is so great that they pump a lot of air into our system. We have lowered the bowls as far as we can. These are closed bottom wells so we can not drill them any deeper. The perforations in one of the wells are so worn out that if we do try to use the well we have to dump water on the ground for about an hour before the well clears up and we can put it into our system. Over the past several years we have seen the water table drop and with the present drought we do not forsee any significant	1,000,000	1,884	4,625 11	Madera	III	2008

recharge to these wells in the near future.

2679 1910185	1910185-001	LOS ANGELES CO WW DIST 36-VAL VERDE		RECOAT INTERIOR OF 0.50 MG CUYAMA TANK TO PROTECT WATER QUALITY AND PUBLIC HEALTH.	м	0	С	CUYAMA TANK. THE EXISTING 500,000 GALLON CUYAMA TANK IS OVER 20 YEARS OLD WITH CORRODED TANK WALLS WHICH MAY AFFECT WATER QUALITY AND	80,000	1,320	4,660 16	Los Angeles	IV	1998
2680 1910185	1910185-004	LOS ANGELES CO WW DIST 36-VAL VERDE		CONSTRUCT A 500,000 GALLON TANK AT AN INTERMEDIATE PRESSURE ZONE FOR THE HASLEY AREA	м	0	с	POBLIC HEAT IH. INTERMEDIATE ZONE DISTRIBUTION TANK NEEDED. THE EXISTING SYSTEM HAS TWO PRESSURE ZONES WITH A 310' DIFFERENCE IN ELEVATION. MANY OF OUR CUSTOMERS ARE SERVED OFF THE HIGH PRESSURE ZONE. THIS REQUIRES CONSTANT PUMPING AND REGULATING OF PRESSURES.	5,015,000	1,320	4,660 16	Los Angeles	IV	1998
2681 1910185	1910185-002	LOS ANGELES CO WW DIST 36-VAL VERDE		CONSTRUCT NEW WELL WITH CHLORINATION STATION FOREBAY TANK, AND BOOSTER PUMPING STATION TO MEET CUSTOMER WATER REQUIREMENTS.	I, M	0	c	NO WELLS. THIS DISTRICT HAS ONLY ONE SOURCE OF WATER, THE CASTAIC WATER AGENCY. WHEN THIS CONNECTION IS DOWN, AS OCCURRED AFTER THE 1994 EARTHQUAKE, WE MUST RELY ON STORAGE VOLUME FROM OUR TANKS WHICH WILL LAST LESS THAN ONE DAY.	1,705,000	1,320	4,660 16	Los Angeles	IV	1998
2682 1910185	1910185-005	LOS ANGELES CO WW DIST 36-VAL VERDE		RETROFIT TWO WATER TANKS WITH FLEXIBLE CONNECTIONS AND MOVE DRAIN/OVERFLOW TO SIDES OF TANKS.	M S	0	С	SEISMICALLY UNSOUND TANK CONNECTIONS. IN THE EVENT OF A SEVERE EARTHQUAKE, THE EXISTING RIGID CONNECTION AND DRAIN COULD RUPTURE LEAVING AFFECTED RESIDENTS WITHOUT WATER SERVICE.	112,500	1,320	4,660 16	Los Angeles	IV	1998
2683 1710006	1710006-004	Konocti County Water District	Replace Clearwell Tank	This project would replace a 100,000 gallon clearwell storage tank used for CT with a 200,000 gallon storage tank. The current pump station would be replaced with a properly sized lift station to match the current capacity of the water treatment plant.Tank and pump station engineering and construction: \$188,000Replace clearwell storage: \$450,000Relocate and replace pump station: \$180,00010% continguences: \$82,000	M	0	С	The clearwell tank is in poor condition. The vent screen on the roof of the tank has corroded completely. While there are no risks of contamination due to the vent screen and support missing, leaving a cap to act as a barrier to contaminants, inadequate venting may lead to the tank collapsing under pressure. Also, the support at the center of the tank is heavily corroded. The lift station does not have adequate capacity to match treatment plant capacity. To improve capacity delivered to the distribution system, it is imperative the lift station is relocated to allocate space for the clearwell and pumps are replaced.	900,000	1,744	4,986 03	Lake	II	2009
2684 5510010	5510010-002	TUD - Crystal Falls Water System	Rancho Poquitos Pipeline replacement	CONSTRUCT A PIPELINE TO REPLACE THE OLD STEEL PIPE AND CONSTRUCT AN INTERCONNECTION WITH THE OAK GARDEN SYSTEM.	М	0	С	THE RANCHO POQUITOS MAIN SUPPLY PIPELINE IS STEEL PIPE REQUIRING FREQUENT REPAIR. THE RANCHOS POQUITOS SYSTEM NEEDS TO BE LOOPED FOR PELIABILITY	38,000	2,232	5,301 11	Tuolumne	Ш	1998
2685 5810006	5810006-001	North Yuba Water District	North Yuba Water District Water Transmission Main	The project would consist of a 2.7 mile extention of an existing dead end water main to loop the distribution system. This would enable the District to maintain acceptable levels in storge tanks during critical times.	Μ	0	C	The District has an existing eight inch water main that delivers water from the water treatment plant to the distribution system. This water main is undersized and cannot convey enough water during summer months for domestic use and fire protection. Customers are periodically asked to cut back on water use as storage tanks (also undersized) become dangerously low. The possibility of creating a negitive head situation exists. Additionally, the District cannot provide adaquate fire protection during these times and fire fighting would definitely cause a negitive head situation. The community is in a heavily forested area and the danger of fire is extream.	680,000	695	5,303 21	Yuba	I	2007
2686 4210013	4210013-002	SOLVANG WATER DEPARTMENT		Construction of 2.3 million gallon reservoir	М	0	С	Needs additional water storage facilities to comply with Water Works standards.	3,638,000	1,916	5,383 06	Santa Barbara	IV	1998

2687 4110010	4110010-056	Montara Water and Sanitary District	New Alamo Booster Pump Station	This project will convert an existing Alamo Pressure Regulating Valve Station into an underground booster pump station by adding a booster pump. This existing Alamo PRV station connects the higher Portola Zone with the lower Alta Vista Zone. The new booster station would allow pumping from Alta Vista Zone to Portola Zone and would increase the fire safety in the forested area significantly.	Μ	0	с	Montara Water and Sanitary District owns and operates an existing Alamo Pressure Regulating Valve Station (PRV). This project includes making modifications to the existing PRV station to allow the District to transfer water from its Alta Vista pressure zone to the Portola pressure zone thus significantly increasing fire fighting capabilities, which are especially important within the urban-rural interface in the forested area. This project will contribute to improving public health and safety by improving the District's distribution system fire fighting capabilities.	215,000	1,640	5,412 17	San Mateo	II	2009
2688 4110010	4110010-009	Montara Water and Sanitary District		Replace school house tank , rehab Alta Vista tank, repair or replace Potola tank	М	0	С	Reservoir rehabilitation.	1,550,000	1,640	5,412 17	San Mateo	II	1998
2689 4110010	4110010-041	Montara Water and Sanitary District	Emergency Connection with Coastside County Water District	This project will install two above-grade quick connection points each equipped with 1,000 feet of 4- inch-diameter flexible piping to be deployed in case of emergency. One connection facility will be installed at each of the water district's closest distribution system location. The project will include the following elements:1. For Montara Water and Sanitary District (MWSD): one above-grade connection equipped with a 1,000-foot roll of 4-inch-diameter flexible piping; located in the most southern portion of the distribution system. The facility will be enclosed in a pre-fabricated building. MWSD owns a portable booster pump should pumping be deemed necessary.2. For Coastside County Water District (CCWD): one above-grade connection equipped with a 1,000-foot roll of 4-inch-diameter flexible piping; located in the most northern portion of the distribution system. The facility will be enclosed in a pre-fabricated building.	м	0	c	This project will provide facilities for a quick connection between Montara Water and Sanitary District (MWSD) and neighboring Coastside County Water District (CCWD) to be operated in case of emergency such as multiple fire events, earthquake, any other natural and man-made disasters that effect one of the water districts and allows the unaffected district to provide mutual aid type assistance in case of dire need. No permanent connection will be established by this project due to previous supply agreements, water rights, and restrictions imposed by the California Coastal Commission. This project is critical for public health and safety protection for over 25,000 people residing in the Mid-Coast Region served by the two water district and recorded over 150,000 visitors to the coastside annually.	200,000	1,640	5,412 17	San Mateo	Π	2009
2690 4110010	4110010-057	Montara Water and Sanitary District	Water Distribution System Rehabilitation and Improvement Project	This project will replace the next several mains that have demonstrated the highest number of leaks in the past 5 year, as follows:1. Fourth Street Main Replacement, 1,500 ft, 6-inch-diameter2. Airport Main Replacement, 2,400 ft, 8-inch-diameter3. Corona Street Main Replacement, 200 ft, 6-inch diameter4. Replace 4" steel water main on Elm St. between George and Franklin st.5. Replace 4" AC water main on Elm between Franklin and Drake St.6. Replace 8" gate valve after PRV station at Marine and Cabrillo Hwy.7. Add 6" gate valve at Edison and Tamarind St.8. Add 2 ½" valve station at 4th St. and Le Conte Ave.9. Add 6" gate valve on 5th St. at East Ave.10. Add 6" gate valve at 5th St. and Le Conte Ave.11. Add 8" gate valve 8th St. and Le Conte Ave.12. Add 8" gate valve 8th St. and Le Conte Ave.12. Add 8" gate valve 8th St. and Farallone Ave.13. Add two 6" gate valves 0n Cypress, both sides of Cabrillo Hwy.14. Replace non-op 6" and 8" gate valves at Edison and Birch St. 15. Replace main on Harte Street between Fir and Ivy 16. Replace main on Harte Street	м	0	c	The District has acquired the water system ownership in 2003 from a private water company. The customers voted overwhelmingly to take over the system due to poor water quality, water leaks, lack of emergency and fire storage and other deferred maintenance issues. The District has instituted an aggressive main replacement program and implemented many distribution system improvements since 2003. The implemented improvements resulted in a significant reduction of leaks and subsequent water losses. However, the program was put on hold in 2006 due to lack of funding. This project will contribute to further improvement of public health and safety by reducing leaks, improving distribution system. In addition, this project will help improve the distribution system water quality.	2,800,000	1,640	5,412 17	San Mateo	Ι	2009
2691 4110010	4110010-040	Montara Water and Sanitary District	New Valve and Pipe Installation at South Airport Well	This project will install a new out to waste valve and waste pipe at the South Airport Well to avoid contaminating the system with dirty water on well startup.	М	0	c	South Airport Well needs a new out to waste valve and waste pipe to avoid contaminating the system with dirty water upon startup for water quality protection and public health and safety protection.	23,000	1,640	5,412 17	San Mateo	II	2009

2692 4110010	4110010-039	Montara Water and Sanitary District	Air Relief Valves for Distribution System	This project will install up to 20 air relief valves throughout the distribution system to ensure water quality protection during repairs, on-going maintenance, and pressure fluctuations during routine operations of the water system.	Μ	0	с	This project will place air relief valves throughout the distribution system to ensure water quality protection during repairs, on-going maintenance, and pressure fluctuations during routine operations of the water system. The system currently contains no air relief valves.	58,000	1,640	5,412 17	San Mateo	II	2009
2693 4110010	4110010-058	Montara Water and Sanitary District	South Airport Well Rehabilitation	This project will chemically rehabilitate the existing South Airport Well to restore its production to rate capacity and extend its service life.	Μ	0	с	This project will rehabilitate existing South Airport Well to restore its rated production capacity and improve water quality. The well if one of the highest producing groundwater sources in the District, however, its production has significantly deteriorated due to deposits on the screens resulting in loss of capacity.	75,000	1,640	5,412 17	San Mateo	II	2009
2694 1910163	1910163-001	VALENCIA HEIGHTS WATER CO.		Design and construct replacement wells.	М	0	с	Four wells produce water with nitrates and VOC's. Three out of four wells have exceeded the MCL for nitrate of 45 ppm.	700,000	1,600	5,500 16	Los Angeles	IV	1998
2695 1010006	1010006-002	FOWLER, CITY OF		Construct a new well to increase the water supply capacity for both sides of the water system.	м	0	с	The water system is separately by Freeway 99 and the three water lines that connect the two sides of the water system do not have adequate capacity to provide desired water pressures and fire flows.	650,000	1,528	5,572 11	Fresno	Ш	2001
2696 3310800	3310800-001	California Rehabilitation Center - Norco		Add air stripping unit for benzene treatment.	Μ	0	с	Well #1 contains Benzene at a level above the MCL. The well was taken out of service in early 1989. In 3/97 an inspection of CRC's water system by DHS indicated that we need more water to reliably meet demands. Well #1 needs to be reactivated.	250,000	1,600	5,730 20	Riverside	v	1998
2697 3310026	3310026-001	Nuevo Water Company		Construct new 1000 gpm capacity well and new 12" pipeline (see attached Plate 1).	м	0	с	Degradation of ground water quality due to intrusion of plume of high TDS water into ground water basin (see attached May 31, 1995 report prepared by Albert A. Webb Associates).	1,020,000	1,787	6,000 20	Riverside	V	1998
2698 4910027	4910027-011	Sonoma State University	Domestic Water tank #3	This project includes construction of a new 350,000 gallon welded steel tank for water storage, including tank foundation, subgrade preparation, anchorage, and tank accessories including internal and external pipe and pipe connections, inlet, outlet, overflow, drain, access manways, vents, ladders, guardrails, and miscellaneous equipment, together with associated site preparation, removal of trees, site grading, constructior of new access roads to and around the tank, fencing, water systems piping, electrical work, instrumentation, protective coatings, disinfection, testing and demolition Project earthwork is unbalanced and requires disposal of unsuitable material and importation of suitable material for engineered fill.The University is proposing to construct a new 350,000 gallon welded steel tank to facilitate the domolition and reconstruction of two new 300,000 gallon tanks. Since the University is operational 24/7, 365 days a year, the ideal solution is to bring Tank #3 online first to ensure that the campus would have ample water supply during the reconstruction of tanks #1&2 which would have to be done separately so that sufficient water storage remained.		0	c	The University intends to construct a new 350,000 gallon welded steel tank for potable water storage northeast of the existing two 200,000 gallon concrete tanks in the Facilities Services Area on the northeast side of the Sonoma State University campus. The purpose of this project is to increase the reliability and the capacity of the University's potable water storage capacity of 400,000 gallons in two concrete tanks originally constructed in the mid 1960's. Both reservoirs have damage, which has led to continuous leakage of water from the reservoirs. In addition, the age of the reservoirs and their proximity to the active Rodgers Creek fault, less than 3.5 km from the site, which is capable of producing strong ground shaking means that the reservoirs are susceptible to failure in an earthquake.Continued operation of the reservoirs places the University's water supply at an unacceptable risk. Recommendations for potable water storage for the University have been documented in the Water System Analysis and Report prepared for Sonoma State University by Winzler and Kelly Ingineers, in October 2007. This project includes the construction of a new 350,000 gallon tank located northeast of the existing two 200,000 gallon tanks. This would provide the University with approximately 750,000 gallons in water storage capacity including an immediate 350,000	1,200,000	1,100	6,000 18	Sonoma	IJ	2009

2699 4910027	4910027-009	Sonoma State University	Well 3 and 4 Rehabilitatio	n The University is proposing to drill a well in close proximity to the existing well to reduce the amount of additional infrastructure needed. The project would go out to bid with the following requirements for contractors to meet.Installation of electrical service for well system, pouring of concrete slab around well casing, install and connect water piping from the well location to the pump house on campus. The well specifications would be as follows: Drill and case an 8' x420' domestic water well, provide fluid tank for storage of drilling fluid and development water throughout drilling process and vacuum truck to remove fluids off site, install a 2305250-88 25hp Grundfos submersible pump (or equivalent) set in 350' deep, install wellhead and plumbing items, install Siemens (or equivalent) pumping plant panel with motor protection, install check valve, chlorinate well and begin monitoring of water quality through lab testing.	м 2	0	c	The life cycle of Wells No. 3 and No. 4 are approaching the end of their useful life. These are the only two operating wells that the University has and due to the age and detioration of well casing, they are approaching the end of their useful life. The casings in wells No. 3 and No. 4 is compromised due to sand encroachment and the overall age of the casing which are detioriated. The wells are over 20 years old and they are the only reliable water source for the campus. If one of the wells should fail due to age, the campus would have only one well to supply all water for the campus. The wells intertie with the campus system, but not to any outside (external) system that could provide backup.The monitoring systems that would be included in rehabilitation of wells no. 3 and no. 4 would include PLC communication and automated alarm to University Police and Plant Operations to allow for a fast response for repair or implementing alternate measures.	200,000	1,100	6,000 18	Sonoma	II	2009
2700 4910027	4910027-010	Sonoma State University	Drinking water raw water line replacement	The project involves connecting into the existing tanks and wells at either end and abandoning the existing transite line in place. The existing pathway is several hundred yards of pavement that will need to be removed and replaced. This installation would also be designed as described above to allow for minimal disruption of water to the campus by allowing the connections to be made at both ends at the very last moment.	М	0	c	Main drinking water raw water line is old frail transite piping. The piping fails frequently and requires repairs to be performed regularly. When a failure occurs it impacts the campus' ability to provide the necessary potable water to the population of on-campus residents, commuter students, visitors and employees. In the event of an earthquake which is very likely, this system is extremely likely to fail completely which would isolate the raw water wells from the campus treatment and distribution system. This would force the campus to close until the line was repaired.	1,500,000	1,100	6,000 18	Sonoma	II	2009
2701 4910027	4910027-008	Sonoma State University	Domestic water Chlorination System	Removal of the existing T2 Chlorinator (approx. 10 years in age) from the potable water control building located within the Corporation Yard including HAZMAT disposal. Install 50 feet of new 1" CPVC piping and fittings for new system requirements, upgrade electrical power supply from 110VAC to 220VAC, install new sensors to existing Allen-Bradley monitoring system which will allow monitoring of water condition including chorlination and total dissolved solids and alarm reporting to University Police and Plant Operations with automatic shutdown in the event of chlorination system failure.	5 M	0	с	The Unviersity relies on a self- operated, owned and maintained well water system for the campus. The existing chlorination system is no longer supported by the manufacturer and replacement parts are not available. If the system was to fail, the University would shut down and the on-campus residents would have to be relocated. Violations would be not providing proper water disinfection and most likely violation of California Code of Regulations Title 22 Sections 66-4421-64426.5.	100,000	1,100	6,000 18	Sonoma	Π	2009
2702 4910027	4910027-007	Sonoma State University	Domestic Pumphouse Emergency Supply	Winzler and Kelly Consulting Engineers completed and evaluation of the Water System. The recommended evaluation outlines a strategy of three phases. The university had implemented two of three phases and needs to complete the final phase. This final phase is a straight forward design build that involves removal of the existing natural gas motor, replacement with an electric motor which will be operated by campus power or by a diesel generator that has been specified to provide power to the new electric motor, and PLC controllers for the system. This project combined with an existing project underway at one of the well locations would provide the necessary backup power to enable the campus to provide the domestic water need during power failure and also provide the desired redundancy in the daily pumping operations.	M 5	0	с	The problem is the backup power for the booster pump that pressurizes the residential water supply is provided by a natural gas powered motor that is at the end of its life expectancy. It is approximately 40 years old. Not only is this motor old, but since the only fuel source is natural gas, it is susceptible to failure in the event that natural gas service is interupted. Additionlayy, this motor is not well suited for control by the currentl PLC controls and does further expose the motor to failure by overheating or other mechanical problems not monitored by the PLC.	300,000	1,100	6,000 18	Sonoma	Π	2009

2703 3410005	3410005-004	Rancho Murieta Community Servi	Drought Augmentation Supply - New Well: West Ranch site	This project entails construction of a new well capable of producing approximately 500 gpm. A new 15-18 inch pipeline, approximately 12,000 feet long, is necessary to intertie with the existing distribution system.	M	0	с	In a 1977 drought, 1:200 year event, the District's primary water source, the Cosumnes River, is essentially dry, causing a 1500 AF shortfall. The District will not be able to divert surface water to storage reservoirs for consumptive uses for nearly 10-12 months and must rely on storage from previous years. Even with 50% conservation, at full buildout there is a 1500 AF shortfall. This well will aslo provide an emergency back-up water supply in case one or all of the surface water reservoirs are contaminated or the water treatment plant is out of service for extended periods, as a result of fire, vandalism, or other catastrophic failures.	2,000,000	2,525	6,060 09	Sacramento	I	2011
2704 3410005	3410005-005	Rancho Murieta Community Servi	Drought Augmentation Supply - New Well: South Ranch site	The project entails construction of a new well capable of producing 500-1000 gpm. This well is located outside District boundaries. A new 15-18 inch pipeline, approximately 3 miles long, is necessary to intertie with the existing distribution system.	fM	0	С	In a 1977 drought, 1:200 year event, the District's primary water source, the Cosumnes River, is essentially dry, causing a 1500 AF shortfall. The District will not be able to divert surface water to storage reservoirs for nearly 10-12 months and must rely on storage from previous years. Even with 50% conservation, at full buildout there is a 1500 AF shortfall. This well will also provide an emergency back-up water supply in case one or all the surface water supply reservoirs are contaminated or the treatment plant is out of service for extended periods as a result of fire, vandalism, or other catastrophic failures.	2,300,000	2,525	6,060 09	Sacramento	I	2011
2705 3410005	3410005-006	Rancho Murieta Community Servi	Drought Augmentaion Supply - New Well: Airpor site	The project entails construction of a new well t approximately 500 feet deep, capable of producing approximately 500 gpm. This well is located within the Disrict boundaries. A new 15-18 inch pipeline is necessary to intertie with the existing distribution system. The project also includes acquisition of right of way easements and a dedicated well site.	Μ	0	С	In a 1977 drought, 1:200 year event, the District's primary water source, the Cosumnes RIver is essentially dry, causing a 1500AF shortfall. The District will not be able to divert surface water to storage reservoirs for consumptive uses for nearly 10-12 months and must rely on storage from previous years. Even with 50% conservation, at full build-out there is a 1500 AF shortfall. The new well will supply approximately 500 gpm. A new pipeline extension is needed to tie into the existing distribution system. This well will also provide an emergency back-up in case one or all of the surface water supply reservoirs are contaminated or the water treatment plant is out of service for extended periods, as aresult of fire, vandalism or other catastrophic failure.	1,100,000	2,525	6,060 09	Sacramento	1	2011
2706 4010025	4010025-003	SLO CWD NO. 10 - CAYUCOS	Distribution lines	Replace existing 4 inch lines with new pipes.	м	0	С	Two, 4inch distribution lines inadequate for providing fire flows & pressure	850,000	736	6,076 06	San Luis Obispo	IV	2006
2707 3310036	3310036-003	Western MWD - Murrieta Division	Replace old water mains	Replace main & lateral water lines in older parts of town. Many areas are in lower income areas. Some are also in historical parts of town.	М	0	С	Aging leaking water distribution lines within older portions of town requiring high maintenance costs & possible water outages.	750,000	2,446	6,305 20	Riverside	V	2001
2708 1910247	1910247-003	NEWHALL CWD-CASTAIC	CASTAIC FOREBAY TANK AND PUMP REPLACEMEN	Newhall County Water District plans to disassemble the M T current Forebay reservoir and booster pumps. A contracted tank removal company will do this. Once the site is clear of obstacles construction can begin on the new Forebay Tank. We will use an engineered design, from a tank construction company. After the new tank is in place, work can begin on the Forebay Booster Pumps. As I mentioned earlier, three out of four boosters have design flaws. In addition, the current pump configuration does not lend itself to efficiency. Because of these reasons, we will replace three of the oldest pumps with one high efficiency pump and new motor control centers. We will also incorporate a booster pump, installed in 2007, into the new facility design. Following this, are above ground piping improvements and a full tank coating (inside and out). To top off the construction, a company will re- asphalt to improve access to the site.	0	c	Newhall County Water District constructed the Castaic Forebay Tank in 1966. This welded steel tank has a capacity of 300,000-gallons and receives water from both wells and the State Water Project. Water mixes within the tank and booster pumps distribute the water to the rest of the Castaic Distribution System. Since the Forebay tank is the entry point to the entire Castaic System, it plays an important role. Newhall County Water District, as a part of our normal monitoring and maintenance, hires a diver to do scheduled inspections on tanks. During the inspections, the diver makes minor repairs when needed. We have now arrived at a point where minor repairs cannot fix the problems with the tank. Problems include deterioration of the steel walls, the tank floor, rust tubercles, coating blisters, deep pitting, and severe metal loss in support beams. Since the problems arrived at the conclusion: The Forebay Tank has reached the end of its useful life and we must replace it. In addition to the problems with the tank, the booster pumps that receive Forebay's water have an antiquated design. Three out of the four booster pumps are installed partially below ground. This design flaw leads to the pump vaults filling with water. Sump pumps must evacuate the collection of the water in the vaults periodically in order to ensure proper sanitation.	625,000	1,931	6,392 15	Los Angeles	IV	2011	
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2709 1010005	1010005-005	Firebaugh City	Well No. 7 Replacement	This project will replace City Well No. 7 with a new well. M This includes site exploration, drilling test well, drilling of a new production water well, installing a pump, motor, controls, site improvements, and connection to the existing water treatment plant.	0	С	Well No. 7 is offline and will be abandoned due to steady arsenic concentrations that exceed the maximum contaminant level permitted. This seriously impacts the City's ability to meet peak water demands. A new well to replace Well No. 7 is needed as soon as possible to enable Plant No. 2 to meet the City's demand if Plant No. 1 is not in operation.	658,350	1,347	6,500 23	Fresno	Ш	2012	
2710 1010005	1010005-006	Firebaugh City	Valve and Fire Hydrant Replacement	This project will work to maintain a high standard of fire M safety readiness by replacing several aging water valves and fire hydrants in various locations throughout the City.	0	С	Many of the fire hydrants and valves around the City are reaching the end of useful life and need replacement. Rust build-up and aging have the potential to cause substandard operation or failure during a fire emergency. The failure of any hydrant or valve during an emergency has the potential to cause additional unwanted damage.	250,800	1,347	6,500 23	Fresno	III	2012	
2711 1010005	1010005-004	Firebaugh City	HUD Tank, Booster Pump Station, Piping Replacement	This project will replace the aging HUD tank with a 0.75 M million gallon tank, booster pump system, and the associated distribution piping and valving.	0	c	The current tank was built in 1971 and is reaching end of its useful life. An inspection completed in 2008 and 2011 revealed the tank to have interior lining degradation including corrosion pits, checking, cracking, and blistering. Some patching of the more advanced rust areas has occurred at time of each inspection. The tank has no anchoring system or grade band and rests on grade. It also lacks any internal or external cathodic protection, an interior ladder and a roof railing system. The tank was found to have minor movement of the roof support structure however a structural analysis was not completed as part of the either inspection. The failure of this tank would cause a significant problem for Firebaugh's industrial users and the Las Deltas Water District. The project is needed in order to maintain adequate storage capacity and sustained fire flows in the south west portion of the City.	794,200	1,347	6,500 23	Fresno	Ш	2012	

2712 1010005	1010005-003	Firebaugh City	6" Water Line Replacement	This project will replace the existing 6 inch water line with a 12 inch water line from the HUD tank to the industrial area on Washoe Avenue and also connect to the recently installed 12 inch water line from the Tomatek plant.	Μ	0	с	The City of Firebaugh serves water to its industrial users and the Los Deltas Water District at the present time via a 6" main from the HUD tank. The 6" main severely restricts supply to the south west portion of the City due to its length and size. A new 12" replacement is required to maintain adequate sustained fire flows to this area of the City. This replacement line would connect to a 12" main previously constructed by the industrial users in this area and would provide a looped system for a more dependable water supply.	611,325	1,347	6,500 23	Fresno	III	2012
2713 4010019	4010019-004	Templeton CSD	Westside Water Storage Tank and Pressure Zone	Due to the high health and safety concerns resulting from substandard pressures, the 2005 District Water System Master Plan Update identified correcting the pressure deficiency as a first tier priority project. To increase the water pressure in the distribution system to acceptable levels and in conformance with California Waterworks Standards (Section 64602), the District proposes to construct a new 1M gallon water storage tank as part of a new pressure zone in the Southwest area of the District. The proposed Project includes a new water storage tank located 44 feet higher than the existing water tanks in the system. This tank will be the primary water supply the new pressure zone. The increased hydraulic grade line will eliminate the low pressure areas and help provide fire flow to the Southwest corner of the District. The tank will be sized to meet the storage requirements of the zone as recommended by the District's Water Master Plan. This project will also include 1500 If of new 16-inch transmission line and a booster station designed to supply water to the tank from the main zone. The booster station will be equipped with two 560 gpm pumps to feed the new tank. The booster pump station will be isolated from the main system by installing chect valves and pressure reducing stations at strategic	M v k	0	C	The Westside area of the Templeton Community Services District (District) has low water service pressures (25 to 39 psi) and marginal fire flows (less than 1500 gpm) during average day demand conditions. The low fire flows are a serious safety concern and the lowest water service meter in this area measures an average service pressure of only 22 psi. The area affected by the low pressure includes the Vineyard Elementary School, serving 487 students & faculty, and approximately 576 residential service connections. Correcting this pressure deficiency is identified as a first tier priority project in the 2005 District Water System Master Plan Update due to the high health and safety concerns resulting from substandard pressures and fire flows needed to serve the existing customers in the District. It is critical that the District take steps to correct the water pressure deficiency in order to insure compliance with the minimum pressure requirements of the California Waterworks Standards (Section 64602). The District currently operates a single pressure zone with water tanks providing water pressure through a gravity system. In a gravity fed system, adequate storage is critical to ensure positive water pressure necessary to prevent contamination. During the hot summer months when water use is high, tank levels drop to minimum levels on a daily basis. As the tank levels drop, water pressures in the system decrease and	3,800,000	2,563	6,500 06	San Luis Obispo	IV	2009
2714 1910085	1910085-003	MAYWOOD MUTUAL WATER CO. #2	Water Mainlines Rehabilitation 2008	The project consists of cleaning and lining with cement mortar approved by NSF. This improvement will bring to all customers better quality of water, will bring an efficient PSI and will reduce the use of electricity needed on the boosters and pumps.	M D	0	С	Water mainlines are full of tuberculation caused by minerals, and need a rehabilitation of approximately thirteen miles. Main valves need to be replaced, a total of 175, and approximately forty-five fire hydrants that are currently under the standards of Los Angeles County Fire Department. This water system has no history of rehabilitation for the past sixty-five years, and the appearance of water is often brownish-yellow caused by minerals.	4,500,000	1,908	6,700 16	Los Angeles	IV	2008

2715 3610062	3610062-014	RUNNING SPRINGS WATER DISTRICT	Valley View/Hwy. 18 Water Main Replacement Project	The project would entail installing three sections of new M water mains. Two of these would be on Valley View Drive and the third would run parallel with Highway 18. Approximately 1,100 feet of 12" PVC pipe would be installed from the Luring Pines Tank on Valley View Drive to Highway 18. This would substantially increase fire flow throughout the Luring Pressure Zone. A parallel 8" PVC water main would need to be installed on Valley View Drive which would be a part of the ROWCO Pressure Zone. This would facilitate the back- lot main abandonment program. The third water main would be installed along Highway 18 from Wagon Wheel Drive to the other end of Wagon Wheel Drive. This portion of the project would consist of approximately 2,725 feet of 12" PVC pipe. Once these mains are installed, the District can begin to switch the water meters over to the new mains and abandon the old mains.	0	c	The Running Springs Water District has undertaken a program to eliminate a series of substandard sized backlot water mains that were installed in the 1940's & 50's. These lines are old galvanized steel and range in size from 1" to 2". These water lines are a constant source of high water loss, rusty water customer complaints and the tuberculation in the pipes make it very challenging to maintain adequate working pressures. Before we can abandon these old steel mains, new water mains must be installed in the streets fronting these properties. These new mains will also have the added benefit of increasing the fire flow throughout the District, protecting the community in case of a wildfire.	820,000	3,160	6,713 13	San Bernardino	v	2009
2716 0510017	0510017-002	CCWD Copper Cove	Copper Cove C Tank and Main	The project will construct a new booster pumping M station and transmission main to directly feed the C tank. The booster station will provide a capacity of 5,000 gpm with two pumps, and a space for a third for future demands. 13,000 LF of 20-inch main will be installed. A portion of the pipeline alignment is routed through wetlands and the project has received all necessary permits for construction.The design and environmental documentation and permits are complete. The project has been placed on hold due to current economic status and impact on District's finances. Project is ready to bid for construction pending notice of funding availability.	0	c	The Copper Cove water system consists of three main pressure zones. The C pressure zone storage tank is fed from the B pressure zone storage and distribution system. During high demands, pressure in the B system is reduced and insufficient flow and pressure are available to serve the C system. As a result, the C tank has been depleted and insufficient pressure is available to meet C system demands. While this has impacted existing customers up to now with reduced pressure and possible water quality impacts, the system would be unable to provide fire flow protection, which could prove disastrous. Another benefit of the project will be improved capacity and reliability to provide fire flow requirements and supply for new economic development in the project area.	7,000,000	2,449	6,735 10	Calaveras	Ш	2009
2717 1910147	1910147-004	SATIVA-L.A. CWD F	Sativa new well project # 4B	M desperately needs improvements to its water system.Develop a new well with a production of 900 gpm or more.Build a small on site reservoir with booster pumps to maintain positive pressure on the system (preferred).Hydro-pneumatic tank at well site if not a reservoir and booster pump.Abandon and destroy the old well # 4 site or build a treatment system for VOC removal and re-develop well # 4 and repair well # 4.Drill and develop a new well to supply the district. Add a reservoir for storage and fire protection. Add a booster pump station to provide positive pressure.Currently there are only 2 hydro-pneumatic tanks providing storage and pressure for the system. The system uses all "Groundwater" no surface water or MWD connection.	0	c	Sativa Los Angeles County Water District is a very small water system with approximately 6,880 customers with limited water production capabilities. The District needs to locate, drill and develop a new well to meet system demands. The current wells barely reach 50 psi and we have a need to maintain positive pressure in the system to eliminate potential backflow and cross-connection and contamination. Our older well # 4 has been contaminated with VOC's and we need to develop a new well to replace well # 4 due to the VOC problem. Well # 4 will soon be abandonded and a new well is urgently needed. The water system is barely maintained with Wells 2 & 5. Our other well # 3 has sanded and is under going repairs. It is very likely that when well # 3 is repaired that the production will be reduced and it will continue to pump sand. The water system has no other water sources for the community. The current wells are old and need another well to supplement our water system (well 3 site was first developed in the 1950's). The last Sanitary Survey noted the risk of potential cross connection due to low water system risk of potential cross connection due to DPH Standards to provide safe drinking water to our community. The current wells are old and need to DPH Standards to provide safe drinking water to our community. The district recently hired a "Certified Operator" and was operating without a certified	2,000,000	1,488	6,813 22	Los Angeles	IV	2008

2718 2310001	2310001-004	Fort Bragg, City of	EFBPZ Willow St Pump Station Rehab	Phase 1 is pump station improvements consisting of two M low flow (300 gpm), two medium flow(450 gpm) and one fire flow (1500 gpm) pump. The low and medium flow pumps would be powered by variable frequency drives and the fire pump would be a fixed speed drive. A surge control, pressure relief valve is proposed on the common pump station discharge piping. Flow would be metered on the low and medium flow discharges only. A standby power set is proposed in an outdoor, weather proof and noise attenuating enclosure. A SCADA antennae is also proposed on the roof and confirmation of line of site SCADA transmission will be evaluated.Phase 2 of this project consists of installation of 10" water main along the west side of Dana Street from the Willow Street extension to tie in near Chestnut Street; installation of 10 inch water main from the new line on Dana Street across school property to tie into existing water main at the south end of Hocker Lane and installation of new water main around the back side of the High School to complete the loop with the two new proposed pipes.	0	C	The East Fort Bragg Pressure Zone (EFBPZ) pump station was constructed in 1985 to boost pressure within the southeasterly portion of the City of Fort Bragg. After some 25 years in operation and numerous modifications to the pump station city staff determined that available water supply and pressures within the EFBP2 are, at times, insufficient. The equipment at the pump station is outdated; the pumps have been re-built numerous times; pump controls and alarms are deficient and a total upgrade of the pump station is required. Installation of an emergency generator is also an additional component being considered. The pressure zone and pump station have been evaluated and several necessary phased projects identified and proposed to increase water availability for domestic use and fire suppression.	555,000	2,791	6,963 03	Mendocino	Ι	2011
2719 1710015	1710015-002	Hidden Valley Lake CSD	Well Protection, Chlorination and Emergency Power	The project consists of the following:Well #2 M Site:Construction of a building (well protection), installation of backup emergency power (250 KW generator), motor control center, flow meter and low level switch. Well #3 Site:Construction of a building (well protection), installation of chlorination facilities, motor control center, flow meter and low level switch.Well #4 Site:Installation of a building (well protection), booster station with tank, booster pump and controls, motor control center, flow meter and low level switch.	0	С	This project is to add well protection, chlorination facilities and emergency power.	1,350,000	2,433	6,971 03	Lake	Π	2009
2720 1710015	1710015-003	Hidden Valley Lake CSD	Raven Hill Water Storage Tank	M storage tank at the same elevation as the existing Tank 9, and isolating the Ravenhill Road area from Zone 9 and boosting pressures within by connecting it to Eagle Rock Zone and installing a PRV, gate valve, and check valves. Acquisition of right-of-way for the pipeline connecting the two zones outside of District boundaries will be required as well as purchasing property for the new tank site. The low pressure problem in the Ravenhill Road area will be addressed by isolating this area from Zone 9 and a new pressure zone will be created, Ravenhill Zone, by connecting it to Eagle Rock Zone, which is fed from Little Peak Tank. The peak elevation in Eagle Rock Zone is approximately 1,795 feet. The existing PRV at this location is set at 50 ps on the downhill side. The new PRV separating Eagle Rock Zone from Ravenhill Zone will be located at 1,525 feet. The upstream pressure on the PRV will be 167 psi. By setting the downstream setting on the PRV to 62 psi, the resulting pressure at the peak of Ravenhill Road, 1,575 feet, will be approximately 40 psi. The lowest elevation in Ravenhill Zone, 1,465 feet, will have a pressure of approximately 88 psi.	0	C	This project is intended to address and resolve pressure and storage concerns within Zone 9 of the Hidden Valley Lake Community Services District's current water system.	1,590,000	2,433	6,971 03	Lake	Π	2009
2721 1710015	1710015-001	Hidden Valley Lake CSD	Water Service Lateral Replacement	The project would replace the old leaking water service M laterals and as a result, greatly enhance the District's water conservation efforts.	0	с	The problem is that there are approximately 2200 water service laterals that are 35-40 years old and have significant leakage.	8,000,000	2,433	6,971 03	Lake	II	2009

2722 2910023	2910023-009	Nevada ID - Lake Wildwood	Connection to NID	Connection to NID treated water service.	м	0	С	Lack of adequate well water/reliance on NID Ditch water for housefold use	1,310,000	3,137	7,090 21	Nevada	I	2004
2723 3910003	3910003-001	Escalon, City of	Municipal Well No. 11	The Municipal Well No. 11 project is comprised of planning, designing, permitting, and construction or new municipal water well within the City of Escalon The developed well generally consists of drilling an installing a new municipal water well approximately feet below the surface. The City has already condu test well procedures and verified the site will produ viable water in terms of quality and quantity. Plans specifications are currently being finalized. The we be equiped with all necessary mechanical, electrica SCADA, backup power, chlorination, and associated appurtenances. More Specifically, the items to be installed/constructed include, but not limited to: W installation/development, perforated casing, pump associated onsite piping and valving, electrical equipment to include backup power, variable speed drive, chlorination equipment, and all necessary site equipment including site development and security	M f a d d y 700 s and	0	С	The City of Escalon currently operates four (4) active municipal wells in the City's water system. Currently, in the event of a well being taken out of service the water system would not be able to adequately meet peak water demand and pressure requirements in all areas of the City. The system essentially does not have redundancy in the event a well fails or is taken offline for maintenance. The City's system, more specifically, is at capacity during peak hour demand during summer months. In the event of a well going offline, the system would not only not meet municipal water demands and pressure requirements, but would be at risk in terms of meeting fire flow requirments. Municipal Well No. 11 provides the City with much-needed redundancy to the water system. The proposed new Municipal Well No. 11 will also stabilize the western portion of the City. Currently, the City does not have any municipal wells located on the western portion of the City.	1,500,000	2,363	7,137 10	San Joaquin	Ш	2009
2724 5410008	5410008-008	Orosi Public Utility District	Eastside Water Pipeline Rehabilitation - Orosi PUD	It is proposed to install 3,530 lineal feet of 8 inch du iron pipeline, including fire hydrants and valves to replace about 3,100 lineal footage of aging and leaf pipeline of which over one-half of the footage is 3- isteel pipe. The balance of the pipeline to be replace 4-inch and 6-inch asbestos concrete pipe. The prop project will replace pipeline that has exceeded its u life and will include additional fire hydrants at a spa that meets current standards. The project will also improve hydraulic capacity in the eastside portion of the District. The health and safety benefit identified the reduced potential of water contamination occu- with higher water system pressures. Further, the project will improve hydraulic capacity for custome and for fire protection. With regards to the reduct system repairs, a health and safety benefit is also realized by the reduction in occurrences of resident being without water during the leak repair effort. Further, any time a repair is made to an existing was system. This is especially a concern in system operating at low pressures. A public meeting was lo on February 13, 2007. The proposed project was discussed. One member of the public spoke in favor the project, and there was no expression of opposit to the proposed project. On April 10, 2007, a public hearing was held on the proposed Negative Declars	uctile M ky inch icch iced is bosed isseful accing of d is irring er use ion in ts ts ater of the ms held or of tion c ation	0	c	System Description:The District was formed in 1922 and currently provides water, sewer and lighting services to approximately 1,722 single-family residential equivalents (SFRUE). According to the 2000 census for the Orosi Census Designated Place (CDP), the population was 7,318 people and the median household income was \$30,400.The District's water source is from pumping of groundwater wells. The water distribution system consists of a 750,000 gailon ground level storage tank, booster pumps and pipelines that ranging in size from 2 inches to 16 inches in diameter. The single-family residential monthly rate is comprised of fixed (\$7.68) and a consumption (\$0.76 per 1,000 gailons) components. The typical single-family monthly water rate is about \$20.20. From 2001 to 2005, pressure data loggers were installed in areas of concern. The low and high system pressures generally ranged from 27 to 51 psi. Given the formation of the District in 1922. Some portions of the distribution system have seen over 80 years of service. Problem:About 90 percent of the pipeline recommended to be replaced is located in easements behind residential lots. The pipe is not located in either an alley or public road. Acces to the pipeline has been compromised with the building of fences making access to the water pipeline difficult. About 60 percent of the pipeline difficult. About 60 percent of the pipeline in the pipeline is three (3)-inch steel pipe. The pipe is old	741,000	1,870	7,318 12	Tulare	Ш	2009

2725 5110001	5110001-021 City of Li	ive Oak City of Live Oak Ne	w Well The New Well with Arsenic Treatment System project M	0	С	The City currently has 2,210 service connections and a	2,700,000	2,186	7,475 21	Sutter	I	2012
		with Arsenic Treat	nent will be all inclusive. It will start from selecting a suitable			service population of 8,392. The City of Live Oak's Well						
		System	site for the well and water treatment system, through			#5 has been repeatedly tested and shown elevated						
			environmental studies and permit processing, through			Arsenic and Nitrate levels. The well is very old, and						
			construction and connection to the City Municipal water			because of its age it is not able to be economically						
			system. The City will first hire an engineering firm			repaired and upgraded in order to facilitate arsenic and						
			experienced with City Municipal water systems to			nitrate treatment and removal systems. In 2009 we						
			design the project. Their work will include selecting a			were awarded funding to install an Arsenic and Nitrate						
			suitable site based upon soil, aquifer, and water testing,			Removal system at Well #5, but due to the age and level						
			as well as the best fit for our existing water system. If a			of repair of the well itself, the costs necessary to fully						
			current City owned site is not identified for this project,			complete the project were not feasible and we were						
			we will have to purchase a suitable site. The engineer			forced to abandon that upgrade and remove the well						
			will continue with environmental review, as well as			from service. Without the use of Well #5, the City is left						
			permitting for the well. The project will be designed to			with a supply deficiency on the east side of town. On						
			meet the current requirements and needs of our			peak demand days and times, a diminished supply						
			residents as well as any anticipated future regulations			results in diminished flows and pressures that are						
			and development needs. A contractor experienced in			noticeable to our residents. Not only are these levels of						
			Municipal water systems will be selected to construct			service noticeable to our residents during normal use,						
			the project. The contractor will be responsible for new			the Sutter County Fire Department has voiced repeated						
			construction as well as connection to the City's existing			concerns for the safety of residents in a fire emergency						
			water system. Training for City employees will be a			due to the lack of adequate fire flows. The fire flow						
			critical step, adequate training of all employees on the			concern is so great, that part of the fire emergency plan						
			newly installed equipment will be a mandatory			includes a possible emergency shutdown of State Route						
			requirement. Once the system is constructed and put			99 in order to lay a hose line across the highway from						
			into service, the contractor will be available for			the water storage tank on the west side of town to						
			technical assistance as necessary to ensure proper			supply fire water to the east side of town. This is an						
			operation of the equipment. A maintenance schedule			extremely drastic measure, however with the missing						
2726 5110001	5110001-019 City of Li	ive Oak City of Live Oak Ko	a Street The Kola Street water main project will replace aging, M	0	С	The City currently has 2,210 service connections, and a	300,000	2,186	7,475 21	Sutter	I.	2012
		Water Main Replac	ement leaking and undersized water mains beginning at the O			service population of 8,392. The existing City of Live Oak						
			Street water treatment facility heading north on O			water distribution system is aging and in need of						
			Street to Kola Street, and then east on Kola Street, with			replacement. The majority of the existing water						
			a short jog on N Street before picking up Kola Street			distribution system in the City was installed between						
			again to State Route 99. The project will replace aging			1947 and 1965, and consists of mainly 6" cast iron water						
			and deteriorated 6" water mains with 10" water mains,			lines. The entire system is degraded and undersized and						
			and install new 10" mains where none previously			cannot meet the demands of Live Oak's growing						
			existed. This project will directly increase water flow			population. Population changes have affected Live Oaks						
			and supply pressures on State Route 99 where we have			water requirements and the capability to provide the						
			diminished pressures and fire flows due to the			water needed for its residents. The Kola Street water						
			undersized mains. This project will consist of replacing			main project begins at the O Street water treatment						
			the 6" predominantly cast iron mains with 10" C-900			facility, and replaces 6" mains that are currently too						
			PVC or ductile iron mains, as well as adding a section to			small to adequately supply water to the north side of						
			O Street where no main currently exists. This small			town. Especially of concern is the State Route 99						
			addition of O Street main will allow for a direct water			corridor. The 6" mains are unable to supply enough						
			supply to Kola Street and State Route 99, bypassing the			water to the commercial sites along the highway, and						
			current mains that loop through Luther Elementary			are unable to meet the fire flow demands required by						
			School and a nearly 200 unit residential subdivision			the fire department in an emergency situation. The City						
			before making their way to Kola Street and State Route			completed its Water Master Plan in late 2009, which						
			99. Where Kola Street crosses the Union Pacific			identified a maximum day deficiency in our supply						
			Railroad, boring will be required to replace the 6" main			capacity, as well as hydraulic restrictions within the						
			with a 10" main. All required permits and approvals will			distribution system that limit the flow and pressure. The						
			be obtained from the Railroad prior to any work taking			undersized 6" mains are the main culprit behind the						

hydraulic restrictions in the system. The existing mains

transite/asbestos pipe. Replacement is needed not only

in this project consist of cast iron, plastic, and

place in their right of way. With the mains, new fittings,

that is required to safely and efficiently distribute water

hydrants, valves, and all other associated equipment

2727 5110001	5110001-020	City of Live Oak	City of Live Oak Pennington Road Water Main Replacement	The Pennington Road water main project will replace M aging, leaking, and undersized water mains beginning at the Pennington Road and O Street intersection, and will continue east down Pennington Road under the railroad crossing, and under State Route 99, ending at the Larkin Road intersection. The project will replace aging and deteriorated 6" water mains with 12" water mains. This project will greatly improve the supply of water to the east side of town, as well as the central portion of the City located along State Route 99. This project will consist of replacing the 6" cast iron mains with 12" C- 900 PVC or ductile iron mains. The project includes boring under the railroad as well as under State Route 99 for the new main installation. All required permits will be obtained from the railroad as well as CalTrans for the Highway crossing. The Highway crossing will include survey of existing sewer, storm drain, gas, and electric utilities to insure safe and proper installation of the new main. Included with the installation of the new main. Included with the installation of the new main. Included with the installation of the associated equipment required to safely and efficiently distribute water to our customers will be included. Paving and patching the roadways will also be required to complete the project.	Λ	0	c	The City currently has 2,210 service connections and a service population of 8,392. The existing water distribution system is aging and needs to be rehabilitated. The majority of the existing water distribution system in the City of Live Oak was installed between 1947 and 1965. This particular section of main on Pennington Road is 6" cast iron and is some of the first water mains installed in Live Oak. With the average life expectancy of these cast iron water mains estimated at 75 years, we are fast approaching the end of the expected life of these mains. Because of the age of the mains, as well as the installation methods that were used during early days of Live Oak, we are experiencing notable leakage in our oldest mains. This leakage is becoming quite taxing on our water systems, which is already struggling to meet our maximum day demands. These 6" mains are not only nearing the end of their useful life, they are also undersized and not meeting all of our current and anticipated future demands. With one of our City wells out of service on the east side of town, the supply mains on the west side of town are taxed with supplying water to east side of town are taxed with supplying water to fully meet peak demands, as well as fire flow requirements.	550,000	2,186	7,475 21	Sutter	Ι	2012
2728 1910060	1910060-003	LA PUENTE VALLEY CWD		Replacement of line with 12" ductile iron pipe. M Project involves: Design to solve problem, and Construction	Л	0	С	WW standards defect. Reliability. Numerous leaks on 12" steel (circa 1951) transmission/distribution line on Stimson St. causing water outages during maintenance.	150,000	2,567	7,500 16	Los Angeles	IV	2006
2729 5410020	5410020-005	Woodlake, City of		Add additional storage tank and associated piping.	1	0	С	Inadequate storage capacity.	750,000	1,784	7,524 12	Tulare	ш	2003
2730 4910016	4910016-001	Cotati, City of	Cypress Water Storage Tank Replacement Project	This project includes demolition of the existing 0.1 MG M tank, and construction of a new 0.4 MG steel tank in the same location, including an upgraded intertite with the distribution system, related site work, telemetry, and landscaping to mitigate visual impacts. The existing 0.1 MG tank is no longer serviceable, and has been out of service since 1997. The purpose of the new tank is to increase storage (as identified in the City's Water Master Plan), provide operational flexibility for maintenance of the City's in-service 1.0 MG tank, provide equalization volume for peak hour demands in an area that currently has relatively low pressures, and to provide storage during emergencies, including failure of the long intertie with the 1.0 MG tank.	Λ	0	С	Cotati previously had a 100,000 gallon storage tank at the proposed tank location. However, this was taken out of service in 1997, as it was no longer servicable. This project will increase the City's storage from 1.0 to 1.4 million gallons for normal operations and provide redundancy for maintenance and emergencies.Cotati's Water Master Plan identifies the need for this tank due to increased storage needs in 2010 and to mitigate the potential for low-pressure (under 20 psi) during periods of peak hour demand. This portion of the City already experiences relatively low pressures due to the elevation, so the proposed tank will mitigate the potential for peak hour pressure drops.The tank will also provide redundancy and backup for maintenance and emergencies. The other 1.0 million gallon (MG) tank is located in a different portion of the City and is on the end of a long pipeline. In the event that this pipeline fails, the 0.4 MG tank provides emergency operational storage until the 1.0 MG tank is brought back on-line. The new 0.4 MG tank will allow the City to take the 1.0 MG tank out of service for routine maintenance and also provide additional storage for normal operations (as identified in the Master Plan for 2010).	1,600,000	2,560	7,532 18	Sonoma	IJ	2009
2731 4910023	4910023-003	California-American Larkfield (PUC)		Construct raw water storage reservoir at North Wikiup M	Л	0	С	Inadequate storage capacity.	400,000	2,367	7,775 18	Sonoma	Ш	1998
2732 4910023	4910023-002	California-American Larkfield (PUC)		Old Redwood Highway main replacement/extension. M	Л	0	С	South end of distribution system requires an additional looped feed.	160,000	2,367	7,775 18	Sonoma	II	1998

2733 3310033	3310033-005	Santa Ana River Water Company		Foundation improvements, expansion joints and piping modifications of shell to ground connections (see attached report).	М	0	с	The water company's two existing water storage tanks need to be upgraded to minimize potential damage to piping and possible breakage during a severe earthouse	100,000	1,920	8,080 20	Riverside	v	1998
2734 3310033	3310033-003	Santa Ana River Water Company		Construct a 2.7 million gallon welded steel tank on the water company's existing land on Bellegrave Ave.	М	0	С	Insufficient treated water storage facilities. The water Company has two water storage facilities. The water company has two water storage tanks with a capacity of 2.2 million gallons. However, they need 4.9 million gallons of storage.	1,200,000	1,920	8,080 20	Riverside	v	1998
2735 3310033	3310033-001	Santa Ana River Water Company		Construct water pipelines to eliminate dead end water lines (Plate 1)	М	0	С	Poor water quality and low water pressure due to dead end water lines.	810,000	1,920	8,080 20	Riverside	V	1998
2736 3310033	3310033-002	Santa Ana River Water Company		Drill and equip two water wells	м	0	С	Lack of reliable water supply.	600,000	1,920	8,080 20	Riverside	V	1998
2737 4210020	4210020-011	Santa Ynez River Water Cons. Dist. ID#1	2" PVC Replacement Project	The project is to replace the undersized (2") water mains with 6" Class 900 PVC to increase flow and pressure during periods of high demand. Five segment: have been identified that would require replacement, ranging in lenght from 297 feet to 1,050 feet, for a total of 3,245 feet.	M s I	0	С	In various locations throughout the District's water distribution system, undersized (substandard) 2" PVC water mains need to be replaced. These lines are not compliant with the California Water Works Standards for new water main installation and cause restricted flow and pressure problems.	405,630	2,327	8,298 06	Santa Barbara	IV	2009
2738 4210020	4210020-010	Santa Ynez River Water Cons. Dist. ID#1	Still Meadows Pressure Improvement Project	The project would serve to increase pressure and reduce flow velocities in an area of the ID1 distribution system showing greatest negative affects during periods of high demand. Piping from ID1's highest pressure zone would be extended into an isolated area of a lower pressure zone. System improvements would include the installation of 660 feet of 12-inch PVC piping and four isolation valves.	M I g	0	С	Computer flow modeling of the Santa Ynez River Water Conservation District, Improvement District No.1 (ID1) distibution system, with field verification and calibration, has revealed areas of inadequate pressure within the distribution network during periods of high demand. Pressure thresholds used for system evaluation include CAC Title 22, American Water Works Association standards, ID1 Water Works Standards and Construction Specifications, and Santa Barbara County fire flow requirements for rural/residential service. Additionally, modeling results revealed flow velocities that exceed the ID1 engineering design threshold of 4 fps during periods of high demand.	250,000	2,327	8,298 06	Santa Barbara	IV	2009
2739 4210020	4210020-009	Santa Ynez River Water Cons. Dist. ID#1	2" GIP Replacement Project	The project is to replace the GIP sections of the District's aging distribution system to reduce water losses, reduce expenditure of District resources for multiple repairs, and alleviate potential impacts to system water quality. Improvements to flow and pressure will also be realized in isolated sections of the system. Six GIP pipeline sections have been identified that require replacement, ranging in length from 148 feet to 420 feet, totaling 1350 feet. GIP piping would b replaced with 6-inch Class 900 PVC in compliance with AWWA and California Waterworks Standards.	M e	0	C	In various locations throughout the District's water distribution system, undersized (substandard) 2" galvanized iron piping (GIP) that was installed in the early sixties needs to be replaced. Due to the material and age of the piping, frequent leaks occur resulting in water quality concerns, loss of water, and expenditure of District resources. In some areas, the undersized piping restricts flow causing a reduction in system pressure during high use periods.	184,750	2,327	8,298 06	Santa Barbara	IV	2009
2740 4210020	4210020-012	Santa Ynez River Water Cons. Dist. ID#1	Still Meadows 4" Lateral Replacement Project	Replacement of the 4" lateral with 6" Class 900 PVC would provide for more reliable service, prevent water loss and alleviate potential impacts to system water quality from continued breaks. The length of the 4" line requiring replacement is approximately 945 linear feet.	M	0	с	A 4" lateral to the 8" distribution main on Still Meadows Road, installed in the mid-70's, is constructed of substandard (Schedule 40) piping material. Numerous repairs have been made on the line, which provides water to four domestic service meters, resulting in water loss and potential contamination of the distribution system.	85,050	2,327	8,298 06	Santa Barbara	IV	2009
2741 4210020	4210020-002	Santa Ynez River Water Cons. Dist. ID#1		Construct a 3.2 MG reservoir to provide adequate storage in one pressure zone.	М	0	С	Inadequate storage to comply with Water Works standards.	3,300,000	2,327	8,298 06	Santa Barbara	IV	1998
2742 5410021	5410021-001	Earlimart PUD		INSTALL SECONDE CROSSING OF HIGHWAY 99 AND REPLACE SOME PORTIONS OF THE SYSTEMS	М	0	С	WATER LINES CROSSES HIGHWAY 99. REDUCES DEPENDABILITY OF THE DISTRICT IN CASE OF PIPE FAILURE.	780,000	1,541	8,300 12	Tulare	ш	1998

2743 1010026	1010026-002	PINEDALE COUNTY WATER DISTRICT Pinedale Water Well	Design: Issue a Request for Proposal (RFP) and Statement of Qualifications to local engineering firms and select an engineering consultant for the design. Construction: Drill a well pilot hole and test water quality in various water bearing strata. Construct and develop a new water well. Construct a well pump and associated piping, valves, and tie-in to existing water distribution facilities. Construct appurtenant facilities including a pressure tank and backup generator. Develop the site, including access road street improvements and security fencing. Construction Administration: Generally performed by District staff, but the engineering consultant would be retained to review submittals and address any issues that might come up during construction.	Μ	0	c	The primary need for the project is to provide the water district with sufficient system capacity to meet fire flow demands prescribed by local codes and ordinances. The addition of a standby power source to the new well would help to ensure that adequate pressure is maintained in the District's water system during power outages. There are typically two principal water production criteria that should be met in the operation of a public water system. These criteria include peak hour demand flow rate and average daily demand plus fire flow rate. Since the District does not have any telemetry system or metering equipment to monitor usage on an hourly basis, peak hour usage is estimated by utilizing accepted textbook factors. In one accepted textbook method, the peak month is used to calculate the peak hour flow rate in the District for comparison to pumping capacity. Using a factor of 1.2 to estimate the peak day flow during the month of maximum use, and applying a factor of 1.5 to estimate the peak hour demand for the District is calculated as 5,580 gpm.Another accepted practice for estimating peak hour demand involves applying a factor of 1.8 to the average daily demand and utilizing a 1.5 factor for peak hour demand. Using this method the peak hour demand is calculated as 5,600 gpm. This number compares favorably with the orevious method of estimating peak	900,000	3,370	8,495 11	Fresno	Π	2012
2744 1010023	1010023-001	ORANGE COVE CITY OF	DEVELOP A SUPPLEMENTAL GROUNDWATER SUPPLY CONSISTING OF AT LEAST FOUR WELLS, TRANSMISSION LINES, BLENDING/MIXING STRUCTURES, AND TREATMENT UNITS, IF NECESSARY.	Μ	0	С	THE CITY'S SURFACE WATER ALLOCATIONS BARELY MEET ITS WATER DEMANDS. THE U.S. BUREAU OF RECLAMATION HAS STATED THAT NO MORE SURFACE WATER ALLOCATIONS ARE AVAILABLE.	3,095,600	1,503	8,500 11	Fresno	III	1998
2745 3610112	3610112-006	HELENDALE COMMUNITY SERVICE DISTRICT Replacement Well, Well House and SCADA System	Drill a 1200 gpm 400+ foot water well near the well we want to replace and construct a new well house to house chlorine and other well operating supplies and protect the well. Install a SCADA system at wells 1 through 10 and on our north and south reservoirs. Our reservoir capacity is 2.5mg per reservoir.	Μ	0	с	Well #2 needs replaced. The casing has deteriorated with many cracks and holes and is producing sand which damages our pump and causes us to provide customers with sand filters. Production is down significantly and decreasing monthly. This new well will also significantly reduce our dependence on other wells that are producing arsenic, iron and manganese. The District wants to incorporate a new SCADA system to monitor reservoirs and wells and provide security to our water system in accordance with Homeland Security guidelines. The District currently does not have a SCADA system in place.	970,000	2,610	8,646 13	San Bernardino	v	2009
2746 3610112	3610112-003	HELENDALE COMMUNITY SERVICE DISTRICT	Develop a new master plan	М	0	С	Master Plan does not provide for reliable water system operation	100,000	2,610	8,646 13	San Bernardino	v	2000

2747 4010016	4010016-004	Los Osos Community Services District	LOCSD and GSWC Inter-tie Project	E The Inter-tie project will include two separate inter-tie connections between the LOCSD and GSWC water distribution systems. The inter-ties will be located in the street. They will include a valve vault, valves, and two-way meters. The project will also include approximately 1,400 feet of 8-inch water main to connect the two water systems together.	Μ	0	c	The Los Osos Community is currently served by three water purveyors, Los Osos Community Services District (LOCSD), Golden State Water Company (GSWC), and S&T Mutual Water Company (S&T). They serve a total population of just over 14,000 persons. The community's sole source of water supply is the groundwater basin. The lower aquifer of the groundwater basin is currently in overdraft and experiencing sea water intrusion at a rate of 50 to 60 feet per year with the current operations. The upper aquifer is currently high in nitrates and is a non-potable water supply source without blending or other treatment. The three water purveyors are currently working together to optimize the use of the groundwater basin and determine projects that will not only reduce water consumption, but also reduce the use of lower aquifer wells that are closer to the bay and intensifying the rate of sea water intrusion. GSWC will be installing a nitrate removal unit at one of their well sites that will allow them to extract water from the upper aquifer and reduce the pumping from the lower aquifer. LOCSD recently installed an upper aquifer well, which is blending with a lower aquifer well. The water purveyors are pursuing water education programs to help bring awareness to water conservation and will be developing a groundwater basin management plan in the near future.Another project identified is an inter-tie	240,000	2,738	9,000 06	San Luis Obispo	IV	2009
2748 3610047 2749 3610047	3610047-002 3610047-004	GOLDEN STATE WATER CO - WRIGHTWO GOLDEN STATE WATER CO - WRIGHTWO	OD DD GSWC-Wrightwood System - Linnet Tank	Replace mainline To furnish and erect a new 0.5 MG welded steel water storage reservoir with appurtenances; including ring wall foundation, and reservoir sub grade preparation. Also included in the scope of this project is 1600 feet of 12 inch pipeline that will feed the reservoir. The estimated completion date for the plans is May 2009 and the estimated construction start date will be in August of 2009.	M M	0 0	c c	Old, undersized mainline The existing Reservoir (called the Lone Pine Reservoir) is too small to meet the current water demand. The existing tank is leaking, and has reached the end of its useful life. Based on the current master plan, a new and larger tank is needed to supply adequate storage for current water demand and fire flow.	3,900,000 277,376	2,891 2,891	9,479 13 9,479 13	San Bernardino San Bernardino	V V	1998 2009
2750 3610047	3610047-003	GOLDEN STATE WATER CO - WRIGHTWO	OD	Construct new reservoir	м	0	с	210k Gal Lone Pine Reservoir corroded and structurally	200,000	2,891	9,479 13	San Bernardino	v	1998
2751 1910086	1910086-002	MAYWOOD MUTUAL WATER CO. #3	Distribution main replacement	6 inch main between Gage and Randolph on Atlantic Blvd, remove blockage for fire flow. Replace 4 inch mains on Mayflower & Prospect between Randolph and 61st street. Replace 4 inch mains on Slauson Avenue from Alamo to LA River. Replace 4 inch mains on Atlantic between Slauson and 56th street.	M	0	с	Replace low flow mains, replace all 4 inch main with 6-8 inch. Increase fire flow to low flow areas 6 inch main between Gage and Randolph on Atlantic Blvd, remove blockage for fire flow. Replace 4 inch mains on Mayflower & Prospect between Randolph and 61st street. Replace 4 inch mains on Slauson Avenue from Alamo to LA River. Replace 4 inch mains on Atlantic between Slauson and 56th street.	2,000,000	2,044	9,500 16	Los Angeles	IV	2007
2752 1910203	1910203-002	LOS ANGELES CWWD 40, R24, 27,33-PEAF	RBLSM	INSTALL 6,600 LINEAR FEET OF 12" WATER MAIN	M	0	с	OLD, UNDERSIZED WATER MAIN	450,000	2,754	9,777 16	Los Angeles	IV	1998

2753 1910203	1910203-007	LOS ANGELES CWWD 40, R24, 27,33-PEAR	IBL Nitrate Treatment in Well 27-5	This project is for the removal of nitrate from the groundwater pumped from Well No. 27-5 to ensure compliance with the nitrate standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for nitrate treatment. Ion exchange is designated as the Best Available Technology by the USEPA for the removal of nitrate from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Healt and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact easy to automate, and can be operated on demand. The treatment goal is to remove the nitrate in the effluent (treated) water to less than 4 ppm, meeting the nitrate standard of 45 ppm. The proposed packaged wellhead nitrate removal system includes a treatment module, pre-filter assembly, salt/saturator tank, brine processing unit, and brine wastewater storage tank(s). Details of each component that is sized to treat the flow rate from Well No. 27-5 at 500 GPM are as follows. The treatment module (i.e., ion exchange resin operating in parallel to remove the nitrate from the well water. The columns are installed in a 10'W x 35'L x 9'H mobile container, eliminating the need for a building or other	M e , e v	0	c	Nitrate is an inorganic compound that often appears in the environment, both naturally and unnaturally. Most commonly the nitrate in groundwater originates from fertilizers, septic systems, and manure storage or spreading operations. The nitrate from these sources seeps into the groundwater if it is not absorbed by vegetation, turned into vapor, or taken away by runoff. If water with high nitrate levels is consumed by humans or animals, it will inhibit the ability of the red blood cells to carry oxygen throughout the body, a condition called Methemoglobinemia. This is most dangerous in infants who can die from the effects of the nitrates. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women. Nitrate regulation was established in 1992 and it requires all water suppliers to test samples of their water every year to monitor the contamination levels. When these water samples are tested, they should have a nitrate level of less than 50% of their MCL of 45 parts per million (ppm) Nitrate as NO3. If a sample is found to be higher than 50% of its MCL, contamination level must be checked every three months. The water supplier will be forced to take action if the level of nitrates found in the samples is consistently in violation. The Los Angeles County Waterworks District 40, Antelope Valley, Regions 24, 27, and 33, Pearblossom, Littlerock, & Sun	499,000	2,754	9,777 16	Los Angeles	IV	2009
2754 2610125	2610125-002			housing structures. The ion exchange resin is	м	0	C	Village, serves approximately 9,800 people through	100.000	2 08/	0 9/7 12	San Bernardino	V	1000
2755 3610125	3610125-002	SBNDO COUNTY SERVICE AREA 703		Have a hyfraulic analysis performed on the system to determine how much pipeline is needed and where, contract for installation of pipelines	M	0	C	Waterworks problems - pipelines too small in diameter to adequately supply water throughout the distribution system.	100,000	2,984	9,847 13	San Bernardino	v	1999
2756 4110027	4110027-001	Westborough County Water Dist		Install new pipes and couplings to eliminate water outages for customers and construct new water storage tank for adequate water storage.	M	0	с	Water outages due to deteriorating pipes and low storage tanks.	2,500,000	3,457	9,910 17	San Mateo	II	1998
2757 4110017	4110017-001	City of Menlo Park	Water Main Replacement Project	The City has a consultant working on plans and specifications to address each of the problems listed. Their services will also include permit, bid and construction support. 1. Menlo Business Park – This project will reconfigure the pipes and valves to allow Menlo Business Park customers to receive water from turnouts controlled by the City of Menlo Park. Approximately 930 feet of pipe will be installed along a easement and connections to three SFPUC turnouts will be reconfigured. Emergency connections will remain with the neighboring city via normally closed valves.2. Bayfront Expressway at Marsh Road – To improve maintenance accessibility to the water main and valves approximately 400 feet of pipe will be installed along Bayfront Expressway. Pipes and valves in the middle of the busy intersection will be abandoned.3. Haven Avenue at Atherton Channel – To eliminate these dead ends, this project will install 100 feet of 8-inch pipe to be bored under Atherton Channel. Access points will be well away from the bank and creek habitat. 4. Sharon Oaks Residential Complex –This project will involve the installation of two new water service lines; one to the residential complex subiming pool and the other to three townhouses. About 60' of one-inch diameter copper service line will be installed along will ne matondoned 5. (Vérefe and Willow Boad – To	M I f	0	c	Seven problems in the City's water distribution will be addressed by this project.First, approximately 100 customers in the commercial/industrial Menlo Business Park receive water from San Francisco Public Utility Commission (SFPUC) turnouts controlled by a neighboring city. The area became part of the City of Menlo Park Municipal Water District (MPMWD) in 2001 when an old County water district was dissolved. The piping remained connected to the neighboring City's system. MPMWD pays a 5% surcharge for the water it must purchase from that city to serve these customers. The affected water customers have asked that the piping be reconfigured so that they would be served from City-controlled turnouts.Second, several valves, old ductile iron pipe (DIP) and asbestos cement pipe (ACP) are located in the middle of a busy, Caltrans- controlled intersection at Marsh Road and Bayfront Expressway. Maintenance personnel are required to exercise valves and repair main leaks at this location in high-traffic conditions or accessibility is limited to rare hours of low traffic times at night and on weekends. Third, MPMWD severed a water main located under Atherton Channel just downstream of the Haven Avenue vehicle bridge due to leakage. Because it was an emergency fix and permits could not be obtained quickly, the dead ends water water these	1,440,000	3,901	10,200 17	San Mateo	Ι	2009
2758 5510001	5510001-001	TUD - Sonora/Jamestown Water System	Treated Water Storage	CONSTRUCT A 1 MILLION GALLON TREATED WATER	М	0	с	INSUFFICIENT STORAGE DURING PEAK DEMAND	420,000	4,342	10,294 11	Tuolumne	Ш	1998
2759 5510001	5510001-004	TUD - Sonora/Jamestown Water System	McKibben Drive Pipeline Replacement	STORAGE TANK. REPLACE THE STEEL PIPE WITH A NEW PVC PIPE.	М	0	с	PERIODS. MCKIBBIN DRIVE PIPELINE IS AN OLD WRAPPED STEEL PIPE THAT IS LEAKING.	52,000	4,342	10,294 11	Tuolumne	ш	1998

2760 1910148	1910148-004	SIERRA MADRE-CITY, WATER DEPT.	Water System Rehabilitation	This project will provide for the design of the M replacement of undersized water transmission and distribution pipelines to provide adequate water supplies in the event of a major seismic event as identified in the 1997 Corps of Engineers Seismic Reliability Study. Replacement of aged undersized pipelines will increase the volume of water flow needed to provide fire flow protection to the City's residential, commercial and industrial communities following a major seismic event as well as improve water quality. The project will also provide for the replacement of system control valves and the installation and upsizing of fire hydrants.	0	c	The quality and reliability of drinking water supplies for the City of Sierra Madre is at risk due to the deterioration of their water infrastructure due to age and from the potential impact from a major seismic event in the region. The design and construction of the purposed projects is imperative in order to safeguard the quality and quantity of the drinking water supplies in their communities. Improvements to water storage reservoirs, pump stations, and well supply sources are needed to lower the risk of contaminating the drinking water supply and ensure sustainable water supplies due to the failure of water infrastructure systems.	3,000,000	3,867	10,800 07	Los Angeles	IV	2009
2761 1910148	1910148-002	SIERRA MADRE-CITY, WATER DEPT.		Design and construct one domestric well and a water M system inter-tie between the Cities of Sierra Madre and Arcadia.	0	C	Reliability of local sources limited. Additional sources of supply needed.	1,660,000	3,867	10,800 07	Los Angeles	IV	2006
2762 4910012	4910012-005	Sonoma, City of	Napa Road Water Line Extension Project	The project will extend the City's existing 10-inch water M line in Napa Road from Larkin Drive to Broadway. Service line laterals would be constructed to service parcels on the south side of Napa Road. The work will include street resurfacing as necessary for the installation of the water line trench on Napa Road.	0	C	The City's existing water line alignment follows southerly on Broadway and extends to the intersection with Napa Road. The Vintage Senior Living and Assisted Care Facility on Napa Road is serviced via the existing connection to the water main which veers north and east through private property at the Friedman's Home Improvement Store located at 1360 Broadway Avenue. After crossing the Friedman's property, the line connects to the 14-inch main in Broadway. Another 10- inch City water line is located in Napa Road east of Larkin that services residential homes in the Larkin Drive area. Installation of the Napa Road Water Line Extension Project would circumvent the City's water line that is located within the private property of Friedman's Home Improvement Store, and place it in City right-of- way in Napa Road. Ruptures and leaks on the City water line within the Friedman's property are difficult to maintain and repair quickly because of their location on private property. Delayed repairs cause water loss and potential Interruption of service to Vintage Senior Living and Assisted Care Facility. The project would also create a redundant loop system to provide greater system reliability, particularly to the Vintage Senior Living and Assisted Care facility.	700,000	4,214	10,807 18	Sonoma	II	2009

2763 4910012	4910012-003	Sonoma, City of	Citywide Water Services Replacement Project	The project includes the residential water service replacement projects that are part of the 2007 Connection Charge and Rate Study. The water service lines are located within the following streets: Junipero Serra (West Spain to Merritt Court), Este Madera Drive, Este Madera Lane and Este Madera Court, France Street (Sth Street East to Broadway), and Chase Street (East of Sth Street East). It is anticipated that the replacement elements will include water service laterals, service saddles, corporation stops, meter boxes, and related improvements such as curb/gutter/sidewalk/driveway/and ADA ramp replacement where necessary, trench pavement repair, pavement striping and markings where necessary and related improvements. There will be two sections of water main replacement: on the eastern side of Este Madera Drive and off of 340 Patten Street. Approximately S5 linear feet of 6-inch pipe will require installation in order to connect two 6-inch water mains on Este Madera Drive, providing a looped system which increases service reliability and improves water quality in that area. The second section of water main replacement at 340 Patten Street is an existing 2-inch main (approximately 220 lineal feet) that would be increased to a 6-inch water main to provide sufficient fire flows.	M ,t f	0	C	The identified water service lines are currently leaking due to the type and age of the service lines. In addition, the fittings for the lines are leaking and may be structurally inadequate. Failures to those connections would be catastrophic in nature and would impact water services and traffic safety on the roadways where the lines are located. Replacing the service lines would save water and increase the reliability of the water system since the service lines are the weak links in the system.	2,420,000	4,214	10,807 18	Sonoma	u	2009
2764 4910012	4910012-004	Sonoma, City of	Fano Lane Area & Bettencourt Water Improvements Project	The proposed limits of the work includes Bettencourt Street between Fifth Street West and Second Street West and Fano Lane between Robinson Road and Fifth Street West, Junipero Serra Drive between Verano Avenue and West Spain, Merritt Court, Palou Street and Hayes Street. The project includes water service replacements in the project area. It also includes the necessary street resurfacing for addressing the impacts to the roads resulting from the trenching and other related work.	M	0	с	The identified water service lines are currently leaking due to the type and age of the service lines. In addition, the fittings for the lines are leaking and may be structurally inadequate. Failures to those connections would be catastrophic in nature and would impact water services and traffic safety on the roadways where the lines are located. Replacing the service lines would save water and increase the reliability of the water system since the service lines are the weak links in the system.	1,314,000	4,214	10,807 18	Sonoma	II	2009
2765 1805004	1805004-001	High Desert State Prison	Security Perimeter and Lighting for Water Tanks	The planning, implementing and control of a secured perimeter fence and security lighting around the water tanks for High Desert State Prison and California Correctional Center. Project would include the layout of the lighting and fencing, excavation of the electrical trench, installation of lighting poles,running of electrical conductors and conduit, installation of lighting timers and hardware, excavation of holes for vertical poles for fencing,installation of 3 wire(barbed) on top of poles,installation of 1,100.00 linear feet of fencing, 2 bags of concrete for approximately 110 holes for vertical poles. Fabrication of two (2) separate locations. Fabrication of signs for "authorized personnel only". Fence will be 8 feet tall by 1,100. feet in total length with two gates. Fence will have security ties and weldee	M f	0	с	The water tanks currently have no security perimeter surrounding them. There is a potential to tampering with the water tanks. These tanks are next to theperimeter road, where a vehicle could impact the tanks. In keeping with the security standards of public utilities since september 2011 these tanks should be behind a secured perimeter to prevent unauthorized access and protected from potential terrorist attack to the drinking supply.	83,000	2,023	10,950 02	Lassen	I	2012

at all connections to prevent tamper.

2766 4410013	4410013-001	Scotts Valley Water District	Automated water meter conversion	The project is to replace SVWD's existing touch-read water meter system with state-of-the-art AMR/AMI technology. The conversion would be a turnkey installation provided by a qualified firm identified through a competitive selection process. The new AMR/AMI system would incorporate and utilize existing SVWD meters, but would provide for electronic communication of data on a minimum daily time-step. The system would provide functionality with SVWD's existing billing system and would include programmable features for identifying leaks and successfully implementing water conservation best management practices.	0	C	Scotts Valley Water District (SVWD) relies on a sole source aquifer for its drinking water supply. Over the past three decades, groundwater extractions by SVWD, neighboring water districts, small systems, and private pumpers have caused groundwater levels to decline by up to 200 feet. Water recycling and water conservation have been identified as key programs to reduce overall pumping to a sustainable level. A successful water recycling project has been implemented, and wide- ranging water conservation measures have been put in place.Further strides in water conservations avings are hampered by limited customer water use data. SVWD currently reads and bills customers once every two months. More frequent meter reading with the existing touch-read technology is not feasible due to staffing constraints. Replacement of the current system with automated meter reading (AMR) and advanced metering infrastructure (AMI) technology would allow for early leak detection, implementation and documentation of water conservation best management practices, reduced vehicle use, and overall improved customer service.	950,000	3,852	11,301 05	Santa Cruz	Ι	2009
2767 4410013	4410013-002	Scotts Valley Water District	Booster pump station improvement	The project consists of improvements to Sandhill and EI M Pueblo booster pump stations. The Sandhill booster pump station would be improved to replace the existing aging pump with a new high efficiency pump and add a second new high efficiency pump along with associated valves and piping. The two new pumps would operate in a lead-lag mode. The normal operating capacity of the facility would not change. The purpose would be to provide assured water service for customers in the Mt. Roberta pressure zone. The planned improvements would require acquiring approximately 200 square feet of rural property adjacent to the existing booster station footprint. Preliminary discussions with the property owner regarding this potential acquisition have been completed. The two existing, aging pumps at Bethany booster pump station would be replaced with new high efficiency pumps. Existing valves and piping would remain unchanged. The three existing, aging pumps at El Pueblo booster pump station would be replaced with new high efficiency pumps. Existing valves and piping would remain unchanged. The pump replacements at Sandhill, Bethany, and El Pueblo would generate an overall estimated 25% energy savings. The greatest total energy savings would be achieved at El Pueblo due to the large volume of water pumped at this station.	0	c	Three Scotts Valley Water District (SVWD) booster pump stations – Sandhill, Bethany, and El Pueblo – are in need of immediate improvement. Sandhill booster pump station consists of a single, aging 30+ year old booster pump. This booster pump station is SVWD's sole means of filling of Mt. Roberta water storage tank, which can provide a maximum of one day's supply within the Mt. Roberta pressure zone at peak season customer demand.Bethany booster pump station consists of two aging 30+ year old booster pumps. This booster pump station is SVWD's sole means of filling of Bethany water storage tank, which can provide a maximum of two days' supply within the Bethany pressure zone at peak season customer demand. El Pueblo booster pump station controls delivery from El Pueblo Water Treatment Plant, which processes approximately 30% of SVWD's total supply. The pump station consists of three parallel 28 year old booster pumps capable of operating in tandem. Loss of this pump station to pump failure in a peak use period would seriously compromise SVWD's ability to meet customer demand throughout the entire SVWD system. Pump tests show signficant potential energy savings from replacing the El Pueblo pumps with new efficient models. Energy savings would also result from replacing the Sandhill and Bethany pumps, but in lesser amounts due to the lower volume of water pumped at	650,000	3,852	11,301 05	Santa Cruz	Ι	2009

2768 4110016	4110016-004	Hillsborough Water Dept.	Water Main Replacement	<ol> <li>2445 to 2400 Summit Dr &amp; Oak Tree Place Install 815' M of 8" cement lined DIP. Move zone boundaries at 2445</li> <li>Summit Dr to 2400 Summit; install 6" PRV to supply Forestview tank zone (exist #40 psi) with the Darrell zone (exist #113 psi); eliminate dead-end on Summit and assist Forestview tank zone when needed. Install 200' of 6" DIP on Oak Tree Pl and 3/4" pressure regulators at all residents. Install two 6" PRV's on Summit Dr and Bella Vista to feed this area from the Darrel tank zone for the future elimination of old Oaks Drive pump station and old Forestview tanks. Mains will be installed in roadway.2. Robinwood Lane &amp; Denise Drive Install 930" of 6" DIP on Denise Dr from Alberta Way to Robinwood Ln and 1700' of new 6" DIP on Robinwood from Denise to Hayne Rd. Both of these dead end mains will be connected together to create a circulation line and induce a main run isolation valve approx every 300' and include a main run isolation valve approx every 300' and include a main run sloalton valve approx every 300' and include a main run sloation valve approx every 300' DIP madway on Ralston and space hydrants every 300'. Existing main will be abandoned in place. New long water services will now be connected from Ralston, requiring reverse plumbing of existing residents to the street.4. Chateau Pumping Line - The Town will install approx 1200' of 10" DIP in the roadway</li> </ol>	0	c	Hillsborough provides service to 4,200 service connections via 97 miles of water main lines. A 2004 Water Main Infrastructure Inventory identified ages of mains:Age Linear Feet0-10yrs 541510-20yrs 020-30yrs 5562230-40yrs 6096340-50yrs 7569801der 314633Many miles of pipe remain to be upgraded. Following are the most problematic due to deterioration, breaks, inadequate supply, hydrant spacing, placement and material:2445 to 2400 Summit Dr & Oak Tree Place:Summit has failing 6" Cast Iron (CI) and Transite (TI) mains. Hydrants are dry-barrel type supplied by a 6"x 4" reducer. Oak-Tree is served by 4" CI main fed from 2400 block of Summit, which is lower pressure. 10 Oak Tree Place has #37 psi. Other properties on Oak Tree and Summit are served by 2', plastic-to- galvanized, higher pressure line fed from the 2500 block of Summit through the easement into the back of Oak Tree. Existing mains crisscross the roadway from behind the curb. Robinwood Lane & Denise Drive:6" CI main on Robinwood, from Hayne to Denise, has had several breaks over past few years. 6" CI main on Denise needs replacement. Existing mains are behind the curb.101 Robin Rd to 2755 Ralston Ave 6" CI main needs replacement. Runs behind back yards of properties on Barroilhet Rd, Ralston Ave and Robin Rd. Existing water services run from main to homes. Area is difficult to access for main repairs, emergency water turn offs,	3,000,000	4,296	11,328 17	San Mateo	Ι	2009
2769 4110016	4110016-005	Hillsborough Water Dept.	SCADA System Upgrade	The Town of Hillsborough's water system consists of 8.3 M million gallons of storage, 14 pump stations and approximately 100 miles of water distribution piping. Town plans on using the upgraded Supervisory Control and Data Acquisition (SCADA) monitoring system to improve the operation and control of the drinking water storage and distribution systems. The new SCADA monitoring system will include development, installation and commissioning of a Central Computer System (CCS) with a state-of-the-art Human Machine Interface (HMI), 19 new Remote Terminal Units (RTUs), a retrofit of 2 existing Remote Terminal Units (RTUs) and a spread spectrum based radio telemetry network. Additionally, the system shall have the capability to incorporate an Emergency Operations Center (E.O.C.). The system shall be installed in a coordinated manner in order to assure valid and accurate monitoring and control capabilities are maintained at all times on the existing system or the new system. The new project will also include effort to install and connect certain new instruments at each site. The new SCADA monitoring project will incorporate up to 50 facilities and a minimum of 2000 mixed physical and 5000 pseudo I/O points. The data obtained from SCADA monitoring system will be used to improve the daily water system operation, increase the efficiency of pump stations during off neak hours, and maintain outimum water	0	c	The Town of Hillsborough provides drinking water to approximately 4,200 residents and businesses. The Town's water supply system includes 14 pump stations, 17 tanks, and 9 water-metering stations. Water levels in these facilities is monitored and controlled by a Supervisory Control and Data Acquisition system (SCADA). The system consists of a Master Transmitting Unit (MTU), located in the Public works department and a Remote Transmitting Unit (RTU), which monitors equipment located at every tank and pump station. The Town's SCADA system was installed in 1999, is outdated and is no longer supported by the manufacturer. A 2006 SCADA System Evaluation identified numerous system issues:1. The RTU uses the actual reservoir level information while simultaneously controlling pumps to bring the reservoir to a desired water level. In one instance, the MTU went offline for a prolonged period of time due to power failure. During this time no new water level information was transmitted to the RTU at each pump station. This led to the pump running continuously on the last transmitted value of the reservoir level. This is a major flaw in programming and an upgrade in the safety check of pump control logic is required. 2. The wiring installation did not adhere to standard engineering practices. For example, wires are not labeled with wire numbers and there is no indication of wire numbers.	1,340,000	4,296	11,328 17	San Mateo	Ι	2009
2770 4110016	4110016-001	Hillsborough Water Dept.	Replace Water Mains, Tanks and Booster Station	Replace existing undersized water mains with minimum M s 8" ductile iron pipe. Seismically upgrade or replace water tanks and booster station and other	0	С	Delapitated and aged watermains, water tanks and booster stations.	15,000,000	4,296	11,328 17	San Mateo	Ш	2006

improvements and water services.

2771 4110016	4110016-003	Hillsborough Water Dept.	New Vista Water Tank	The Town is at 50% design of a 600,000 gallon concrete M storage tank and anticipates completing 100% design by June 2009. The tank will be built above ground using pre- stressed concrete. The pre-stressed concrete tank will be secure and virtually maintenance free. The north side of the tank will be built on the footprint of the existing tank. The south side of tank will be built into a hillside which will act as a retaining wall. This will save expenses on excavation, retaining walls and paving costs necessary if a conventional steel tank were built. The tank design provides better inlet/outlet piping design along with a mixing system to improve the water quality. It is designed to meet current American Water Works Association (AWWA) standards for seismic design and will include an earth quake shut off system. The new tank design also saves on exterior and interior coatings costs which are an on-going maintenance expense. The increased water storage capacity will give the Town more water reserve to service the residential and other areas during peak water demand due to emergency water shortage, wildfire or earthquake. The new pump station for Vista water tank would be relocated for easier access and drainage away from the building. It would also meet seismic design standards for this area. It would have a new Motor Control Center nanel (MCC) and standhy energator within the new	1	0	C	The Town of Hillsborough is a residential community located in San Mateo County, California. It lies west of Highway 101 and east of Highway 280 and is within very close proximity to the San Andreas Fault line. Fully two thirds of the Town is in a CalFire State Fire Hazard Zone and nearly half is in a state-designated Very High Fire Hazard Zone. The ABAG Multi-Jurisdictional Local Hazard Mitigation Plan identifies 3,458 acres or 89% of the Town as being at risk from wild land-urban interface fires. The Town's water system includes 8.2 million gallons of water storage facilities, 14 pump stations and 17 tanks and 100 miles of water piping to 4,200 service connections. Much of the system was originally installed in the early-mid 1900s. A number of the water tanks and pump station have been upgraded in order to bring them into compliance with current construction standards, harden them against seismic events and to increase storage capacity in case of wildfire. However the Town's 350,000 gallon Vista Road Water Storage Tank, built in 1947, and associated pump station, built in 1960, have not yet been upgraded. They have surpassed their long term durability and normal longevity. It is a free-floating steel tank on 6 inch sandbed foundation. The tank has significant corrosion at the bottom wall shell connection to the floor plates. It has bitumastic tar coating interior lining which has corroded. The tank is torage	2,500,000	4,296	11,328 17	San Mateo	Ι	2009
2772 5410006	5410006-001	Lindsay, City of		building. The pumps would be able to alternate CANAL SUPPLY LINE, 2.5 MG STORAGE TANKS, TWO NEW WELLS, INFRASTRUCTURE IMPROVEMENTS, PRESSURE SYSTEM LOOPS, RAW WATER TREATMENT PLANT IMPROVEMENTS. OTHER - DESIGN AND CONSTRUCTION	1	0	с	major need of seismic retro fit to bring it up to current DISTRIBUTION PROBLEMS	12,842,000	2,335	11,450 12	Tulare	Ш	1998
2773 4910005	4910005-007	Healdsburg, City of	City of Healdsburg College Avenue Water Main Replacement	M by-pass plans to ensure all customers maintain domestic water service; systematic removal of old water mains on College Avenue between Piper Street and Sherman Avenue; placement pipe bedding; installation of 1,855 lineal feet of 8" C-900 PVC water main; trench compaction; installation of 36 new 1" residential water services; installation of 4 new fire hydrant assemblies; and appetent valves and piping; flush new lines; pressure test new lines; flush and disinfect new lines; perform bacteriological testing; and return completed lines to service; and perform street trench repairs. Estimated time to complete 90 days.	1	0	C	College Avenue is currently served by a 4" cast iron water main that was installed in 1936. This main serves 36 residential customers and has experienced several failures over the past several years. Failures have been attributed to age of pipe, seismic activities and corrosion. The failures typically occur after hours requiring prolonged shut-downs and significant expense due to overtime work. Public health is potentially compromised due to lack of water for domestic consumption and sanitary purposes while emergency repairs are performed. Uncontrolled discharges of chlorinated water due to the water main failures has resulted in the Regional Water Control Board staff advising the City that as a minimum, the discharged water needs to be de-chlorinated prior to discharge into the storm drain system, and that greater preventive measures should be taken to minimum water main failures. In addition the substandard water main sizes	415,000	4,272	11,706 18	Sonoma	Ι	2009

are not be able to meet current minimum fire flow requirements. No public notification conditions

currently exist.

2774 4910005	4910005-008	Healdsburg, City of	City of Healdsburg Brown Avenue Water Main Replacement	The project would entail; development of water supply by-pass plans to ensure all customers maintain domestic water service; systematic removal of old water mains on Brown Avenue between Piper Street and Powell Avenue; placement pipe bedding; installation of 2,394 lineal feet of 8" C-900 PVC water main; trench compaction; installation of 42 new 1" residential water services; installation of 6 new fire hydrant assemblies; and appetent valves and piping; flush new lines; pressure test new lines; flush and disinfect new lines; perform bacteriological testing; and return completed lines to service; and perform street trench repairs. Estimated time to complete 90 days.	0	c	Brown Avenue is currently served by a 2" and 4" cast iron water main that was installed in phase beginning in 1936 and completed in the early 1940's. These mains serve 42 residential customers and have experienced several failures over the past several years. Failures have been attributed to age of pipe, seismic activities and corrosion. The failures typically occur after hours requiring prolonged shut-downs and significant expense due to overtime work. Public health is potentially compromised due to lack of water for domestic consumption and sanitary purposes while emergency repairs are performed. Uncontrolled discharges of chlorinated water due to the water main failures has resulted in the Regional Water Control Board staff advising the City that as a minimum, the discharged water needs to be de-chlorinated prior to discharge into the storm drain system, and that greater preventive measures should be taken to minimum water main failures. In addition the substandard water main sizes are not be able to meet current minimum fire flow requirements. No public notification conditions currently exist.	534,900	4,272	11,706 18	Sonoma	Ι	2009
2775 4910005	4910005-006	Healdsburg, City of	City of Healdsburg Cadoul Reservoir Rehabilitation II	The project would entail: installing by-pass pumping to M maintain domestic water supply from other storage and supply sources; draining the tank; removing and disposing of the existing roof structure and covering at a permitted landfill or demolition recycling facility; mobilize air blowers and monitoring equipment to ensure safe and adequate air supply during work; perform repairs to the tank interior and piping as necessary; clean tank; installing 7 oz geo-textile underlayment; installing 45 mil Hypalon liner with batten bars and appurtenant attachments to piping and tank inlets and outlets; test all seams for leaks via air lance method; repair or install new roof covering; clean and disinfect new installations; fill tank with domestic water and check for leaks; disinfect refilled water; perform bacteriological testing; disconnect by-pass pumping; and return reservoir to service. Estimated time to complete 45 days.	0	С	The Cadoul Reservoir is a 60,000 gallon poured in place concrete reservoir, partially below grade, that provides domestic and fire suppression water to approximately 116 connections. The reservoir was constructed in 1920. The reservoir has developed significant cracks allowing root intrusion, and is leaking – thereby wasting potable water and possibly creating unsafe saturated subsurface conditions. In addition, the existing roof structure has deteriorated to a point where it could fail. The roof has been temporarily repaired but there are concerns related to contamination from precipitation and other vectors. No public notification conditions currently exist.	150,000	4,272	11,706 18	Sonoma	II	2009
2776 4910005	4910005-009	Healdsburg, City of	City of Healdsburg Fitch Well Field Rehabilitation	The project entails a systematic rehabilitation of Wells M #1 - #4. Rehabilitation for each well would include: removal of pump motor; removal of pump assembly and water column; scrubbing of the well casing; video inspection of well casing; installation of new well screens/liner as necessary; well surging and development; installation of new pump/bowl assembly, bearings, "spider" supports, foot check valve, and water column; installation of new energy efficient pump motor with anti-ratcheting device; perform check of electrical supply and motor control center and perform necessary repairs/upgrades; disinfect and flush well; perform bacteriological testing; and return well to service. Estimated time to complete 120 days.	0	С	The Fitch Well Field consists of four public supply wells adjacent to the Russian River. The well motors are mounted on elevated support structures and are above Russian River flood stage. The wells were constructed in the early 1970's and have an average depth of 80 feet, with an average production of approximately 700 gpm each. The wells are classified by DPH as being under the influence of surface water from the Russian River and the City is prohibited from using them for public consumption from November to May. Due to the surface water influence, the well screens and bowls have become "fouled". We have recently experienced pump and motor failure on our other well field (the Gauntlett Well Field) and are concerned that similar failures will occur on these wells. These well augment the City peak summer demand and are critical to meet public health and safety supply demands. No public notification conditions currently exist.	500,000	4,272	11,706 18	Sonoma	Ι	2009

## 2777 4910005 4910005-004 Healdsburg, City of

## Gauntlett Reservoir Rehabilitation

City of Healdsburg

The project would entail: installing by-pass pumping to M maintain raw water supply to the water treatment plant; draining the tank; removing and disposing of the existing roof structure and covering at a permitted landfill or demolition recycling facility; mobilize air blowers and monitoring equipment to ensure safe and adequate air supply during work; perform repairs to the reservoir interior and piping as necessary; clean tank; install 7 oz geo-textile underlayment; install 45 mil Hypalon liner with batten bars and appurtenant attachments to piping and tank inlets and outlets; test all seams for leaks via air lance method; repair or install new access ladders; install new roof support structure; install new roof covering; clean and disinfect new installations; fill tank and check for leaks; disinfect refilled water; perform bacteriological testing; disconnect by-pass pumping; and return reservoir to service. Estimated time to complete 120 days.

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The Gauntlett Reservoir was constructed in 1957 and is a 720,000 gallon gunite lined, below grade reservoir that serves as the raw water fore-bay tank for the City's Panorama Water Treatment Plant. Water is supplied from four public supply wells that are adjacent to the Russian River. Prior to the DPH requirement to construct the water treatment plant - due to surface water influence of the public supply wells - the Gauntlett Reservoir served as the primary potable water storage facility for the City. However, with the construction of the water treatment facility in 2005, the Gauntlett Reservoir was "reused" as the fore-bay tank, providing gravity feed to the water treatment facility. Recent inspections have determined that the roof structure is in significant distress (dry rot and failed joint connections) and the roof covering is leaking, allowing precipitation and other vectors to enter. The City recently spent \$30,000 to perform emergency temporary repairs. The gunite liner has also been observed to be leaking in several locations and may be creating unsafe saturated subsurface conditions. No public notification conditions currently exist.

750.000 4.272 11,706 18 Sonoma 2009 11

2778 4910005 4910005-005 Healdsburg, City of

Avenue

City of Healdsburg Water The project would entail; development of water supply M Main Replacement Terrace by-pass plans to ensure all customers maintain domestic water service; systematic removal of old water mains at various locations on Terrace Avenue between Healdsburg Avenue and University Street; placement of pipe bedding; installation of 2,566 lineal feet of 8" C-900 PVC water main; trench compaction; installation of 55 new 1" residential water services: installation of 6 new fire hydrant assemblies; and appetent valves and piping; flush new lines; pressure test new lines: flush and disinfect new lines: perform bacteriological testing; and return completed lines to service; and perform street trench repairs. Estimated time to complete 90 days.

Terrace Avenue is currently served by 2" and 4" cast iron water mains that were installed in phases starting in the early 1930's and completed in 1963. These mains serve 55 residential customers and have experienced several failures over the past several years. Failures have been attributed to age of pipe, seismic activities and corrosion. The failures typically occur after hours requiring prolonged shut-downs and significant expense due to overtime work. Public health is potentially compromised due to lack of water for domestic consumption and sanitary purposes while emergency repairs are performed. Uncontrolled discharges of chlorinated water due to the water main failures has resulted in the Regional Water Control Board staff advising the City that as a minimum, the discharged water needs to be de-chlorinated prior to discharge into the storm drain system, and that greater preventive measures should be taken to minimum water main failures. In addition the substandard water main sizes are not be able to meet current minimum fire flow requirements. No public notification conditions currently exist.

	575,600	4,272	11,706 18	Sonoma	11	200
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2779 4910005	4910005-002	Healdsburg, City of	City of Healdsburg Gauntlett Well Field Rehabilitation	The project entails a systematic rehabilitation of Wells #1, #2 and #3. Rehabilitation for each well would include: removal of pump motor; removal of pump assembly and water column; scrubbing of the well casing; video inspection of well casing; installation of new well screens/liner as necessary; well surging and development; installation of new pump/bowl assembly, bearings, "spider" supports, foot check valve, and water column; installation of new energy efficient pump motor with anti-ratcheting device; perform check of electrical supply and motor control center and perform necessary repairs/upgrades; disinfect and flush well; perform bacteriological testing; and return well to service. Estimated time to complete 120 days.	M , r	0	c	The Gauntlett Well Field consists of four public supply wells adjacent to the Russian River. The well motors are mounted on elevated support structures and are above Russian River flood stage. The wells were constructed in 1957 and have an average depth of 80 feet, with an average production of approximately 650 gpm each. The wells are classified by DPH as being under the influence of surface water from the Russian River. As directed by the DPH the City constructed a surface water treatment plant which was completed in 2005 and is supplied raw water exclusively from the four Gauntlett wells. Due to the surface water influence, the well screens and bowls have become "fouled". Last year Well #4 went down and had to be rehabilitated. Well #3 went down on February 18th of this year and is currently undergoing emergency repairs and will ultimately need to be completely rehabilitated. Recognizing that Wells #2 and #1 are most likely in a similar condition and "ready to fail", and that this well field is the only raw water supply to the water treatment facility for the City of Healdsburg, it is imperative that Wells #1, #2 and #3 be rehabilitated to maintain adequate water supply to protect public health and safety. No public notification conditions currently exist.	375,000	4,272	11,706 18	Sonoma	1	2009
2780 4310019	4310019-003	City of San Jose - NSJ/Alviso	Nortech Parkway East Loop Main	Microtunnel under a state highway to provide an additional connection between the two areas.	М	0	С	Service area is split into two geographical portions, connected only by two distribution mains. During a seismic, or other catastrophic event, the two portions may become separated, resulting in loss of water supply to residents and possible depressurization of the system.	750,000	2,267	11,742 17	Santa Clara	II	2009
2781 1510013	1510013-001	City of McFarland		<ul> <li>A) Eliminate low volumes and possible bacteriological problems.</li> <li>B) Portable electric generator to restore water service during power outages.</li> </ul>	м	0	С	<ul> <li>A) Large diameter system main line extensions to eliminate small diameter customer lines, extending long distances. B) Lack of water/power to emergency situations</li> </ul>	211,000	2,792	12,138 12	Kern	Ш	1998
2782 1510013	1510013-004	City of McFarland	Browning Rd Storage Tan and Booster Pumping Pla	k The project is to construct a new water supply well, nt storage tank, and booster pumping plant on the east side of Hwy 99 along Browning Road in Kern County, California. A one-acre (1 ac) well site has already been acquired and a casing hammer test well drilled. The casing hammer method of drilling allowed for frequent water quality sampling down to a depth of 900-ft. The test well indicated that a new well can be completed that will provide 1,500 gpm to 2,000 gpm and meet all Title 22 water quality requirements without treatment. The new well will supply a 1,000,000 gallon welded stee storage tank. A booster pumping plant with an initial capacity of 3,500 gpm and the ability to expand in the future will convey water to the distribution system. This storage tank and pumping plant will provide the system a sufficient water supply in the event of a PG&E power outage on the west side of Hwy 99. Furthermore, the City will be able to fill the storage tani in off-peak hours and use the tank and pumping plant if peak hour periods to take advantage of time of use pumping and reduce operational costs to continue to provide inexpensive water to the community.	M 2l	0	C	The City of McFarland currently has three active water supply wells. One of the wells is above the chemical MCL for arsenic at 16 ppb and the other two wells are right at or just below the MCL for arsenic at approximately 9 ppb. Changing groundwater levels could negatively impact these two wells and increase the arsenic concentrations above the MCL. The City's inability to absorb the high operation and maintenance costs associated with well head arsenic treatment are a great concern due to the economic disadvantage of their community. An alternative to installing treatment for these wells must be pursued. Furthermore, the City water system is bisected by Highway 99. The west half of the City is served power by PG&E. The east half of the City is served power by PG&E is interrupted or lost, the City is unable to supply wells are all on the west half of the City is unable to supply water for domestic use or fire protection. A new well and storage tank is proposed on the east side of Hwy 99 to remedy the system problems noted above.	3,500,000	2,792	12,138 12	Kern	II	2009

2783 3910015	3910015-004	CITY OF LATHROP	3.8 Million Gal Water Tank and Booster Pump Station	Project includes construction of a 3.6 million gallon water tank with a booster station and a SCADA tower in order for the city to be able to communicate between water facilities within the City.	M	0	C	The 3.8 million gallon water tank is needed to provide addition storage and fire protection for the City. The tank and booster station will be tied into the water system and will provide a more consistent water pressure. The water tank will also aid in allowing the City to utilize their surface water supply more efficiently and reduce our depeandancy on groundwater. Our current ground water requires additional treatment for arsenic removal and reducing the amount of water needed to be treated for arsenic will aid in providing lower water rates to our citizens than it would be without the tank. In addition this tank is needed to support developoment of approximately 5 million square feet of retail space. The project was put on hold due to the difficulties experienced in the recent credit crunch and down turn it the economy. The project has CEQA clearance as well as improvement plans that are ready for bidding. If this project is funded, it will provide the oppurtunity for new businesses to develop and provide nearly 2000 jobs to the area.	6,000,000	3,675	12,427 10	San Joaquin	Ш	2009
2784 3610121	3610121-006	SBDNO COUNTY SERVICE AREA 64	Spring Valley Lake CSA 64 Water System Improvement	The project includes the drilling and equipping of a new water production well. The site location identified for the well indicates that a production of between 2,500 and 3,000 gallons per minute can be anticipated. The well would utilize an 18-inch diameter steel casing with full depth perforations to maximize the output. The well would be equipped with a water lubricated vertica turbine pump and motor arrangement. Well construction would be performed on property already owned by the District and when complete would bring the District into compliance with the DHS requirements for water supply to public water systems. The project also includes the fabrication and erection of two 3.0 million gallon water storage reservoirs. The reservoirs would be constructed of steel panels utilizing welded connections. The reservoirs would be designed and constructed to the American Water Works Association' (AWWA) standards on property previously purchased by the District. Finally the project includes the construction of approximately 1.3 mile of 16-inch diameter pipeline to connect the new well and reservoirs into the existing District water system. This pipeline would be constructed using polyvinyl chloride material meeting the AWWA and industry standards. The pipeline routing would be exclusively on District property or within County maintained road rights-of-way.	v M al	0	c	CSA 64 (District) provides water for domestic service and fire protection to approximately 3,782 equivalent single family residences in the community of Spring Valley Lake. The District falls under the regulating authority of the California Department of Health Services (DHS). The DHS requires public water systems to provide water at a rate of the maximum day demand to the customers with the District largest production well out of service. The District does not meet this requirement and additional well capacity is required to bring the District into compliance.Further, the District does not meet the DHS requirement for water storage capacity. Based on the population served and the maximum day water demand, the District is deficient by 5.0 million gallons of storage. Additional reservoir capacity is required to bring the District into compliance.The system deficiencies are noted on the annual inspection and reports performed and submitted by the DHS.	3,200,000	3,782	12,481 13	San Bernardino	v	2009
2785 3610121	3610121-005	SBDNO COUNTY SERVICE AREA 64		Develop new master plan	М	0	С	Master plan does not provide for reliable water system operation	100,000	3,782	12,481 13	San Bernardino	V	1999
2786 3610121	3610121-001	SBDNO COUNTY SERVICE AREA 64		Construct 1 MG reservoir	М	0	С	Inadequate storage capacity	400,000	3,782	12,481 13	San Bernardino	V	1998

2787 1910096	1910096-006	Newhall CWD-Newhall	Newhall Reservior 4A Replacement	The first step of the project would involve engaging engineering firms to bid on the design of the new distribution reservoir. Once the bid has been awarded staff will work closely with the engineers to make sure all specifications are met. After a design is completed NCWD will go out to bid for the dismantling of the existing reservoir and the construction of the new 2.75 MG reservoir. Grading of the area surrounding the existing Reservoir 4A is the first portion of the construction process. Then, during winter months, Reservoir 4A can be dismantled, recycling as much material as possible. When this is completed the existing footing must be removed and final grading can take place. A new footing can then be poured and the construction of a coated steel reservoir can begin. Some features that have become Newhall County Water District Standards are: non common inlet/outlets, spiral flex tend staircase to the top of the tank, and earthquake valves on inlet and outlet of the reservoir. Our standardized specifications for new reservoirs will be fully implemented into the design and construction of the new reservoir to assure that the highest level of safety and functionality are utilized. In addition Title 22 standards for distribution reservoir construction (54585) will be strictly adhered to ensuring regulatory compliance. Rather than retrofitting the existing reservoir and building an additional	м	0	C	Newhall County Water District (Newhall Division) Reservoir 4A was built in 1975. This 1.5MG tank is hydraulically connected with Reservoir 4 and together both feed Zone 4 of the Newhall Division. Reservoir 4 is in need of major rehabilitation that includes earthquake retrofits, structural improvements, and correcting its common inlet/outlet flaw. The Newhall Division Master Plan, prepared by Brockmeyer Engineering, expresses the need for increased storage in this zone for a total of 3.39 MG. Taking this into consideration, the most sensible solution to the problem is to demolish the current Reservoir 4A and build a much larger 2.75 MG Reservoir in its place. Increased storage, along with design improvements, yields many benefits for the water system. The first improvement is increased available storage for peak flows. Currently Pressure Zone 4 is deficient when it comes to peak demand in hot weather, extreme fire flow conditions, and in the event of a disaster. Another improvement is increased water quality. Having a larger tank allows operators to cycle the water levels in the tank so that older water is turned over more often. At this time the reservoir is kept relatively full and tank levels are not allowed to drop enough for fear of a demand surge. A full reservoir with minimal turnover puts the reservoir at risk of nitrification (due to the chloramines disinfectant used). Water ouality is also improved by eliminating	1,240,000	3,846	12,566 15	Los Angeles	IV	2008
2788 1910096	1910096-007	Newhall CWD-Newhall	Newhall Reservoir 1 Replacement	The first step of the project would involve engaging engineering firms to bid on the design of the new distribution reservoir. Once the bid has been awarded staff will work closely with the engineers to make sure all specifications are met. After a design is completed NCWD will go out to bid for the dismantling of the existing reservoir and the construction of the new 4.5 MG reservoir. Grading of the area surrounding the existing Reservoir 1 is the first portion of the construction process. Then, during winter months, Reservoir 1 can be dismantled, recycling as much material as possible. When this is completed the existing footing must be removed and final grading can take place. A new footing can then be poured and the construction of a coated steel reservoir can begin. Some features that have become Newhall County Water District Standards are: non common inlet/outlets, spiral flex tends staircase to the top of the tank, and earthquake valves on inlet and outlet of the reservoir. Our standardized specifications for new	Μ	0	C	Newhall County Water District (Newhall Division) Reservoir 1 was built in 1962. This .75MG tank is hydraulically connected with Reservoir 1A and together both feed Zone 1 and the rest of the Newhall Division. Reservoir 1 is at the heart of the Newhall Distribution system and is in need of major rehabilitation that includes earthquake retrofits, structural improvements, and correcting its common inlet/outlet flaw. The Newhall Division Master Plan, prepared by Brockmeyer Engineering, expresses the need for increased storage in this zone for a total of 7.5 MG. Taking this into consideration, the most sensible solution to the problem is to demolish the current Reservoir 1 and build a much larger 4.5 MG Reservoir in its place. Increased storage, along with design improvements, yields many benefits for the water system. The first improvement is increased available storage for peak flows. Currently Pressure Zone 1 is deficient when it comes to peak demand in hot weather, extreme fire flow conditions, and in the event of a disaster. All of	2,200,000	3,846	12,566 15	Los Angeles	IV	2008

Newhall is dependent on Reservoirs 1 and 1A and they

are grossly undersized. Another improvement is

increased water quality. Having a larger tank allows

operators to cycle the water levels in the tank so that

reservoir is kept relatively full and tank levels are not

allowed to drop enough for fear of a demand surge. A

older water is turned over more often. At this time the

reservoirs will be fully implemented into the design and

highest level of safety and functionality are utilized. In

construction (section 64585) will be strictly adhered to

ensuring regulatory compliance. Rather than retrofitting

construction of the new reservoir to assure that the

addition Title 22 standards for distribution reservoir

the existing reservoir and building an additional

2789 1910096	1910096-009	Newhall CWD-Newhall	Newhall Booster No. 4 Replacement	The replacement of Booster Station No. 4 is an item tha is recommended in the Newhall County Water District (NCWD) Newhall Master Plan prepared by Brockmeier Consulting Engineers Inc. The suggested location of relocation is a piece of property the District already owns. Furthermore, a second parcel to the west of the property is needed and will be acquired from the City o Santa Clarita. Once this has been completed NCWD wil entertain bids for engineering design of the pump station and intertie into the distribution system. During the design process, staff will work closely with engineers to ensure that Title 22 Regulations and NCWI specifications are integrated into the project. After the design has been established NCWD will receive bids to build the new pump station. All piping work will be done in-house utilizing the NCWD Construction Crew. According to the Newhall Master Plan, the new booster station should house two vertical turbine pumps that produce 1,300gpm. Two pumps are essential for system redundancy. Also, another advantage of two pumps is the ability to switch off lead and lag pumps. This will lengthen the life of the pumps and motors installed at the site. By moving the location and installing new pumps are housed in a building and are away from customers, pumping efficiency and pumping rates are increased, and reliability is	f I D	0	c	Newhall County Water District Booster Pump Station No. 4 was built in 1966 and consists of three centrifugal pumps. Located in the Newhall Division, Booster No. 4 receives water from Zone 1 and pumps the water to Reservoirs 4 and 4A. The combination effluent from all three pumps is approximately 1200gpm. The pumping rate is slightly deficient, but the major problem with Booster No. 4 is the type, and location of pumps. This booster station is located in a residential neighborhood on a lot between 2 houses and customers have complained of noise issues on several occasions. Also, centrifugal pumps are not the most efficient selection for this application. They are not dependable and are constantly being changed out and rebuilt (we estimate the life of each motor at a year and a half). Furthermore, centrifugal pumps are inefficient in terms of electricity consumption. The last Edison pump tests conducted on March 28, 2008 showed 55.9%, 55.9%, and 49.0% efficient for pumps one, two, and three respectively. A combination of these problematic elements suggests Newhall County Water District should replace the booster station to resolve all issues.	530,000	3,846	12,566 15	Los Angeles	IV	2008
2790 1910005	1910005-001	LOS ANGELES CO WW DIST 40 Reg 38 Lake	LA	CONSTRUCT A NEW 400' SHADOW WELL, 4500' OF PIPELINE, A CHLORINATION SYSTEM, A BOOSTER STATION AND A FOREBAY TANK	М	0	с	REGION 38 WELLS MAY NOT BE ABLE TO PROVIDE ADEQUATE WATER SUPPLY DURING HIGH DEMAND	715,000	3,526	12,609 16	Los Angeles	IV	1998
2791 1310006	1310006-004	Imperial, City of	Main Replacement Program	Start program to replace obsolete mains and valves	м	0	с	Obsolete water mains and valves. Inadequate valving (potential hazard to large sections of City in the event of water main failure and shut down).	500,000	4,033	12,752 14	Imperial	v	1998
2792 3310074	3310074-001	Lee Lake Water District		A water surface treatment facility needs to be constructed to allow the District to use its wells for potable use. Also, a water transmission pipeline must be constructed to connect the wells to the District's existing potable transmission main.	М	0	С	In 1996, the Distirct acuired 3 water wells for the purpose of providing an alternate source of potable water to the District's system to increase system reliability. It was determined by DHS that the wells are under the influence of surface water.	1,000,000	4,440	13,168 20	Riverside	v	1998
2793 3310074	3310074-002	Lee Lake Water District	Wild Rose Reservoir II	The proposed project is the construction of a 3 million gallon tank adjacent to the existing tank site to provide storage for operation and emergencies. The District has a continuious western border with the Cleveland National Forest that has the potential to threaten multiple communities within the District. There are no other water sources in the area for fire fighting and CalFire uses our system to fill basins within the forest. We believe that more storage capacity will safe gaurd the community in the event of fire or earthquaake if the District's single water source is or unavailable or ruptured.	M ;	0	c	The District is needs to expand its storage capacity for emergency and fire flow.	3,000,000	4,440	13,168 20	Riverside	v	2009
2794 4210007	4210007-006	MONTECITO WATER DIST	Dalton Tunnel Storage Tank/Treatment Plant Expansion	Replace existing 250,000 gallon tank with 2,000,000 gallon tank and increase treatment flow to 1.4 MGD.	м	0	с	Dependency on South Coast Conduit during high flows.	3,200,000	4,529	13,500 06	Santa Barbara	IV	2003

2795 3310032	3310032-003	San Jacinto, City of	San Jacinto Elevated Storage Tank & Supply Pipeline	The proposed project includes construction of an elevated water storage tank and the appurtenant pipelines to connect the tank to the city's water distribution system. The tank would be located on a hillside on the edge of the city's water service area. It would have a storage capacity of at least 2 million gallons. The project work would entail purchasing an easement for the tank location; grading and paving of an access road and the tank site; construction of the tank foundation; installation of the tank; and installation of an underground pipeline (likely 15" diameter) between the tank and the city's water distribution system, a distance of a few thousand feet.	Μ	0	C	The City of San Jacinto's water system currently has two significant deficiencies. First, it does not have adequate storage capacity to serve emergency needs. As a result, the public are at risk in the event of a large fire or series of fires. Second, the entire system relies on at-grade storage tanks with booster pumps to provide a pressurized system. This requires that the pumps run 24 hours a day, which leads to high power usage. It also requires that the pumps operate across a range of flow rates while maintaining the same pressure - as a result, the pumps rarely operate at their best efficiency point. Finally, it leaves the system at risk of failure in the event of a power outage. While emergency generators are available at each of the pumping stations, they have only finite capabilities. The proposed project addresses these deficiencies. With respect to the first issue, a recent update to the City's master plan identified an immediate need for approximately 2 million gallons of additional storage. Thus, a tank with a 2 million gallon size is proposed. With respect to the second issue, the proposed tank would be built at an elevated location on a hillside along the edge of the City's water service area. By elevating the tank, the City can achieve more efficient operations by pumping the tank full at night, and using gravity during the tank the gravity flow from the	4,000,000	4,030	14,098 20	Riverside	v	2011
2796 2910003	2910003-008	Truckee-Donner PUD, Main	Prosser Dam Road Pipeline Extension	<ul> <li>The proposed project entails the extension of a municipal water pipeline into an area currently served by private wells.</li> </ul>	Μ	0	С	The proposed project entails the extension of a municipal water pipeline into an area currently served by private wells. A number of properties in this area have experienced problems and/or well failures due to a locally declining groundwater table. Fire hydrants would be installed at intervals of about 500 feet along the pipeline, making water available for fire suppression in an area without such a water supply thereby protection this area and the urban/wildland interface along the northern area of Truckee.	1,200,000	12,271	14,300 21	Nevada	I	2009
2797 0510016	0510016-001	CCWD Ebbetts Pass Improvement District	Hunters WTP Surge Tank	The project will construct a surge tank at the Hunters WTP to reduce pressure impacts on the plant's mechanical equipment. Control halving will be added to equalize the pressure surges. Other ancillary equipment and electrical equipment will also be installed to support the surge tank operations. Hydraulic studies have been performed, plans and specifications are complete, The project consists of a 15 ft diameter, 64 feet high steel tank, a 12-in electronic control valve, and piping. The estimated cost is \$500,000. The project has been exempted from CEQA, and the District has scheduled the project to go out to bid in April 2009. Construction is anticipated to be complete by September 2009.	М 5-	0	С	CCWD owns and operates the Hunters Water Treatment Plant located near the community of Avery in Calaveras County. The permitted capacity is 4.0 mgd. The service area of the plant incorporates the Highway 4 corridor from Forest Meadows, Avery, Arnold, and Big Trees Village. The raw water feed to the plant is a connection to the District's Collierville Tunnel which operates the Collierville Powerhouse. The Powerhouse is operated by the NCPA. The operations of the Powerhouse have changed over the years resulting in daily hydraulic surges that propagate back to the Hunters WTP. The surges are such that control valving at the Plant can not react in a manner to prevent damage to plant piping and the upsetting of the filters. This District has worked with the operator of the tunnel to alter operations, but the negative impact to hydropower generation could not be reduced. Installing a surge tank at the end of the tunnel at the WTP is the recommended alternative.	500,000	5,736	14,340 10	Calaveras	ш	2009

2798 3910007	3910007-001	RIPON, CITY OF	City of Ripon WBA Exchange Nitrate Treatment Pilot Investigation	Given the residuals disposal challenges associated with M strong base anion exchange and reverse osmosis, the City of Ripon is proposing to evaluate weak base anion (WBA) exchange as an emerging nitrate treatment technology that may offer a feasible alternative to the current technologies. This project will complement current and anticipated Proposition 50-funded research efforts on other emerging nitrate treatment technologies including the City of Ripon's Integrated Nitrate and Arsenic Treatment Pilot Investigation (#P50- 3910007-055) evaluating chemical reduction by SMI-111* granular media and other projects investigating biological reduction of nitrate (City of Fresno). The City of Ripon WBA Exchange Nitrate Treatment Pilot Investigation will be conducted cooperatively by the City and Damon S. Williams Associates (DSWA). DSWA is a water and wastewater engineering consulting firm whose primary focus is providing services to the water utility market in the areas of water quality and water treatment. DSWA's goal is to help utilities produce safe drinking water. DSWA has significant experience in the treatment of nitrate and arsenic in California water supplies, and has led the current Prop S0 funded pilot study (#P50-3910007-055), to test the effectiveness of SMI-111* granular media at removine nitrate. DSWA also brings the unioue	0	C	Rising concentrations of nitrate in the City of Ripon's groundwater supply have forced the City to take critical wells out of its drinking water supply. One of the City's potable wells, Well 12 with a design flow of 2,000 gpm, is currently offline due to nitrate concentrations exceeding the MCL, while two other wells (Wells 3 and 14) are closely monitored and controlled to maintain nitrate compliance. In addition, five of the City's seven drinking water wells contain arsenic concentrations above the new arsenic MCL of 10 $\mu$ g/L or within 20% of the MCL. The City also operates two municipal wells (Well 5 and Well 11) as supply for the non-potable water system. These wells have been converted from drinking water wells to non-potable use because of high nitrate concentrations. Currently the total pumping capacity is 1,750 gpm from these non-potable wells. Nitrate, with an acute health risk-based MCL of 45 mg/L as nitrate, has been detected in the City's wells at concentrations as high as 67 mg/L. Arsenic, which poses a chronic health risk and has a new MCL of 10 $\mu$ g/L, has also been detected in the City's wells with water quality monitoring dat have at sometime contained nitrate and/or arsenic within 20% of the respective MCLs or in excess of those limits. Other inorcanit contaminations of concern have also been	500,000	4,524	14,915 10	San Joaquin	II	2007
2799 3910007	3910007-003	RIPON, CITY OF	Ripon Surface Water Supply Project	The infrastructure required to connect Ripon to the South San Joaquin Irrigation District (SSJID) surface water supply includes the construction of a 6-mile long pipeline, storage tank, and pump station. The pipeline will extend from the existing SSJID transmission pipeline where a tap will be made, directly south along rural Jack Tone Road, to the Ripon city limits. The pipeline will cross a number of facilities, the largest being Highway 120 and various irrigation canals. The pipeline is designed to convey the ultimate flow via dual 18-inch pipelines. The pipeline infrastructure will also include the necessary appurtenances such as air release valves,	0	с	The City of Ripon, located in the Central Valley of California, serves water to 15,000 residents. The current source of water is solely supplied from groundwater wells. As with many other jurisdictions located in the Central Valley, the reliability of Ripon's water supply is threatened by nitrate levels in the groundwater exceeding State maximum contaminant levels.Ripon's request for \$10 million in funding assistance would be used to install a 6-mile pipeline connecting Ripon's water distribution system to the South San Joaquin Irrigation District (SSJID) Nick DeGroot Water Treatment Plant. This source of surface	10,000,000	4,524	14,915 10	San Joaquin	Ш	2009

water would supplement 25-35% of the City water

demand and improve the reliability by which Ripon

serves water. In addition to improving the reliability of

Ripon's water system by the diversification of the water supply, this project would also provide regional benefits. San Joaquin County has relied heavily on groundwater to supply both its agricultural and urban needs. This reliance on groundwater has resulted in significant over drafting of the groundwater basin and a decline in groundwater levels, which in turn (1) causes the inflow of poorer quality groundwater from the west, and also (2) results in a net reduction of aquifer storage. The proposed Ripon Surface Water Supply Project would allow the City of Ripon to make use of surface water in-lieu of groundwater to supplement a portion of

gate valves, and flow control equipment. A 2 million

of the pipeline.

gallon storage tank and 3 million gallons per day pump

station will be located on a single parcel at the terminus

2800 2810005	2810005-004	American Canyon, City of	American Canyon Potable Water Storage Reservoirs	This project involves the construction of two potable water reservoirs, East Tank #1 and East Tank #2. The two tanks will complement each other and are therefore submitted as one project. East Tank #1 will supply and pump water to East Tank #2, which is set at a higher elevation. East Tank #1 is a 2.0 MG above- ground, steel potable water storage tank. Construction involves a pump station and an 18-inch diameter inlet/outlet potable water pipeline, approximately 1,800 feet in length. The tank will connect to an existing 18- inch water line on the East Tank #1 project site. Work also includes storm water detention and overflow dechlorination vaults and construction of a 10 to 12 foot wide access road approximately 2,500 feet in length. A six-foot high chain link security fence, with three-strand barbed wire top, to encompass the tank site, will also be installed. East Tank #2 is a 2.5 MG above-ground, steel potable water storage tank. Construction involves two 18-inch diameter inlet/outlet potable water pipelines, approximately 3,100 feet in length. The tank will connect to an existing 18-inch water line on the East Tank #2 project site. Work also includes storm water detention and overflow dechlorination vaults, construction of a concrete pad, and improvements to a 10-foot wide access road approximately 3,100 feet in length. A six-foot high chain link security fence, with three-strand barbed wire	м Э	0	C	The main problem this project is attempting to address is a potable water storage deficiency to meet current demands in American Canyon. Storing water is critical to the efficient operation of American Canyon's water distribution system for two purposes: to allow for constant flow and to provide pressure to the distribution system. In1997 the California Department of Health Services (DHS), conducted a Water System Inspection Report stating that potable water storage was deficient. Since 2000, the City has witnessed an unprecedented 75 percent growth in population; growing from slightly over 9,800 residents to 17,000. Unfortunately, no storage facilities have been constructed as recommended by DHS, due to financial constraints thereby increasing stress on the current system. Industry standards recommend a minimum of 3-5 days of storage. The current storage capability within the City is approximately one day. In addition, in 2003, the City of American Canyon Water System Master Plan identified the need for additional potable water storage capacity to meet current water storage capacity goals. The Plan identifies a city wide storage deficiency of 7.1 MG at build-out, with 5.1 MG in the main pressure zone. One critical element of this project is the construction of the American Canyon High School (anticipated enrollment of 2,200 students), which commenced in 2008. The high school is set above the	11,000,000	6,750	15,300 03	Napa	Π	2009
2801 2810005	2810005-005	American Canyon, City of	American Canyon Watermain Replacement Project	To eliminate chronic water outages and leaks, the City of American Canyon proposes to replace approximately 2,300 linear feet of asbestos cement water main piping with PVC C-900 at Patricia Drive, Stenson Drive, Marla Drive, and Danrose Drive. The project also includes installing 61 new one-inch service laterals (copper piping) and installing a cathodic protection system to protect the new copper piping from the corrosive soil. In order to achieve this goal, the City will utilize its standard procurement process to obtain bids and select the best purveyor to provide for the replacement of the water main and service laterals, and installation of a cathodic protection system. A final implementation schedule will be prepared and environmental clearance will be obtained by March 2009. The project is categorically exempt from NEPA and CEQA, because in all cases the water main will be replaced at previously disturbed sites. The total project cost estimate is \$500,000. This includes demolition, abandonment, and removal activities, installation of 2,300 linear feet of PVC C-900 pipes, purchase and installation of a facthodic protection water service system, and installation of a linear disturbed site aterals. This is a shovel ready project that is estimated to create up to 20 jobs. Final plans and specifications are 95 percent complete and will be final in March 2009. Work can begin limmediately upon grant award.	M	0	c	The City of American Canyon provides potable water service to approximately 6,000 active accounts utilizing over 4,100 acre-feet of water annually. The City has witnessed a 75 percent growth in population since 2000; growing from slightly over 9,800 residents to 17,000. Almost 50 years ago (in the 1960's), asbestos cement and cast iron water mains were installed in the southwest area of American Canyon; which contains corrosive or "hot" soil. Because of the corrosive conditions, the soil is penetrating or "eating" through the cast iron water mains and the cast iron water service sadles are separating. The net result is that within a neighborhood of roughly 75 homes, there have been 23 documented leaks and outages since 2007. Water outages range from one hour for small leaks (with a loss of 10 gallons per minute) to five hours for large leaks (with a loss of 150 gallons per minute). The water outages are chronic and unacceptable to residents and city leadership. Mitigation of the water delivery problem is a priority for the City. This project meets the definition of Category E on the Safe Drinking Water State Revolving Fund Project Ranking Criteria (Brief), which states, "Water yotems vith water outages or significant water problems caused by source water capacity or water delivery capability that is insufficient to supply current demand."	500,000	6,750	15,300 03	Napa	I	2009
2802 2810005	2810005-002	American Canyon, City of		Purchase water supply and connection from City of Vallejo water system.	M	0	c	Deficient residual pressure and need emergency water supply.	1,000,000	6,750 5,486	15,300 03	Napa	H H	2006
2003 2310003	2310003-001			system.			C .		2,000,000	5,400	13,333 03			2002
2804 1910063	1910063-002	LINCOLN AVENUE WATER CO.	Intrustructure Upgrades	Upgrade the distribution system.	М	0	C	Most main lines in our service are are 50+ years old. Some areas do not have adequate fire flow as required by the LA County Fire Department.	500,000	4,423	16,000 16	Los Angeles	IV	2007

2805 4010001	4010001-002	ARROYO GRANDE, WATER DEPARTMENT	Fair Oaks Avenue - Halcyon Road Waterline Replacement	The project scope includes the replacement of 7,130 LF M of existing 8" cast iron pipe to 8" and 12" PVC pipe. Replacement of the existing pipe will begin at the City water wells, then east on Fair Oaks Avenue, then north on Halcyon Road, east on Cornwall and under Highway 101 to the City reservoir. The project will include a boring under Highway 101 and the installation of a 18" pipe sleeve for the replacement pipe to be installed within.	0	c	The City of Arroyo Grande is requesting partial funding to replace and upgrade an existing 1929 8" cast iron water distribution waterline. The existing water distribution waterline has documented water quality, reliability, and safety issues associated with it. Due to the age of the pipe the existing pipe it is known to cause taste, odor, and elevated level of bacteria into the water supply. The waterline is documented hazard to the community. In the late 1990's the pipe failed under the under Fair Oaks Avenue between Walnut Avenue and Elm Street causing a sink hole and damage to private property. The existing pipe was installed in 1929 to distribute water from the city water wells to city's primary reservoir - Reservoir No.1, which was recently replaced in 2003 with a 2 million gallon post- tensioned concrete water tank. The tank serves at the City of Arroyo Grande's primary reservoir, approximately 1.5 miles away. The pipe was installed prior to the construction of Highway 101. When Highway 101 was built, it was constructed over the existing water waterline without the installation of a pipe sleeve. It is the fear of the City that the pipe will fail underneath Highway 101 in the near future. Being that the pipe is the mainline to the city reservoir; the city is concerned that the pipe may crack in the event of seismic event. The project was orginally identified in the City of Arroyo Grande Water Master Plan in 1999 as	600,000	6,223	16,682 06	San Luis Obispo	o IV	2011
2806 3510003	3510003-002	Sunnyslope County Water Dist	Sunnyslope/Hollister SCADA Water Distribution Water Intertie Solar Retrofit	The project will consist of a solar retrofit and M enhancement of 2 water tank sites, 4 well sites, and 6 distribution and interties to accurately measure the transfer of water quantity and quality between the Sunnyslope County Water District, the City of Hollister, and LESSALT.	0	C	Sunnyslope County Water District, the City of Hollister, and LESSALT have several shared interties between their respective potable water distribution systems. These interties monitor water quality and water quantity transfers between the systems through a Supervisory Control And Data Acquisition (SCADA) system. However, the SCADA system suffers from frequent power failures which causes data losses and SCADA failures. This frequent failure of the SCADA system which monitors the interties results in erronous data for water transfers and water losses in each subsystem. As a result of these erronous data readings and data lapses, it is impossible to accurately monitor water transfer between the systems and calculate system leakage or system water losses with the required accuracy. Due to erronous data anamolies from the SCADA system, the distribution systems have reported erroneous water leakage (or system losses) in everses of State of California standards for system	287,400	5,241	16,713 05	San Benito	Π	2009

leakage. The installation of a solar powered SCADA system to accurately monitor the water transfer between the Sunnyslope County Water District, the City of Hollister, and LESSALT during power failures will enable Sunnyslope and the City of Hollister to comply with the reporting requirements to accurately measure and report system losses from their respective

distribution sytems.

2807 3510003	3510003-005	Sunnyslope County Water Dist	Ridgemark Tank Seismic Upgrade, Paint Recoating, and Cathodic Protection	The existing 0.5 and 1.0 million gallon steel tanks will be M seismically retrofitted, repainted, and protected with cathodic protection to bring the two tanks up to the current seismic code for important structures which need to withstand seismic events. The seismic retrofit of the tank will bring the tanks up to the current seismic standard, and the repainting and cathodic protection of the structural steel elements. This project eliminates the structural seismic deficiencies of the existing tanks.	0	c	The existing two Ridgemark potable water tanks have a capacity of 0.5 and 1.0 million gallons of storage. Both tanks need to have their interior and exterior coatings repainted and need to have minor changes to the exterior valving to allow for top fill and bottom outlet of the tanks. The two tanks currently have no cathodic protection which futher adds to the continuing corrosion of the interior of the tank. The repainting and installation of cathodic protection on these tanks is necessary to preserve the structural integrity of these tanks. Finally, the existing tanks do not meet the current seismic requirements for the area and will need a seismic retrofit of the two tanks to meet the current seismic code for important public facilities.	490,000	5,241	16,713 05	San Benito	Ι	2009
2808 5610043	5610043-002	OAK PARK WATER SERVICE	Conifer Zone Outage Avoidance Project	M with a new 2.1-million gallon reinforced/prestressed concrete reservoir at the nearest possible location without landslide issues. Oak Park names tanks for nearby features and the replacement reservoir will be named Oak Canyon Reservoir (OCR). The OCR site is at the edge of the Oak Canyon Community Park, one mile from the existing tank. The OCR will have flow-through (simultaneous fill and draw) via 1,600 feet each of 20- inch inlet and outlet pipes. The Confier Zone Outage Avoidance Project will also eliminate a dead-end on 3,000 feet of 10-inch pipeline. The old Confier Zone Tank filled via pressure reduction and gravity via pipe through the Conifer Zone causing poor control of tank turnover and wide variations in water pressure. The OCR will make constant the "full tank" pressure situation. The Confier Zone Outage Avoidance Project will not result in any dead-end pipelines and will comply with CDPH requirements.Other Conifer Zone Outage Avoidance Projects include: a) replacing 1,700 feet of existing 10-inch ACP with 1,900 feet of 12-inch and 8- inch pipe; b) OCR inlet control with a motor operated valve; c) one replacement and one new pressure reduction station (the new station eliminates a dead- end situation); d) replacement of three Calleguas meter turnouts with one metered turnout for the entire Oak Park service area; d) demolition of the existing Conifer	0	c	Oak Park Water Service's (Oak Park) 1-million gallon Conifer Zone Tank threatens a long-term water system outage and the likelihood of dropping system pressure below 20 psi for the 6,000 people living in the Conifer Zone. There is often groundwater around the water pipelines and there are about 10,000 feet of recycled water pipelines in the Conifer Zone. The steel tank was built on a landslide by a private developer in 1966 prior to the District's involvement. In December 2005, during the environmental and geologic review process for the Conifer Zone Outage Avoidance Project, a 24-inch bucket-auger drill-hole investigation confirmed a landslide shear plain 33 feet below the tank and indications of five other shear plains. Geomorphology and topography suggest the landslide may be deeper than 70 feet. The landslide area is estimated at 50 acres.Even if it were not on a landslide, the Conifer Zone Tank would not structurally meet Waterworks Standards for seismic loads.Oak Park's Conifer Zone is at the end of the line for water delivered by Metropolitan Water District of Southern California via Calleguas Municipal Water District (Calleguas). Both Oak Park and Calleguas have no local water supply. Should the Conifer Zone Tank fail due to ground movement caused by slippage, zone failure (which does occur in the area), or seismic induced sliding, catastrophic loss of water service would result. Even if	9,900,000	4,624	16,800 06	Ventura	IV	2009
2809 5610043	5610043-001	OAK PARK WATER SERVICE	New Storage tank	Install new 2 MG tank with good foundation soils and M pipeline connecting the new location to the system	0	C	1.0 MG storage tank built in 1996 is on unstable soil that precule seismic upgrade. System deficient in storage	2,500,000	4,624	16,800 06	Ventura	IV	2004

2810 4210001	4210001-007	CARPINTERIA VALLEY WATER DISTRICT	West Side Well Project	CVWD is proposing to construct a new well located on the West end of the District. This project is to improve water quality and water reliability. This project will be shovel- ready by December 2009. The project consists of drilling a well on the west end of the District adjacent to the Main Transmission line (South Coast Conduit), installation of new pump equipment, installation of treatment equipment and installation of piping and valves. This project will enable CVWD to more effectively blend in the west portions of the distribution system.	0	c	The Carpinteria Valley Water District relies on surface water sources and groundwater sources to supply its customers with potable water. The local surface water source is treated at a conventional water treatment plant and then conveyed to Carpinteria Valley some 18 miles to a terminal reservoir. Historically the surface water from this source is high in total organic carbon. Combined with the long transit time to the terminal reservoir after treatment, up to 5 days, disinfection by product formation has been a problem. The District has had 2 violations for TTHMs under the Stage 1 DDBP Rule in the last 3 years. Operational changes including flushing, lowering chlorine residuals, covering open reservoirs, improving TOC removal at the treatment plant have all been implemented to reduce the potential formation of TTHMs. In spite of these efforts the District violated in third quarter of 2008 again. It is likely to continue to have problems when Stage 2 Rule becomes effective. One effective way to lower the formation has been to blend low TOC groundwater with the surface water entering the District. This approach has worked in the past several years. However the District's well field has been a problem. The District operates five well facilities of which three are no longer productive and have been put into an inactive status. The remainion two wells consist of a birb	3,000,000	4,065	18,700 06	Santa Barbara	IV	2009
2811 4210001	4210001-006	CARPINTERIA VALLEY WATER DISTRICT	Lyons Well Rehabilitation Project	CVWD is proposing to rehabilitate the Lyons Well, which M is currently inactive due to high manganese and production problems. This project is to improve water quality and water reliability. This project will be shovel-	0	с	The Carpinteria Valley Water District relies on surface water sources and groundwater sources to supply its customers with potable water. The local surface water source is treated at a conventional water treatment	2,500,000	4,065	18,700 06	Santa Barbara	IV	2009

plant and then conveyed to Carpinteria Valley some 18

miles to a terminal reservoir. Historically the surface

water from this source is high in total organic carbon.

Combined with the long transit time to the terminal

reservoir after treatment, up to 5 days, disinfection by

product formation has been a problem. The District has had 2 violations for TTHMs under the Stage 1 DDBP Rule in the last 3 years. Operational changes including flushing, lowering chlorine residuals, covering open reservoirs, improving TOC removal at the treatment plant have all been implemented to reduce the potential formation of TTHMs. In spite of these efforts the District violated in third quarter of 2008 again. It is likely to continue to have problems when Stage 2 Rule becomes effective. One effective way to lower the formation has been to blend low TOC groundwater with the surface water entering the District. This approach has worked in the past several years. However the District's well field has been plagued with problems and well production reliability has been a problem. The District operates five well facilities of which three are no longer productive and have been put into an inactive status. The remaining two wells consist of a high

is currently inactive due to high manganese and production problems. This project is to improve water quality and water reliability. This project will be shovelready by December 2009. The Project consists of redrilling the well at the Lyons Well facility, replacing old pumping equipment, installing new treatment facilities. The completion this project will enable the District to produce more groundwater for blending and improve water supply reliability.

2812 4210001	4210001-004	CARPINTERIA VALLEY WATER DISTRICT	Critical Valves and Intertie Project	e This project will involve installation of 26 valves in M strategic places within the distribution system and two intertie projects to Montecito Water District's distribution system. The valves will range from 6 inch to 15 inch. Some or all valves will need to be installed while the pipeline remains in service. This project is to improve water system reliability. This project will be shovel- ready by December 2009.	4	0	c	CVWD Distribution system has nearly 90 miles of pipeline serving 4000 individual meters over 10 square miles. The original distribution system was constructed as an agricultural system by the U.S. Bureau of Reclamation in 1954. The system was setup as many turnouts (30 turnouts) on a trunk line. This system was designed for agriculture and therefore water outages for several days were not seen as a problem because irrigation could be scheduled around outages. This same system today serves residential, commercial, industrial, public authority and fire safety customers. Certainly, a multiday water outage is not acceptable to today's water customer. Fortunately some of the system has been further developed and looping of the turnouts has occurred along with better valving within the system. However, even with the improvements the system lacks sufficient valves to isolate smaller sections of the distribution in the event an emergency. In many cases if the transmission system needs to be taken out of service hundreds of and even thousands of customers may be out of water due to a lack of critical valves.	700,000	4,065	18,700 06	Santa Barbara	IV	2009
2813 4210001	4210001-005	CARPINTERIA VALLEY WATER DISTRICT	High School Well	CVWD is proposing to rehabilitate the High School Well, M which is currently inactive due to a collapsed well casing. This project is to improve water quality and water reliability. This project will be shovel- ready by September 2009. The Project consists of re-drilling the well at the High School well facility, replacing old pumping equipment, rehabilitating existing treatment facilities. The completion this project will enable the District to produce more groundwater for blending and improve water supply reliability.	4	0	c	The Carpinteria Valley Water District relies on surface water sources and groundwater sources to supply its customers with potable water. The local surface water source is treated at a conventional water treatment plant and then conveyed to Carpinteria Valley some 18 miles to a terminal reservoir. Historically the surface water from this source is high in total organic carbon. Combined with the long transit time to the terminal reservoir after treatment, up to 5 days, disinfection by product formation has been a problem. The District has had 2 violations for TTHMs under the Stage 1 DDBP Rule in the last 3 years. Operational changes including flushing, lowering chlorine residuals, covering open reservoirs, improving TOC removal at the treatment plant have all been implemented to reduce the potential formation of TTHMs. In spite of these efforts the District violated in third quarter of 2008 again. It is likely to continue to have problems when Stage 2 Rule becomes effective. One effective way to lower the formation has been to blend low TOC groundwater with the surface water entering the District. This approach has worked in the past several years. However the District's well field has been plagued with problems and well production reliability has been a problem. The District operates five well facilities of which three are no longer productive and have been put into an inactive status. The remaining two wells consist of a high	2,000,000	4,065	18,700 06	Santa Barbara	IV	2009

2814 4210001	4210001-003	CARPINTERIA VALLEY WATER DISTRICT	Gobernador Well Project	CVWD is proposing to construct a new well located on the east end of the District. This project is to improve water quality and water reliability. This project will be showel-ready by December 2009. The project is to construct a well on the eastern most end of the District where the water in the distribution is the oldest. Water in the Gobernador Canyon area can be nearly 25 days old. By providing a source of water in this zone the water age will be on the order of 3 days old by the time it gets to the customer. The project consists of drilling a new well, installation of new pump equipment, installation of treatment equipment and installation of piping and valves. This project will enable CVWD to more effectively blend and prevent disinfection byproduct formation in the eastern portions of the distribution system.	M	0	C	The Carpinteria Valley Water District relies on surface water sources and groundwater sources to supply its customers with potable water. The local surface water plant and then conveyed to Carpinteria Valley some 18 miles to a terminal reservoir. Historically the surface water from this source is high in total organic carbon. Combined with the long transit time to the terminal reservoir after treatment, up to 5 days, disinfection by product formation has been a problem. The District has had 2 violations for TTHMs under the Stage 1 DBP Rule in the last 3 years. Operational changes including flushing, lowering chlorine residuals, covering open reservoirs, improving TOC removal at the treatment plant have all been implemented to reduce the potential formation of TTHMs. In spite of these efforts the District violated in third quarter of 2008 again. It is likely to continue to have problems when Stage 2 Rule becomes effective. One effective way to lower the formation has been to blend low TOC groundwater with the surface water entering the District. This approach has worked in the past several years. However the District's well field has been plaqued with problems and well production reliability has been a problem. The District operates five well facilities of which three are no longer productive and have been put into an inactive status. The remaining two wells consist of a high	3,000,000	4,065	18,700 06	Santa Barbara	IV	2009
2815 4410014	4410014-002	San Lorenzo Valley Water Dist	Whittier/Manzanita Avenue distribution System Project	Construction of approximately 2,500 lineal feet of new inch water mains and appurtances thereto within the public rights of way.	8- M	0	С	The existing distribution system consists of 2-inch galvanized steel water mains and undersized 2-inch fire hydrants. Undersized water main is the sources of intermittent low water pressure and inadequate fire flow capacity.	360,000	5,949	19,000 05	Santa Cruz	II	2009
2816 4410014	4410014-004	San Lorenzo Valley Water Dist	El Solyo Avenue Distribution System	Construction of approximately 1,250 lineal feet of new inch water main and appurtences thereto.	6- M	0	С	the Existing distribution system consists of 2-inch galvanized steel water mains and undersized 2-inch fire hydrants. Undersized waater mains is the source of intermittent low water pressure and inadequate fire flow capacity.	200,000	5,949	19,000 05	Santa Cruz	II	2009
2817 4410014	4410014-003	San Lorenzo Valley Water Dist	Lyon Tank Solar System	Contruction of a 40kw roof mount solar system and appurtenances thereto.	М	0	с	Installation of a 40kw solar electrical system at the water system's Lyon storage reservior to provide sustainable electrical supply and reduction of the ageny's carbon footprint pursuant to AB32.	250,000	5,949	19,000 05	Santa Cruz	II	2009
2818 1910073	1910073-005	LOMITA-CITY, WATER DEPT.	Harbor Hills Elevated Storage Tank	50,000 gallon elevated riveted steel storage tank constructed in 1940, 35' LWL/85' top of roof. Exterior coating Aluminum oxide with lead based prime coat(strip and recoat). Interior coating of coal tar and epoxy(strip and recoat). Repair or replace Ladders, balcony railing and catwalks to meet all current Federal and State safety standards. Remove and install new roc hatch to meet current DPHS standards. Bring tank vent: up to current DPHS standards. Remove and replace exsiting spider rods on interior due to corrsion.	M I Sf S	0	С	The Harbor Hills tank provides pressure and surge regulation for Zone 3 of the City's water system. The work needed to be done will provide for optimal safety, operations and storage of this elevated tank. Bring into Federal and State compliance. The tank is in need of repairs and upgrades including: internal and external coatings; structural member repairs, room repairs, catwalk repairs and hatch repairs.	160,000	4,212	20,181 07	Los Angeles	IV	2011
2819 3010055	3010055-001	South Coast WD - Capistrano Beach		The District proposes to construct a new 2 million gallou reservoir at the current reservoir's site.	n M	0	с	Water storage capacity is inadequate to handle the anticipated storage needs for District as well as to handle the storage needs of the proposed District groundwater recovery draility.	2,000,000	5,575	20,500 08	Orange	V	1998
2820 3610120	3610120-002	Phelan Pinon Hills CSD	new master plan	Develop a new master plan	м	0	с	Master plan does not provide for reliable water system	100,000	6,267	20,681 13	San Bernardino	v	2000
2821 3610120	3610120-006	Phelan Pinon Hills CSD	booster station upgrade	Upgrade and replace booster pumps	М	0	С	Booster stations need to be upgraded to be able to supply additional water throughout the distribution system	150,000	6,267	20,681 13	San Bernardino	v	2000
2822 3610120	3610120-005	Phelan Pinon Hills CSD	distribution system upgrade	Upgrade distribution system	М	0	С	Distribution system is not large enough to adequately supply water throughout the system to meet peak demand	2,229,000	6,267	20,681 13	San Bernardino	v	2000

2823 3710023	3710023-004	Santa Fe I.D.	R.E. Badger Water Filtration Plant Chemical Tanks and Improved Disinfection	<ul> <li>Remove and replace existing ammonia storage tank with ASME certified vessel, including associated piping, appurtenances, and telemetry. Construct new spill containment area at chemical delivery site, with enhanced alarms, lighting, and communication in order to provide additional safety measures in the case of an emergency chemical spill. Install baffles to improve the volume available for disinfection from 1.3 MG to 8.6 MG. Baffles would create a serpentine flow in the clearwell, improving disinfection contact time by increasing the distance the water will have to travel. This would lead to increased control of the detention time and a more efficient and effective disinfection approach.</li> </ul>	0	C	The R.E. Badger Water Filtration Plant (REB) is one of the few facilities treating a local water source (Lake Hodges) in San Diego County. REB provides potable water to 58,900 people in the Santa Fe Irrigation District and San Dieguito Water District. SFID is submitting on behalf of both agencies. The existing ammonia storage tanks are out of compliance with current ASME standards and must be replaced. In addition the Chemical loading requires containment enhancements for mitigating potential spills during the delivery of hazardous chemicals. The current 13 million gallon (MG) clearwell provides disinfection contact time as well as storage. The project would provide baffling in the clearwell to enhance its efficiency and improve its ability to achieve Safe Drinking Water Act requirements using less chemicals.	1,800,000	7,121	21,081 14	San Diego	v	2009
2824 3710023	3710023-005	Santa Fe I.D.	Lago Lindo Water Main Replacement	• This is an infrastructure replacement project that will M improve the reliability of an aging pipeline and reduce risk to public health and safety by relocating the pipeline to a more accessible easement. • Replacement of 5,000LF of 10" ACP waterline.• Installation of 6,300 LF of 10" PVC waterline in public right-of-way.• Install new fire hydrants, increasing fire flow reliability• Relocate water services to front of parcels, near public right-of-way for easier meter access and fewer easements.	0	С	Due to the cross-country nature and age of the existing water main, the easement is not accessible in multiple areas for emergency repair or maintenance. The project would relocate this aging pipeline to a more accessible route to enhance reliability and reduce public health and safety risks. Water main is in near proximity to numerous homes; water main break could potentially damage property in addition to disrupting service. Timing for relocation in the preferred route is becoming critical. The existing utilities in proposed augment would occupy the last available slot.	2,800,000	7,121	21,081 14	San Diego	v	2009
2825 5010017	5010017-005	PATTERSON, CITY OF	Groundwater Blending Program	The City of Patterson is 100% dependent upon local groundwater for its municipal and industrial water supply. The supply is provided through seven wells that are spaced throughout the City. Other water supply sources are either cost prohibitive or unavailable. The City is surrounded by agricultural lands that apply nitrogen as fertilizer. Some of the nitrogen percolates into the groundwater when crops are irrigated. In addition, the percolating water collects salts as it moves downward through the soil.Recently, nitrates in the groundwater have contaminated one of the City's wells causing the well to be removed from the water system. Nitrate is a primary standard according to the U.S. EPA, and can have acute health impacts on the community, especially young children and infants. The City was forced to shut down the well without warning. Prior testing of the well did not provide data to suggest nitrates would exceed drinking water standards in the immediate future. This action caused the City to lose approximately 15% of its water supply virtually overnight. Groundwater hydrology studies show that nitrates and salinity migrate, and may cause other wells to also become contaminated and lost. The migration and concentration of nitrates is often unpredictable. Treating the water at the wellhead (well site) for nitrates and salinity is cost prohibitive and often infeasible due to space constrictions. If additional wells	0	C	The City of Patterson is 100% dependent upon local groundwater for its municipal and industrial water supply. The supply is provided through seven wells that are spaced throughout the City. Other water supply sources are either cost prohibitive or unavailable. The City is surrounded by agricultural lands that apply nitrogen as fertilizer. Some of the nitrogen percolates into the groundwater when crops are irrigated. In addition, the percolating water collects salts as it moves downward through the soil. Recently, nitrates in the groundwater have contaminated one of the City's wells causing the well to be removed from the water system. Nitrate is a primary standard according to the U.S. EPA, and can have acute health impacts on the community, especially young children and infants. The City was forced to shut down the well without warning. Prior testing of the well did not provide data to suggest nitrates would exceed drinking water standards in the immediate future. This action caused the City to lose approximately 15% of its water supply virtually overnight. Groundwater hydrology studies show that nitrates and salinity migrate, and may cause other wells to also become contaminated and lost. The migration and concentration of nitrates is often unpredictable. Treating the water at the wellhead (well site) for nitrates and salinity is cost prohibitive and often infeasible due to space constrictions. If additional wells	14,000,000	5,680	21,229 10	Stanislaus	Ш	2009

2826 5010017	5010017-001	PATTERSON, CITY OF	Increased Security for Wel #5	I One of the City's drinking water wells is located adjacent to a City park, and surrounded by a residential area.	м	0	С	Security Project	250,000	5,680	21,229 10	Stanislaus	III	2007
				The well is enclosed by four inadequate walls and a chain link gate. The walls are easily damaged and difficult to repair. Water operators observe indications that Well #5's Security is compromised on a daily basis. Without the added security of a roof the well is susceptable to sabotage and vandalism.										
				The City proposes removing the existing styrofoam/stucco walls and replacing them with a concrete block structure that fully encloses the well and its components. This will add much needed security to this facility, and protect this highly productive well.										
2827 4110018	4110018-003	City of Millbrae		Seismically upgrade storage tanks and recoat interior and exterior surfaces	М	0	С	Need to improve storage reliability and recoat storage tanks.	2,000,000	6,397	21,500 17	San Mateo	Ш	1998
2828 4110018	4110018-002	City of Millbrae		Install pump station to pump water from lower zone to upper zone.	м	0	С	Need capability to transport water to separate zone in event of service disruption.	375,000	6,397	21,500 17	San Mateo	II	1998
2829 4110018	4110018-001	City of Millbrae		Replace system sections that are undersized and deteriorated,	м	0	С	Undersized pipes and deteriorating distribution system causing breaks and service disruptions.	450,000	6,397	21,500 17	San Mateo	II	1998
2830 1910191	1910191-002	NORWALK - CITY, WATER DEPT.		Construct a new reservoir, well and pump station. See attached discussion. Project involves: Design, and Construction	М	0	С	Fire flow, peak hour, and emergency use demands are not currently being met due to under-capacity storage facilities.	5,825,000	5,401	22,000 15	Los Angeles	IV	2006
2831 1910191	1910191-001	NORWALK - CITY, WATER DEPT.		Install new well and well head treatment. Project involves: Design, and Construction	м	0	С	Lakeland Well No. 3 shut down due to water contamination and structural problems.	1,460,000	5,401	22,000 15	Los Angeles	IV	2006
2832 1910038	1910038-003	EL MONTE-CITY, WATER DEPT.	Peck Road Water Main Improvements	To solve the pressure deficiencies in the City's current system, a CIP program has been put in place. The Peck Road Water Main Improvement Projects is part of the first phase of improvements to solve these low pressure deficiencies. The project consists of the construction and installation of approximately 7,600 lineal feet of new 12 inch ductile iron pipe, appurtenances, valves, and fire hydrants. Once construction of the new pipeline is complete, the City of El Monte will be able to improve a majority of system deficiencies.	м	0	С	The City of El Monte's current water distribution system consist of many aged and unlined pipes. Results of a hydraulic analysis of the City of El Monte's Water Distribution System indicate that the system could not adequately deliver the required fireflows while maintain a minimum residual pressure of 20 psi as specified by the department of health. Approximately 90 percent of the City's fire hydrants do not meet the fireflow requirements. In addition, the system experiences pressure deficiencies under a peak hour day condition.	2,100,000	3,524	22,828 16	Los Angeles	IV	2009

2833 3410011	3410011-008	Galt, City of	Galt - East Side Connectivity Improvement	The intersection of Carillion Boulevard and Simmerhorn M t Avenue is located about 2,600 feet east of the City Limits (along Simmerhorn Avenue). The City limits along Carillion Boulevard end approximately 1,800 feet north of the intersection of Carillion Boulevard and Simmerhorn Avenue. A 12" main ends at the southerly City Limits on Carillion Boulevard. A well and water treatment plant is located on the east side of Carillion Boulevard about 0.5 mile from the southerly City Limits along Carillion Boulevard. This water treatment plant is capable of producing approximately 3,000 gallons per minute of drinking water. The Industrial Park Water Treatment Plant is capable of producing similar flows in the immeidate vicinity.In order to solve the problem, a looped system would need to be constructed. This looped system would need to be constructed. This looped system would be constructed in portions of two roads that fall within Sacramento County jurisdiction - Carillion Boulevard and Simmerhorn Avenue. a 12" main would be constructed from the dead-end at Carillion Boulevard to the dead-end at Simmhorn Avenue. The total length of 12" water main is estimated at 4,400 linear feet. Fire hydrants would be installed every five- hundred feet and isolation valves would be located every 1,000 feet and on every leg of a tee. A total of six valves would be constructed. This looped system would allow the Simmerhorn Commerical area to be served by two water treatment facilities, allowing the City Water	0	c	Simmerhorn Avenue is located partially within the City of Galt and partially within the County of Sacramento. A 12" main extends easterly from Lincoln Way along Simmerhorn Avenue to the City Limits. On Simmerhorn Avenue. The 12" main ends at the City Limits. There are six commercial businesses that are served off this 12" main. Fire District commercial fire flow requirements are 3,000 gallons per minute for three hours. Typically, dead-end 12" mains cannot accomodate this lengthy demand. This problem is exascerbated when the nearest well, reservoir, and pump station facility (Industrial Park Water Treatment Plant) is off-line, as there is no other supply source in the area, due to the lack of a looped system. In addition, the Industrial Park Water Treatment Plant provides domestic water and fire protection for existing commercial and industrial facilities in the immediate vicinity (due south and southeast). The Simmerhorn Commercial area is at the end of the water system.	1,400,000	7,872	22,982 09	Sacramento	I	2012
2834 3410011	3410011-009	Galt, City of	Galt - Old Town Undersized Main Upsizing	In order to upgrade the distribution system, the project M consists of replacing undersized water mains in several areas (D Street from Fourth Street to Lincoln Way, E Street from Fourth Street to Lincoln Way, Church Street from F Street to G Street) with 10" mains, extending 10" water mains (Fourth Street from E Street to F Street), and completing interconnections (C Street at Union Pacific Railroad crossing and F Street at Lincoln Way). These improvements, identified in the City's recently completed Water System Master Plan, will provide for a looped system that meets the Fire District fire flow requirements for the Old Town area. In addition, fire hydrants would be installed every five-hundred feet and isolation valves would be located every 1,000 feet and on every leg of a tee. Costs for this application cover both design and construction of the improvements, including construction inspection and construction project management.	0	c	The Old Town area of Galt is a mixture of older residential homes, commercial businesses, and churches. This area is plagued by undersized (typically 4") and unconnected mains, thereby not creating a completed, adequately sized grid system. The water system is susceptible to low pressures and inadequate fire flows. There have been low pressure complaints and recent tests indicate fire flows of approximately 1,600 gallons per minute in these areas of the undersized mains. The current Fire District commercial fire flow standard is 3,000 gallons per minute for 3 hours. Covered in this application are the following locations for replacement of undersized mains: D Street from Fourth Street to Lincoln Way, E Street from Fourth Street to Lincoln Way, Church Street from F Street to G Street; extension of 10" water mains (Fourth Street from E Street to F Street); and completion of interconnections (C Street at Union Pacific Railroad crossing and F Street at Lincoln Way.	1,520,000	7,872	22,982 09	Sacramento	I	2012
2835 3510001	3510001-011	Hollister, City of	pipeline replacement	Identify a more stable pipeline route and construct a M new pipeline with adequate restraints and supports.	0	с	City has 50-year old pipeline that needs to be replaced. Pipelines are located on unstable hillsides, not properly supported; have failed frequently, resulting in water outages. Repairing leaks requires depressurizing large portions of system.	1,366,000	6,119	23,110 05	San Benito	II	1999
2836 3510001	3510001-007	Hollister, City of	seismic retrofit	All deficiencies should be carefully evaluated and M corrected.	0	с	Seismic retrofits of well facilities.	150,000	6,119	23,110 05	San Benito	Ш	1998
2837 3510001	3510001-005	Hollister, City of	replace Cienega Hills storage reservoir	Design and construct a modern reservoir to replace the M existing one.	0	С	Concrete storage reservoir in Cienega Hills needs to be replaced.	265,000	6,119	23,110 05	San Benito	II	1998

2838 1910022	1910022-003	CALIF STATE POLYTECHNICAL UNIV - POMOP Cist	ern Repipe and Valve	The University Water System as discussed has a "Blending Point" which is an In ground Concrete Cistern , This structure is approximatly 85 years old and is in need of repair and may eventually be a risk in an earthquake At present it is the only structure which allows for Nitrate and Perchlorate Blending Compliance . The University is constructing a second reservoir on the campus which could allow for the Cistern to be taken out of service as part of the water System and preseved as an historical building . In order to By Pass and take out the Cistern new Water Mains, Valves and Booster Pumps would have to be installed . The Nitrate Monitoring system would also have to be removed and replaced .	M e g	0	с	The University Water System has an antiquated inground Concrete Cistern as its Water Blending and Entry Point to the Distribution System. This Cistern which was constructed in 1922 has had problems with deterioration and seepage and potential for rodents and bird intrusion. The University is currently constructing a new second Reservoir which could allow for this Cistern building to be taken out of service ,however new Water Mains , Valves and Booster Pumps must be installed which would allow the Cistern to be bypassed .	195,000	7,575	23,500 22	Los Angeles	IV	2009
2839 4910013	4910013-009	Valley of the Moon Water District Wat	ter Main Replacement	This project involves the replacement of approximately 3,000 feet of small diameter steel water mains with 6" and 8" PVC water mains, 75 water service laterals, and fire hydrants. These mains are located in Boyes Hot Springs area of Sonoma County, as specified below:1. Mulford Avenue – approximately 300' of 2" water main2. Academy Lane – approximately 790' of 1-1-1/2' and 4" water main3. Manzanita Road – approximately 950' of 4" water main6. There are approximately 910' of 2" water main6. Water and 4" water main6. The service laterater water and 4" water main6. The service laterater and a provimately 910' of 2" water main6. The service laterater and a provimately 910' of 2" water main6. The service laterater and a provide reliable fire protection for this densely populated area.	у М б	0	c	The District's existing steel water mains located in the Boyes Hot Springs area were installed in the late 1950s and early 1960s. These steel water mains have deteriorated and are undersized. Due to the undersized nature of these mains, there is no reliable fire protection for the area residents. Additionally, because of the deteriorated nature of these mains, leaks are not uncommon. Between the time a leak is called in and the District's staff fixes the leak, a certain amount of potable water is lost. Given the drought conditions prevailing in our service area, it is of paramount importance to replace these mains to save potable water and to provide reliable drinking water to the District's customers. Properly sized water mains will provide the much needed water for fire protection for this densely populated area.	550,000	6,783	23,858 18	Sonoma	Π	2009
2840 4910013	4910013-010	Valley of the Moon Water District Trin Inte	nity Oaks Glen Ellen prconnection	This project involves the construction of approximately 3,600 feet of 8" PVC water main from Bonnie Way, Trinity Oaks to Arnold Drive, Glen Ellen. This pipeline will provide a connection from the Trinity Oaks to the District's water distribution system in Glen Ellen and that two water storage tanks in the Glen Ellen area that have a total capacity of 650,000 gallons. In the event of a disruption to the supply from the Sonoma Aqueduct, this interconnection will provide an alternate source of water supply to the residents of Trinity Oaks and improve the overall reliability of the water system to this area. This alternte source of water supply will also provide additional fire protection in the event of a disruption to the supply from the Sonoma Aqueduct.	r M ne re	0	с	The Trinity Oaks area near Glen Ellen is isolated from the rest of the Valley of the Moon Water District's (District) service area and it has currently no auxiliary source of water supply. The only source of water is from a single turnout on the Sonoma County Water Agency's (wholesale water provider) Sonoma Aqueduct. Currently there is no connection between this isolated area and the rest of the District's water distribution system, essentially creating an island of sorts. The closest point of connection to the District's water system is located in Glen Ellen at a distance of approximately 3,600 feet.	450,000	6,783	23,858 18	Sonoma	Π	2009
2841 1910212	1910212-001	GSWC-SOUTH ARCADIA		REPLACE UNDERSIZED MAINS	М	0	C	700' OF WATER MAINS LESS THAN 4" IN DIAMETER. THESE MAINS DO NOT COMPLY WITH TITLE 22, SECTION 64628 (a).	70,000	7,362	24,413 07	Los Angeles	IV	1998
2842 1010029	1010029-002	CITY OF SANGER Back	kup Power	Install backup power generators at 8 well sites to provide system reliability.	М	0	С	Lack of adequate backup power facilities at the well sites.	1,200,000	5,989	25,404 11	Fresno	ш	2006

## 2843 1010029 1010029-003 CITY OF SANGER

City of Sanger Water Given the critical water storage issues facing the City of M Sanger, through the proposed project, the city will construct a new water storage tank in the eastern portion of the city. The project will include the acquisition of 0.3 acres of land, the construction of a 0.75 million-gallon, ground level, welded steel water storage tank with booster pumps and emergency generator. Electrical controls will provide telemetry and SCADA equipment to match the current city systems. Booster pumps will be sized to operate individually during low-demand periods, and in parallel for peak flow. Once the project is near completion, site improvements will be necessary. Site improvements will include landscaping, lighting and fencing so the tank will blend with the neighborhood.

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The City of Sanger is a growing community in eastern Fresno County. As the city expands and the population grows, water supply has become an increasingly critical issue. Over the last two years, the city has regularly experienced water pressures as low as 22 psi. particularly during the hot summer months when there is maximum water usage. The low pressure problem is more pronounced in the expanding section of the community on eastern side of the city. The storage tank proposed in this project will be located in the eastern part of the city; addressing the specific needs of that community while also alleviating the pressure on the other water storage tanks throughout the city. Sanger obtains all of its water from wells pumping from the underground aquifer. The city has a history of old industry causing DBCP contamination in the groundwater that makes the drilling of additional wells not only costly to construct, but also costly to maintain. Currently, the wells are adequate to meet the Maximum Day Demand over a 24-hour period, but have difficulty meeting the Peak Hour Demand. The proposed tank will not only help meet the peak hour demand, but will also provide enhanced fire protection.

1.330.000

5.989

25,404 11

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2012

2844 1010027 1010027-001 REEDLEY, CITY OF Elevated Water Storage Towers

Storage Tank

The project will allow for two 1.5 million gallon elevated M Hydro-towers to be located at the north end of the City and the east end to stabilize pressures and provide the City with more than 24 hours of water storage capacity. These towers will be design build similar to the ones built in Ripon and Dinuba. The projects are located such that a minimum amount of piping will be required to connect to the City's distribution system. A (supervisory control and data aquisition) S.C.A.D.A. system will be installed to monitor levels and pressures. The project will also include installation of a chlorine residual monitoring unit that will interface with the S.C.A.D.A. system to provide disinfection status of the towers. A future unit to provide conductivity and HPC readings is being discussed. The City will also utilize both towers in a multiple capacity to include storage and uses for equipment within the bottom portions of the towers. One of the towers will have more of a regional use in that it will be located at a proposed regional sports complex. The City currently owns property in which to place the towers and will therefore not need to purchase property. The City will do an RFQ process followed by and RFP to build the project. The City wishes to do its part to reduce emissions and peak energy consumption by being able to pump during off peak hours and allowing the water system to float off the two hydro towers during the day.

The City of Reedley's water system currently has storage capacity for 100,000 gallons to serve a population of 24,000 + with over 5,000 service connections. This is inadequate storage for fire protection and for an extended City wide power outage, this would not provide sufficient water storage for potable use. The City pressures are currently dependent upon wells operating and the two small water towers that are currently located in the central downtown district. Pressures vary widely and are dependant upon amount of use as to whether pressures are reduced to near unuable pressures or safe pressures. Pressure ranges during peak usages have been as low as 22 to 23 psi in the North end of the City. As far as adequate storage goes, the City if it were to have a major power outage and was unable to use its wells, would only have roughly 17 to 22 minutes of water storage available. To date no violations have occurred. Therefore, the City would like to be proactive in not allowing its water system to reach a point where violations are occurring or where frequent boil water orders are being issued.

9.000.000	6.619	25.584 11	Fresno	111	2007

2845 1910154	1910154-010	City of South Pasadena	Wilson Reservoir Replacement	The proposed project will demolish the existing 1 million M gallon reservoir and pump station and construct one 1- million gallon reservoir in its place along with a pump station, drainage, electrical/control system, on-site chlorine generation, seismic protection and cathodic protection (steel tank). Current monitoring equipment will be removed and re-installed to save on costs. The city is in the process of finalizing the plans and will be ready to go out for construction bids in October of this year. The city has contributed significantly to this project with \$1.75 million budgeted including \$1 million reserved for construction costs. Wilson Reservoir is the most critical water storage facility in the City's water system, due to the fact that the majority of the City's water supply is blended and chlorinated at this site. The construction of a new Wilson Reservoir is imperative for the future of South Pasadena's drinking water.	0	C	The 1.0mg Wilson Reservoir was purchased in 1920 by the City of South Pasadena. The reservoir is predominately buried. The base of the reservoir is constructed of concrete and the roof is wood. This reservoir is used to blend water from 3 wells, 2 that are on-site and one that is about one-half of a block away. There are three booster motors and pumps at this site, and there is also a gaseous chlorine injection room. An inspection of the of the reservoir was performed in February 2008 after a portion of the wood roof appeared to be sagging. The inspection report noted that "severe roof collapse may occur at any time" and "plans should be put in place immediately to replace this tank." The reservoir does not currently meet earthquake resistance standards and has a number of other vulnerable features. The reservoir also needs regular maintenance because of its advanced age. This requires the reservoir to be shut down. However, should an emergency occur, shutting down the reservoir for proper maintenance could cause major system failures and substantial added cost to purchase water. The projected cost of the purchased water is estimated to nearly deplete the City's financial reserves.	10,350,000	6,264	25,824 16	Los Angeles	IV	2009
2846 4910017	4910017-034	Windsor, Town of	Water System SCADA Improvements Project	The Water System SCADA Improvements Project ("Project") is an opportunity for the Town to update its aging supervisory and control system with a modern SCADA system that can be easily expanded to meet the Town's future needs. The Project include design and construction of a new SCADA system including each of the remotes water sites (wells, tanks, pumps, etc) and a new master SCADA control station at the Town's Corporation Yard. The system, as initially installed, will completely replace the aging equipment with modern equipment, including programmable logic controllers (PLCs), remote terminal units (RTUs), panels and other miscellaneous hardware, communication equipment and new operating software. The system will initially be configured to accommodate all existing signals and equipment, with the capability to accept new functionality in the future. This expandability will allow the Town to further adapt and optimize system operation, allowing the new system to serve the Town's need for many years to come. All equipment and software will be of a type widely used in the municipal market, allowing for greater flexibility in obtaining service or maintenance from outside sources as compared to the existing system. The contract will be administered as a design-build agreement by which the Town will contract with a single firm for final design, installation, programming, testing, startup and	0	C	The Town of Windsor, California is a community of approximately 26,000 situated in Northern California, north of Santa Rosa just off of Highway 101. The Town's potable water system is operated and maintained by the Town of Windsor Public Works Department. The Public Works Department also is responsible for planning, designing and constructing projects for water system improvements. The system consists of water supply, treatment, distribution, booster pumping and storage facilities. A key component of this system is the Supervisory Control and Data Acquisition (SCADA) system, which monitors system status and reports system alarms to operators, allowing the Town to adapt system. However, the existing equipment comprising the SCADA system is relatively old and has reached the end of its useful life. In addition, the current system uses outdated technology and affords the Town to optimize operation of the system with respect to energy efficiency, water quality and system reliability. Support services and documentation for the existing SCADA system are also limited. Despite a tremendous effort by Town staff, this proprietary equipment has become unreliable and difficult to maintain.	900,000	8,697	26,432 18	Sonoma	Ι	2009
2847 3710027	3710027-004	Vista Irrigation District	Avocado and Hanalei Dr Water Main Replacemer	ve Installation of approximately 5,300 feet of 8 and 10-inch M ts PVC water main and reconnection of water meters and fire hydrants in Avocado Drive and Hanalei Drive.	0	с	This project will replace approximately 5,300 feet of 6 & 10-inch aging steel water mains built in 1949. These mains are nearing the end of their useful lives and are beginning to experience leaks that make them a	1,000,000	27,715	26,708 14	San Diego	v	2009

maintenance liability.
2848 3710027	3710027-001	Vista Irrigation District	Vista Flume Replacement	Permanent replacement of Vista Flume with pressure pipeline. See Attachement 2 and 3.	Μ	0	c	Public health and safety concerns associated with age and deterioration of the low head Vista Flume (potable water conveyance system). See Attachemt 1 and 3.The Escondido-Vista Water Filtration Plant (EVWFP) supplied 55 percent of VID's potable water over the last 10 years. The Vista flume is the sole facility that conveys water from the EVWFP to the VID service area. VID owns and operates the Vista flume and siphon conveyance system. The 11.25 miles of total length includes 6.25 miles of above-ground, gravity fed gunite bench flume, a quarter-mile long hard rock tunnel and 5 miles of steel and/or concrete inverted siphons.The flume was built in 1926 and is in great need of replacement to assure system integrity, reduce vulnerability from malicious behavior, provide better structural safety, prevent leakage, and protect public health. Repairs and/or upgrades to the flumes and siphons over the last 80 years have consisted of: cement motor lining and installation of cathodic protection systems on steel siphons; addition of a cover system; installation of an HDPE liner system which was completed in 2002; and continual repairs to cracks in the gunite and tears in the existing flume increase the potential for contamination.	16,400,000	27,715	26,708 14	San Diego	v	1998
2849 3310025	3310025-001	Norco, City of		Construction of 4 MG reservoir to maintain adequate reserve capacity.	м	0	С	The City's water system has a peak consumption demand of 13 MGD and only 9.5 MG of reservoir storage (see attached DHS compliance order, page 4, 5).	4,400,000	7,949	27,361 20	Riverside	v	1998
2850 3310025	3310025-002	Norco, City of		To reduce system demand, a pumping station and transmission main will be constructed to return up to 2 MGD of recycled water from the WRCWA regional sewage treatment plant for irrigation purposes.	М	0	С	The City does not have an adequate source of supply to meet peak water demand. (see DHS compliance order 04-14-95CO-007, p.2 attached)	550,000	7,949	27,361 20	Riverside	v	1998
2851 1910204	1910204-049	LOS ANGELES CO WW DISTRICT 29 & 80-4	VA Improving Water Quality the Old Topanga Tanks	In The purpose of the proposed project is to thoroughly mix the water in each tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing devices is \$80,000.	M	0	C	The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Old Topanga tanks located at 1645 N. Old Topanga Canyon Road have a total capacity of 500,000 gallons, one 300,000-gallon tank and one 200,000-gallon tank, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tanks is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tanks where fresh cold water stays near the base of the tanks and older, warmer water stagnates near the top. Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total	80,000	7,733	27,807 16	Los Angeles	IV	2009

one of the commercially available active tank mixingchloraminated frdevices. The mixing device has little to no energy costPepperdine 812and requires virtually no maintenance, since it ishas a capacity ofpowered by a solar panel placed on the top of the tank.delivered to theThis system efficiently mixes the entire reservoir byVenice Boulevancreating a near-laminar flow pattern, which will reachThe freshest wa

stratification, short-circuiting and stagnant water

conditions, which will provide a uniform, short water

age. To accomplish this goal, the District proposes using

and eliminate all the dead spots. The device will also be

monitoring of the tank; and a chlorine injection system

floats in triangular pattern with total float buoyancy of

600 pounds, floats on the water surface with a down

intake hose to draw water. The variable length hose

automatically adjusts for the peak performance at any

water depth. The intake remains stationary just above

and in contact with reservoir bottom, preventing the

proposed system is capable of pumping about 10,000

machine from moving out of place or rotating. The

gallons per minute for mixing. The estimated total

that helps maintain appropriate disinfectant levels in

the tank. This mixing device, which consists of three

(SCADA) output signals that allow for real time

equipped with Supervisory Control And Data Acquisition

the Pepperdine 812 Tank mix the water in the tank to eliminate temperature

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LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly M

2853 1910204 1910204-058 LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly the Malibu Knolls Tanks mix the water in each tank to eliminate temperature

2852 1910204

1910204-048

capital cost of the mixing device is \$40,000. M the Malibu Knolls Tanks mix the water in each tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing devices is \$80,000.

receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Pepperdine 812 tank located at 24240 W. Baxter Drive has a capacity of 3,000,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total

The Los Angeles County Waterworks District No. 29

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Los Angeles

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The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection Within the District the Malibu Knolls tanks located at 3001 S. Malibu Canyon Road have a total capacity of 347,000 gallons, one 300,000-gallon tank and one 47,000-gallon tank, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tanks is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tanks where fresh cold water stays near the base of the tanks and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total

80,000 7,733 27,807 16 Los Angeles IV 2009

2854 1910204	1910204-056	LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality the Topanga Summit Tank	n The purpose of the proposed project is to thoroughly M s mix the water in each tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which wil reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system	0	с	The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Topanga Summit tanks located at 3321 N. Topanga Canyon Road have a total capacity of 1,100,000 gallons, one 800,000-gallon tank and one 300,000-gallon tank, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tanks is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tanks where fresh cold water stays near the base of the tanks and older,	80,000	7,733	27,807 16	Los Angeles	IV	2009
			that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing devices is \$80,000.			warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total						
2855 1910204	1910204-007	LOS ANGELES CO WW DISTRICT 29 & 80-MA Emergency Power	INSTALL PERMANENT EMERGENCY BACK-UP M GENERATORS TO KEEP OUR TWO MAJOR PUMP STATIONS OPERATIONAL DURING POWER OUTAGES.	0	С	EMERGENCY GENERATOR. DURING POWER OUTAGES, THE MAJORITY OF THE DISTRICT WILL BE CUT OFF FROM WATER SERVICE UNTIL POWER IS RESTORED.	600,000	7,733	27,807 16	Los Angeles	IV	1998
2856 1910204	1910204-024	LOS ANGELES CO WW DISTRICT 29 & 80-MA Pepperdine Bypass Water Circulation Project	<ul> <li>M Provide the set of the set of</li></ul>	0	C	Metropolitan Water District of Southern California (MWD) provides the single source of water that supplies Los Angeles County Waterworks District No. 29 (District) through a connection with West Basin Municipal Water District (WBMWD). The water supply is delivered to the City of Malibu and the Topanga Canyon area through a 30-inch high-pressure transmission main from the District's interconnection approximately 15 miles away. The water then travels another 20 miles through the transmission main in Pacific Coast Highway (PCH) to the westerly boundary of the District. The water is pumped from transmission main on PCH into the District's storage tanks located in each of the canyons along this reach. In July 2005, MWD switched its primary disinfectant for the Joseph Jensen Filtration Plant that serves the District from chlorine to ozone. The ozone disinfection process improves the taste and odor of the treated water and reduces potential health concerns associated with chlorine disinfection. The treated water is disinfected by using chloramines, a combination of chlorine and ammonia, to maintain water quality in the distribution system. While chloramine can provide a more stable and lasting disinfection, the use of chloramine can potentially introduce water quality problems such as nitrification and corrosion. Nitrification causes depletion of	2,400,000	7,733	27,807 16	Los Angeles	IV	2007

2857 1910204	1910204-051	LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality	in The purpose of the proposed project is to thoroughly	М	0	С	The Los Angeles County Waterworks District No. 29	40,000	7,733	27,80
		the Trancas Tank	mix the water in the tank to eliminate temperature				receives its water supply from West Basin Municipal			

2858 1910204 1910204-025 LOS ANGELES CO WW DISTRICT 29 & 80-MA Water Security Improvement Project

mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000

In compliance with the Public Health Security and М Bioterrorism Preparedness and Response Act of 2002, the Los Angeles County Waterworks Districts (Districts) completed three vulnerability assessments. These vulnerability assessments evaluated susceptibility of existing water facilities to potential threats and identified corrective actions to reduce or mitigate the risk of serious consequences from unauthorized entries and malevolent acts (e.g., vandalism, insider sabotage, terrorist attack, etc.). These assessments analyzed the vulnerability of the water supply (both ground and surface water), treatment and distribution systems along with risks posed to the surrounding community related to attacks on the water system.

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The Districts are utilizing these vulnerability assessments as a guide for prioritizing plans for security upgrades, modifying operational procedures, and changing policies to mitigate the risks to our critical assets. These assessments also provide a framework for developing risk reduction options and associated costs.

The proposed project includes upgrading 10 critical sites in Los Angeles County Waterworks District 29, Malibu and Marina del Rey - System 1910204. The purpose of the proposed project is to implement vulnerability

receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is Security Project

000	7 733	27 807 16	Los Angeles	IV	2009
000	1,155	27,807 10	LOS Aligeles	IV	2009

california (WWD). The water supplied by WWD is						
chloraminated for disinfection.Within the District, the						
Trancas tank located at 6090 S. Trancas Canyon Road						
has a capacity of 500,000 gallons, storing the water						
delivered to the District through a 33" connection at						
Venice Boulevard and Sawtelle Avenue in Culver City.						
The freshest water added to the tank is the first to be						
drawn off. This short-circuiting process leads to thermal						
stratification within the tank where fresh cold water						
stays near the base of the tank and older, warmer water						
stagnates near the top.Such long residence times and						
uneven or total lack of mixing of water in distribution						
system storage facilities often promote formation of						
disinfection byproducts that may cause liver, kidney, or						
central nervous system problems along with increasing						
the risk of getting cancer. The situation also fosters						
nitrification that occurs when the chloraminated water						
has excess ammonia present in the distribution system.						
Nitrification can have various adverse effects on water						
quality, including a loss of total chlorine, an increase in						
heterotrophic plate count (HPC) bacteria concentration,						
and potential increases in total coliforms. A violation of						
the USEPA Disinfection Byproduct Rule and/or Total						
Security Project	4,025,600	7,733	27,807 16	Los Angeles	IV	2007

2859 1910204	1910204-055	LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in the Latigo Tanks	The purpose of the proposed project is to thoroughly mix the water in each tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 eallons per mixing. The estimated total	M	0	c	The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Latigo tanks located at 4230 S. Ocean View Drive have a total capacity of 233,000 gallons, one 133,000-gallon tank and one 100,000-gallon tank, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tanks is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tanks where fresh cold water stays near the base of the tanks and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total churine. an increase in heterotrobic loater count (HPC)	80,000	7,733	27,807 16	Los Angeles	IV	2009
			capital cost of the mixing devices is \$80,000.				bacteria concentration, and potential increases in total						
2860 1910204	1910204-045	LOS ANGELES CO WW DISTRICT 29 & 80-MA Marina del Rey Waterline Replacement - Phase III	The project consists of installing approximately 9,800 feet of 18-inch diameter steel pipeline to replace the existing, aging and undersized 10- and 14-inch diameter steel water main. The water main will be constructed along Bora Bora Way, Via Marina and Fiji Way. This purpose of the project is to improve the Marina del Rey Water System to meet domestic and fire protection water demands. The project represents Phase III of a Water System Improvement Master Plan for the Marina del Rey Water System.	M	0	С	The existing water main that serves the Marina del Rey customers is aged and undersized. It currently does not meet domestic and fire protection water demands.	5,700,000	7,733	27,807 16	Los Angeles	IV	2009
2861 1910204	1910204-004	LOS ANGELES CO WW DISTRICT 29 & 80-MA Carbon Mesa Water tank	ERECT A TEMPORARY 0.1 MG TANK, REMOVE THE EXISTING RESERVOIR, AND CONSTRUCT A NEW 0.250 MG RESERVOIR.	м	0	С	CARBON MESA WATER TANK. THE EXISTING 0.1 MG TANK IS AGED AND OF INSUFFICIENT SIZE TO STORE WATER FOR DOMESTIC WATER SUPPLY.	800,000	7,733	27,807 16	Los Angeles	IV	1998
2862 1910204	1910204-054	LOS ANGELES CO WW DISTRICT 29 & 80-MA Replacement and Retrofit of Four Feeder Valves	The goal of this project is to minimize the amount of water depleted in this area that can be used for both drinking and fire-fighting purposes, and to maintain the integrity of the roadway. The project consists of the replacement and retrofit of four existing water transmission system valves with new electrically controlled valves that can be operated remotely to isolate a highly leak-prone portion of the water system. Shutting down the water main remotely will allow the District to respond promptly and will reduce the damage and erosion caused by leaks. Retrofitting the valves will also reduce the amount of water lost through leakage. Another reason to operate these valves remotely is to reduce and eliminate traffic congestion due to the current need to close lanes of traffic in order to safely access the vaults that house these critical valves. Completing these retrofits will potentially save five to six hours that it typically takes to manually shut down the valves.	M	0	C	There is an active landslide at 19560 Pacific Coast Highway (PCH). This landslide is referred to as the Big Rock Slide and La Grande Bulge. Since 1996 approximately 55 percent of the water main breaks on the District's 30-inch transmission water main, which brings the only source of water supply for nearly 14,000 residents, delivering 10,000 gallons per minute, have occurred in the project area. During each event, we had to manually shut off the existing valves to isolate and repair the break, which is very tedious and time consuming, given the normally heavy traffic along PCH. For example, during the last leak in December 2006 a large sinkhole resulted in the closure of two lanes of PCH for approximately one week, disrupting businesses, restricting the movement of Malibu residents, and costing the District approximately \$500,000 for repair. In addition, when leaks of this nature occur, the District's water storage is depleted, which limits the amount of water available for drinking and fire-fighting.	250,000	7,733	27,807 16	Los Angeles	IV	2009

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				capital cost of the mixing devices is \$80,000.				bacteria concentration, and potential increases in total						
2864 1910204 1910204-023 LOS ANGELES CO WW DISTRICT 29 & 80-MA Concrete tank Will be replaced with a bigger steel tank. M 0 C The existing concrete tank does not meet current 1,460,000 7,733 27,807 16 Los Angeles IV 2004	2864 1910204	1910204-023	LOS ANGELES CO WW DISTRICT 29 & 80-MA Concrete tank	Will be replaced with a bigger steel tank.	м	0	с	The existing concrete tank does not meet current	1,460,000	7,733	27,807 16	Los Angeles	IV	2004
replacement domestic and fire protection standard.			replacement					domestic and fire protection standard.						
2865 1910204 1910204-026 LOS ANGELES CO WW DISTRICT 29 & 80-MA Sepulveda Feeder Los Angeles County Waterworks District 29 (District) is M 0 C Metropolitan Water District of Southern California 5,350,000 7,733 27,807 16 Los Angeles IV 2007	2865 1910204	1910204-026	LOS ANGELES CO WW DISTRICT 29 & 80-MA Sepulveda Feeder	Los Angeles County Waterworks District 29 (District) is	м	0	С	Metropolitan Water District of Southern California	5,350,000	7,733	27,807 16	Los Angeles	IV	2007
Interconnection Project proposing the addition of a new water source through a (MWD) provides the single source of water that			Interconnection Project	proposing the addition of a new water source through	1			(MWD) provides the single source of water that						
new interconnection with MWDs' Sepulveda Feeder to supplies Los Angeles County Waterworks District No. 29			·····	new interconnection with MWDs' Sepulveda Feeder to				supplies Los Angeles County Waterworks District No. 29						
boost gradient during high demand and emergencies. (WWD 29) through a connection with West Basin				boost gradient during high demand and emergencies.				(WWD 29) through a connection with West Basin						
The new connection will be utilized as the primary Municipal Water District (WBMWD). The water supply				The new connection will be utilized as the primary				Municipal Water District (WBMWD). The water supply						

proposing the addition of a new water source through a new interconnection with MWDs' Sepulveda Feeder to boost gradient during high demand and emergencies. The new connection will be utilized as the primary source of water providing the District with a higher grade to overcome the head-loss from the distance between connection point to District boundary. The maximum capacity of the proposed connection will be 40 cubic feet per second – same as the existing connection.

The proposed new connection point will be located on the influent pipeline to the Venice Pressure Control Structure/Power Plant. The project also consists of installing 1,800 linear feet of 30-inch diameter water main and the installation of a regulating station.

The current connection with MWDs' Culver City Feeder will be continue to operate as a back-up connection for emergencies.

This transmission main originates in the City of Los Angeles and extends through the City of Santa Monica prior to entering WWD 29's easterly boundary. Near the origination point of the transmission main, Marina del Rey water system has a connection to the main that serves all the residents in the Marina.

is delivered to the City of Malibu and the Topanga

transmission main from the District's interconnection

approximately 15 miles away. The water then travels

another 20 miles through the transmission main in

Pacific Coast Highway (PCH) to the westerly boundary of the District. The water is pumped from transmission

main on PCH into the District's storage tanks located in

Canyon area through a 30-inch high-pressure

each of the canyons along this reach.

Once it enters WWD 29's boundary, the transmission main extends west on PCH nearly to the border of Ventura County, passing through multiple landslide prone areas. In recent years, landslides and ground movement have damaged the transmission main and 2866 1910204 1910204-052

LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly M the Upper Encinal Tank mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which wil reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000.

2867 1910204 1910204-059 the Santa Maria Tank

LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly M mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000.

receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Upper Encinal tank located at 32911 W. Camino de Buena Ventura has a capacity of 70,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection

The Los Angeles County Waterworks District No. 29

The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection Within the District the Santa Maria tank located at 20400 Mulholland Highway west of Santa Maria has a capacity of 100,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection

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oving Water Quality in The purpose of the proposed project is to thoroughly M the Point Dume Tank mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which wil provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000

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2869 1910204 1910204-046 the Hume Tank

LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly M mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system effciently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000.

receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the Point Dume tank located at 6359 S. Gayton Place has a capacity of 1,800,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water

The Los Angeles County Waterworks District No. 29

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from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection Within the District the Hume tank located at 21737 Azurelee Road has a capacity of 100,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This shortcircuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total

ager to decomption this goal, the product proposed asing	comornia (minib): me
one of the commercially available active tank mixing	chloraminated for disi
devices. The mixing device has little to no energy cost	Pepperdine 907 tank lo
and requires virtually no maintenance, since it is	capacity of 1,600,000 g
powered by a solar panel placed on the top of the tank.	delivered to the Distric
This system efficiently mixes the entire reservoir by	Venice Boulevard and
creating a near-laminar flow pattern, which wil reach	The freshest water add

the Pepperdine 907 Tank mix the water in the tank to eliminate temperature

stratification, short-circuiting and stagnant water

conditions, which will provide a uniform, short water

age. To accomplish this goal, the District proposes using

and eliminate all the dead spots. The device will also be

monitoring of the tank; and a chlorine injection system

floats in triangular pattern with total float buoyancy of

600 pounds, floats on the water surface with a down

intake hose to draw water. The variable length hose

automatically adjusts for the peak performance at any

water depth. The intake remains stationary just above

and in contact with reservoir bottom, preventing the

proposed system is capable of pumping about 10,000

machine from moving out of place or rotating. The

gallons per minute for mixing. The estimated total

that helps maintain appropriate disinfectant levels in

the tank. This mixing device, which consists of three

(SCADA) output signals that allow for real time

equipped with Supervisory Control And Data Acquisition

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LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly M

2871 1910204 1910204-043 LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality in The purpose of the proposed project is to thoroughly the Saddle Peak Tank mix the water in the tank to eliminate temperature

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capital cost of the mixing device is \$40,000. M mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from moving out of place or rotating. The proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing device is \$40,000.

receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is infection.Within the District. the located at Watertank Road has a gallons, storing the water ict through a 33" connection at Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total

The Los Angeles County Waterworks District No. 29

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The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection Within the District the Saddle Peak tank located at 2350 W. Saddle Peak Road has a capacity of 100,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byproducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification that occurs when the chloraminated water has excess ammonia present in the distribution system. Nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total coliforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total

40,000 7,733 27,807 16 Los Angeles IV 2009

2872 1910204	1910204-057	LOS ANGELES CO WW DISTRICT 29 & 80-MA Improving Water Quality i the Horizon Tank	<ul> <li>n The purpose of the proposed project is to thoroughly mix the water in the tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that allow for real time monitoring of the tank; and a chlorine injection system that helps maintain appropriate disinfectant levels in the tank. This mixing device, which consists of three floats in triangular pattern with total float buoyancy of 600 pounds, floats on the water surface with a down intake hose to draw water. The variable length hose automatically adjusts for the peak performance at any water depth. The intake remains stationary just above and in contact with reservoir bottom, preventing the machine from mixing duvice is \$40,000.</li> <li>n The purpose of the proposed project is to thoroughly mix the water in each tank to eliminate temperature stratification, short-circuiting and stagnant water conditions, which will provide a uniform, short water age. To accomplish this goal, the District proposes using one of the commercially available active tank mixing devices. The mixing device has little to no energy cost and requires virtually no maintenance, since it is powered by a solar panel placed on the top of the tank. This system efficiently mixes the entire reservoir by creating a near-laminar flow pattern, which will reach and eliminate all the dead spots. The device will also be equipped with Supervisory Control And Data Acquisition (SCADA) output signals that</li></ul>	0	c	The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection. Within the District, the New Horizon tank located at 5217 S. Horizon Drive has a capacity of 500,000 gallons, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tank is the first to be drawn off. This short-circuiting process leads to thermal stratification within the tank where fresh cold water stays near the base of the tank and older, warmer water stagnates near the top.Such long residence times and uneven or total lack of mixing of water in distribution system storage facilities often promote formation of disinfection byroducts that may cause liver, kidney, or central nervous system problems along with increasing the risk of getting cancer. The situation also fosters nitrification can have various adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total collforms. A violation of the USEPA Disinfection Byproduct Rule and/or Total The Los Angeles County Waterworks District No. 29 receives its water supply from West Basin Municipal Water District that, in turn, purchases imported water from the Metropolitan Water District of Southern California (MWD). The water supplied by MWD is chloraminated for disinfection.Within the District, the Topanga Beach tanks located at 3831 S. Castlerock Road have a total capacity of 4,000,000 gallons, two tanks of 2,000,000 gallons each, storing the water delivered to the District through a 33" connection at Venice Boulevard and Sawtelle Avenue in Culver City. The freshest water added to the tanks is the first to be drawn off. This short-circuiting process leads to thermal stratifi	40,000	7,733	27,807 16	Los Angeles	IV	2009
			proposed system is capable of pumping about 10,000 gallons per minute for mixing. The estimated total capital cost of the mixing devices is \$80,000			adverse effects on water quality, including a loss of total chlorine, an increase in heterotrophic plate count (HPC) bacteria concentration, and potential increases in total						
2874 4810001	4810001-017	City of Benicia	the distribution system	0	С	Sections of distribution system is deteriorated.	1,029,000	9,548	28,000 04	Solano	Ш	1998
2875 4110024	4110024-002	City of East Palo Alto	Design and construct a facility on site to treat high iron M and magnese contect to a safety level in order to use as the back-up source during emergency when San Francisco Water is not available.	0	С	Need emergency water supply.	500,000	3,752	28,000 17	San Mateo	II	1998
2876 4110024	4110024-001	City of East Palo Alto	Replace rusted old and undersized water mains with M new min. 8" mains to elliminate health hazard and risk of failure.	0	с	Undersized pipes and deteriorated water mains causing breaks, low pressure, and low flow rates.	1,100,000	3,752	28,000 17	San Mateo	II	1998

2877 1510029	1510029-001P	Vaughn WC INC	Vaughn WC Supply Reliability - Storage	INSTALL A 2 MG STORAGE TANK AND BOOSTER PUMPING STATION WHICH WILL IMPROVE STORAGE CAPACITY TO A MINIMUM OF 9 HRS OF STORAGE. OTHER - DESIGN & CONSTRUCTION	М	0	с	VAUGHN WATER CO. DESIRES TO INCREASE ITS QUANTITY OF ABOVE GROUND STORAGE TO IMPROVE ITS EMERGENCY/STANDBY WATER SUPPLY CAPABILITIES. CURRENTLY THE CO. HAS 0.55 mg OF STORAGE WHICH REPRESENTS ONLY 2 HRS. OF STORAGE	248,570	8,931	28,100 12	Kern	ш	1998
2878 1510029	1510029-006	Vaughn WC INC	KCWA Intertie Pipeline	The Kern County Water Agency has installed and is operating a conveyance pipeline that extends from the Henry Garnett Water Purification Plant to the northwest area of Bakersfield. This project involves a connection to this existing 48-inch pipeline. A 24-inch PVC pipeline will be connected to the existing pipeline and extended approximately 4-miles within City and County rights-of-way to an existing Vaughn Water Company 2.7 million gallon welded steel storage tank. The pipeline will include isolation valves, air release valves, and blow off assemblies along the pipeline route. The pipeline fipeline provide a permanent, reliable surface water supply to fill an existing storage tank whereby an existing booster pumping plant conveys th water to the distribution system. This will also serve to reduce the company's reliance solely upon groundwater.	M ? ie	0	C	Vaughn Water Company serves water to the Rosedale Community in Kern County, California. In 2007 and 2008 during peak hour system demands the water system received and documented numerous customer complaints regarding low system pressure. It is anticipated that in 2009 the company may experience peak hour system pressures below 20 psig and be out of compliance with State regulations if additional water supply is not acquired. The water company currently relies solely on groundwater supplies. Changing groundwater quality and more stringent water quality contaminant levels are making it increasingly difficult to rely solely on groundwater. An intertie with the Kern County Water Agency will provide a permanent, reliable surface water supply to the Vaughn Water Company system in the amount of approximately 6,000 ac-ft per year. Furthermore, it will reduce the companies use of groundwater and benefit the groundwater basin.	8,000,000	8,931	28,100 12	Kern	111	2009
2879 1510029	1510029-004	Vaughn WC INC	Catalytic Carbon Vessel Plant Expansions	Vaughn Water Company currently has two well sites that have catalytic carbon vessels to remove hydrogen sulfide concentrations (taste and odor) from the water before conveying the water to the distribution system. The capacity of these two wells can be increased, the catalytic carbon treatment system expanded, and the water supply to the distribution system increased approximately 55 percent for the two wells from 3,400 gpm to 5,300 gpm. The plans and specifications for the full treatment system design have been completed. Th project will involve the construction of a concrete foundation, addition of two catalytic carbon vessels and associated piping and valving at each well site. Modifications will be made to the electrical and control to accommodate the new vessels. These improvement will increase system pressure and ensure that the minimum system pressures are maintained.	M e ne d Is ts	0	C	Vaughn Water Company serves the Rosedale Community in Kern County, California. In 2007 and 2008 during peak hour system demands the water system received and documented numerous customer complaints regarding low system pressure. It is anticipated that in 2009 the company may experience peak hour system pressures below 20 psig and be out of compliance with State regulations if additional supply is not acquired.	850,000	8,931	28,100 12	Kern	111	2009
2880 5610011	5610011-004	Santa Paula Water System		Design & construct 9,000 lineal feet of 8 inch dist. Main including services, hydrants, air/vac valves, bklowoffs 8 construct around the second sec	ns M &	0	с	Distribution system has old, inadequate size and poor condition mains which do not comply with W.W.S.	842,400	7,150	29,281 06	Ventura	IV	1998
2881 4110003	4110003-002	City of Burlingame	Replacement of Leaking Water Mains	The water main replacement project involves the installation of approximately 21,300 linear feet of new, PVC water mains to replace the old, unlined, cast-iron water mains and the abandonment of the existing pipe	M ,	0	С	Currently, a portion of the City's water distribution system contains old, unlined, cast-iron water mains that are resulting in water losses through direct leakage as well as water main breaks. These water mains were installed circa 1925. Additionally, it is difficult to maintain an adequate disinfectant residual in these areas due to the enhanced degradation caused by the	1,500,000	8,966	29,867 17	San Mateo	II	2009

direct contact with the unlined cast iron.

2882 4310028	4310028-003	San Jose State University	SJSU South Campus Well Renovation	The project provides improvements necessary due to M the proximity of recycled water, repairs leaks and installs a disinfection system.	0	C	The San Jose State University (SISU) Public Water System (PWS) serves a population of less than 10,000 and is intertied to the San Jose Water Company's PWS that serves more than 100,000. The SISU South Campus Source Well serves a drinking water distribution system that supplies potable water to both athletic facilities and irrigation for playing fields. The Well has been in service for over 50 years and the well head is less than 50 ft from fields irrigated with recycled water. Improvements are required to provide necessary separation between the well head and recycled water. There is no disinfection system and the existing mechanical equipment has numerous leaks posing a health and safety risk.	93,100	1,000	30,000 17	Santa Clara	Ι	2009
2883 1510017	1510017-005	INDIAN WELLS VALLEY W.D.	New Construction - 400,000 gallon tank reservoir	Construction of a tank with a 400,000 gallon capacity for M the Belle Vista area would bring storage requirements in alignment with District standards.	0	С	The development in the Belle Vista area has met or exceeded District's preferred water storage capacity for consumption and fire protection. Required storage consists of four components: equalization storage (20% of maximum day demand); fire storage (the volume required for a specified fire flow and flow duration); emergency storage (24 hours of maximum day demand); and Off-Peak Power Rate storage (six hours of maximum day demand).	1,200,000	11,688	30,000 19	Kern	Ш	2009
2884 1510017	1510017-007	INDIAN WELLS VALLEY W.D.	New Construction - Well Plant for New Well	Construct one well pumping plant, including site work, M site piping, building structures, ventilation systems, motor control equipment and instrumentation and controls, and all related appurtenances at existing well pumping facilities. Work also to include removal, grading, and re-installation of temporary control, chlorination and piping equipment necessary to maintain continued service of the well during construction activities.	0	с	Well plant currently is located in a temporary facility.	650,000	11,688	30,000 19	Kern	111	2009
2885 4310028	4310028-004	San Jose State University	SJSU Water Distribution System Improvements Phase 2	The project reconfigures potable and irrigation systems M with required backflow prevention devices and remediates abandoned piping and appurtenances that pose risks to distributions system's reliability and the public's health.	0	С	The San Jose State University (SJSU) Public Water System (PWS) serves a population of between 10,001 and 100,000 and is intertied to the San Jose Water Company's PWS that serves more than 100,000. The SJSU PWS has a potable loop and an irrigation loop with multiple cross connections. The system has been in service for over 100 years and has had multiple source wells that have been previously closed or abandoned in place.	527,533	1,000	30,000 17	Santa Clara	Ι	2009
2886 1510017	1510017-006	INDIAN WELLS VALLEY W.D.	Main Line Replacement	Two secctions that are ready to be replaced are: 1/2 M mile 12" PVC line on Drummond Avenue, between Norma Street and Downs Street1/2 mile 12" PVC line on South China Lake Boulevard, between College Heights Boulevard and Norma Street	0	с	The District regularly schedules to replace sections of main line that are more than 30 years old or otherwise is in need of replacement. The District has several areas of main line that need to be replaced.	1,000,000	11,688	30,000 19	Kern	Ш	2009
2887 1510017	1510017-002	INDIAN WELLS VALLEY W.D.		INSTALL NEW PIPELINES IN THE EASTERN PORTION AND M CONSTRUCTION A STORAGE TANK IN THIS AREA. OTHER -DESIGN AND CONSTRUCTION	0	C	LIMITED TRANSMISSION CAPACITY ON EAST SIDE RESULTING IN LOW PRESSURES. ADDITIONAL STORAGE CAPACITY REQUIRED IN THIS AREA.	11,975,000	11,688	30,000 19	Kern	ш	1998
2888 4310028	4310028-002	San Jose State University	SJSU Campus Hydrants an Water System Improvements	d The project installs hydrants and improves backflow M devices in campus buildings	0	С	The San Jose State University (SJSU) Public Water System (PWS) serves a population of between 10,001 and 100,000 and is intertied to the San Jose Water Company's PWS that serves more than 100,000. The SJSU PWS serves 48 buildings in 10 square block area of downtown San Jose. The system has inadequate hydrant coverage and deficient cross control devices at the buildings putting the SJSU PWS and the public at risk due to contamination of the system and inadequate fire services.	374,800	1,000	30,000 17	Santa Clara	Ι	2009

2889 3610005	3610005-004	LAKE ARROWHEAD CSD	Backup Power Generators for North Bay PS & Bernina WTP	Install two backup power generators. One at the a District's North Bay Intake Pumping Station and one at the District's Bernina Water Treatment Plant.	М	0	с	Backup power generators are required to ensure reliability of the DIstrict's water system during power failures due to extreme weather events and emergency conditions	1,000,000	8,269	30,000 13	San Bernardino	v	2009
2890 3610005	3610005-003	LAKE ARROWHEAD CSD	Seismic upgrades to 19 water storage tanks	The project would include seismic upgrades at 19 water storage tank sites. Drainage improvements, brush and tree removal, repairs to undermined or damaged foundations and anchorage of reservoirs are among the scope of work. All of the currently unanchored reservoirs require seismic anchorage.	r M	0	С	A condition and seismic evaluation of the District's existing water storage tanks was conducted as part of its March 2008 Water Facilities Master Plan. The results of this evaluation included several recommendations for seismic upgrades. The project would address these deficiencies.	2,000,000	8,269	30,000 13	San Bernardino	v	2009
2891 1910098	1910098-004	GSWC - NORWALK		REPLACE WATER MAINS IN CRITICAL AREAS	М	0	С	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	600,000	9,617	31,221 15	Los Angeles	IV	1998
2892 1910030	1910030-002	GSWC - CULVER CITY		CEMENT LINING WATER MAINS IN CRITICAL AREAS.	М	0	с	OLD CAST IRON PIPES WITH BIO-GROWTH AND POTENTIAL NITRIFICATION PROBLEM.	320,000	9,661	31,435 15	Los Angeles	IV	1998
2893 1910030	1910030-003	GSWC - CULVER CITY		REPLACE WATER MAINS IN CRITICAL AREAS	М	0	с	UNDERSIZED PIPES (<4") THAT DO NOT COMPLY WITH WATERWORKS STANDARDS	700,000	9,661	31,435 15	Los Angeles	IV	1998
2894 3410021	3410021-002	San Juan Water District		Install a 12-inch pipeline up to the tank and refurbish the existing tank, which belongs to a neighboring water agency. The neighboring water agency does not use th tank and they have agreed to let SJWD use it. Also requires four new 60 hp pumps.	M e	0	С	Inadequate pressure to meet Waterworks Standards. As water demand increases, pressure drops below the State required minimum and temporary water outages are experienced during peak demands.	500,000	10,240	33,792 09	Sacramento	I	1998
2895 1910062	1910062-007	LA VERNE, CITY WD	3.5 MG Reservoir for Zone 1	The project will construct a 3.5 MG AWWA Steel tank, at the existing Amherst Treatment Facility Site.In addition, the project will also include site grading reconfiguration of the existing inlet/outlet pipelines an CEQA documentation.	M	0	C	Water storage criteria is based on operational, fire and emergency storage requirements; currently Zone 1 will be deficient by 1 million gallons at the project City build out. A storage deficiency indicates there will be inadequate supply under normal operation and especially during an emergency situation. This project will replace an existing tank at the Amherst Treatment Facility site that is nearing the end of its useful life. Demolishing and reconstructing this tank larger will proved additional storage supply to the zone and increase reliability in the system. The proposed site is currently owned by the City and is fairly large, approximately 5.5 acres; therefore, no additional land is required. Also, there is adequate room to construct the proposed tank prior to demolishing the existing tank. Once the tank is completed the existing tank can be demolished and that area could potentially be utilized for residential or open space use.	8,000,000	8,516	34,046 15	Los Angeles	IV	2012
2896 1910062	1910062-011	LA VERNE, CITY WD	Well Rehabilitation	The project will rehabilitate all of the City's existing wells, which are: Cartwright Well, Lincoln Well, Old Baldy Well and La Verne Heights Wells 1 & 2. The rehabilitation includes additional drilling, new casing, a conductor pipe, removal of the old casing and new gravel pack. Rehabilitating the existing City wells will not require additional land acquisition since the City currently owns all of the well sites.	Μ	0	c	The majority of the City's wells were drilled from 1913 to 1953 by cable tool method which has mills knife perforation and no sanitary seals to prevent entry of shallow contaminates into the well casing. In recent years, fewer and fewer wells have been used due to not only water quality problems such as nitrates and perchlorates, but also mechanical, structural, electrical, maintenance and operational problems. Due to these issues the City has lost 30-40% of it's total ground water production.If all the existing wells are in good working condition and could supply good quality ground water, they would supply 50% to 70% of water the City requires for the next 20 years.Rehabilitating these wells will allow the City to extract all of their groundwater rights. In addition, it will reduce the City's need for imported surface water.	3,500,000	8,516	34,046 15	Los Angeles	IV	2012

2897 1910062	1910062-010	LA VERNE, CITY WD	3 MG Reservoir for Zone 2	P. The project will construct an AWWA 3.0 MG Steel tank, M that is preliminary sited northerly of Baseline Road in the vicinity of the Plateau Forebay - a siting study will be required prior to finalizing the location. In addition, the project will also include extensive earthwork for site grading construction of approximately 1,500 lineal feet of 16" pipeline for inlet/outlet and CEQA documentation.	0	С	Water storage criteria is based on operational, fire and emergency storage requirements; currently Zone 2 is deficient by 1.5 million gallons. At the City's planed build out this deficiency doubles to 3 million gallons. A storage deficiency indicates there will be inadequate supply under normal operation and especially during an emergency situation. This project will proved additional storage supply to the zone to increase reliability to the system.	8,000,000	8,516	34,046 15	Los Angeles	IV	2012
2898 1910062	1910062-013	LA VERNE, CITY WD	Reservoir Mixing Systems	The project would install an active mixing system in each of the City's 11 storage tanks. The preferred active mixing system is the PAX Mixer developed by PAX Water Technologies. The PAX Mixer utilizes a uniquely designed 4-½" (Jiameter impeller, attached to a small submersible motor (0.5 hp) and mounted on a tripod to circulate the water within the storage tanks. This installation of this mixing system can be completed in a timely maner and without removing the tanks from service.	0	c	Water quality can degrade in storage tanks through stratification and loss of chlorine residual. Chlorine Residual Loss occurs in storage tanks when the chlorine components of the combined chloramines breakdown and dissipate into the open air at the surface of the water. The chlorine residual loss tends to occur in the warer summer months when the temperatures of the water increase and in cooler winter month when system demands are lower and water levels in the reservoir do not rise and fall as frequently. As the temperature of the water increases bacteria begins to form and break down the remaining ammonia component of the combined chloramines. These bacteria convert the ammonia to nitrific ation process known as nitrification. Nitrification process known as nitrification the the nitrification process will increase as the water temperature rises. Combined with stratification the chlorine will dissipate from the upper strats's first and the loss of chlorine residual will slowly propagate to the lower layers. Once the chlorine residual has been depleted enough the water within the tank can develop odors, grow pathogens and increase nitrates. The most common method for correcting the issues are to dose the tanks with additional chlorine. However, constant dosing is expensive and over time will corrode the hatches and roof structures where the dosing occurs.	400,000	8,516	34,046 15	Los Angeles	IV	2012
2899 1910062	1910062-009	LA VERNE, CITY WD	Phase 2 & 3 Distribution Pipelines	The proposed project will replace approximately 7,500 M lineal feet of existing 4-inch mains in: 7th, "G", Pineland, Nordland, Marco, Sherwin, Harvard, Yale, Dartmouth, Columbia, Bayberry, Vassar, Princeton, Magnolia, Bonita, Maria, Pattiglen, Rosa, Wicker and Circle Streets with new 6-inch and 8-inch DI pipe. In addition, new fire hydrants will be installed at current design spacing requirements to improve fire flows to these neighborhoods.Lastly, new fire hydrants will be installed at all dead-end streets to improve water quality and water age through regular flushing operations.	0	c	Several existing distribution pipelines within the City are undersized. These undersized pipelines create pressure problems and limit fire flow capacities within the neighborhoods they service. In addition, these pipelines are also older cast iron pipes that have reached the end of their useful life-cycles. Replacing these with new larger ductile iron pipe will improve hydraulics and flow capacity in the vicinity for another 80-100 years (life- time estimate according to DIPRA).Lastly, the majority of these pipelines are located in dead-end streets. Dead-end streets can create issues with water quality as the water ages due to low utilization. To date water quality issues in these areas are minimal; however, installation fire hydrants at these dead-ends will allow for flushing of the mains ensuring water quality issues due to dead-end pipes will be non-existent.	1,600,000	8,516	34,046 15	Los Angeles	IV	2012
2900 1910062	1910062-003	LA VERNE, CITY WD	Second/Third Street 4" Pipeline Replacement	This proposed project would replace approximately M 9,875 feet of substandard water main on Second Street, Third Street, Seventh Street, F Street and other adjoining streets with 8" ductile iron pipe. It also includes the installation of standard fire hydrants to improve fire protection. Project is being designed in phases to limit customer interruptions and school/business operations.	0	С	Several existing streets in La Verne are served by older 4" cast iron water mains. This creates not only pressure problems within these neighborhoods, but limits fire flow capacities.	1,500,000	8,516	34,046 15	Los Angeles	IV	2009

2901 1910062	1910062-008	LA VERNE, CITY WD	La Verne - E street Water Main Replacement	The proposed project will construct a new 16-inch DI M pipe, for transmission, in "E" street between the recently completed MTA Tracks undercrossing and 6th street to the north, to replace the existing 14-inch riveted steel pipe. The proposed project will also construct a new 8-inch DI pipe, for distribution, in "E" Street between 6th Street and 8th Street, to replace the existing 14-inch riveted steel pipe.Design of the project was completed in 2007. Updates to the plans and specifications will be required to meet current design standards; however, these are expected to be minor. Meaning construction on the project could occur within a few months of receiving funding.	0	c	The existing 14-inch pipeline in "E" Street is a riveted thin-wall steel pipe that is estimated to be at least 80 years old. Due to excessive age, the pipe has long since reached the end of its useful life and experiences numerous leaks and failures. In addition, the pipe is also vulnerable to excessive damage in the vicinity of the two rail line crossings.As a major source of supply to the southern region of the City, mostly industrial land uses, long term failure of this pipeline will subject users to inadequate supply and fire flows. Construction of a new 16-inch ductile iron pipe will improve overall system hydraulics and supply to the southern region of the City for the next 80-100 years (life-time estimate according to DIPRA).	1,700,000	8,516	34,046 15	Los Angeles	IV	2012
2902 1910062	1910062-012	LA VERNE, CITY WD	16" Pipeline - Plateau Forebay to Summit	The proposed project will replace approximately 2,500 M lineal feet of existing 16-inch steel pipe, between the Plateau Forebay and Summit Road, with new 16-inch Ductile Iron pipe.	0	C	The City of La Verne purchased the assets of the La Verne Plateau Mutual Water Company circa 1970, included in the purchase was the Plateau Forebay, pump station, and transmission pipeline. This existing 16" pipeline was originally constructed by the Plateau Mutual Water Company and is believed to be at least 50 plus years old. The pipeline alignment is through the Live Oak Canyon area and is a major source of supply to the City's upper reaches. Because of the elevation differential between the terminal reservoir and the Plateau Forebay the pipe is under high pressure. Any significant damage or rupture of this line poses a threat to the LeRoy Haynes Child Development Center and surrounding residences. The majority of the old transmission main has been replaced through development that has occurred in the area. This section of pipe is the last segment required to completely replace the origional transmission main.	1,200,000	8,516	34,046 15	Los Angeles	IV	2012
2903 2710017	2710017-007	Marina Coast Water District	ORD Reservoir #2 Relining Project	This project would include the following:- Perform an M evaluation of the tank integrity Determine the appropriate liner for the tank Obtain appropriate permits for disposing of tank drainage/flushing water, if needed-Select a contractor to perform the re-lining of the tank Drain and isolate the tank from the drinking water system Blast the tank interior Recoat the tank and ready the tank for re-connection to the distribution system Confirm tank reliability.	0	с	The conversion of the Fort Ord from military use to domestic use included transferring ownership to the Marina Coast Water District for the existing Fort Ord public drinking water supply, treatment, storage and distribution system. The Marina Coast Water District is now responsible for public drinking water service to the public now using and residing on the former Fort Ord land. Reservoir 2 is a drinking water storage tank for storing groundwater that is treated for distribution in the Marina Coast Water District water transmission pipelines to citizens in the Ord service area. Reservoir 2 tank is coated on the interior with butyl mastic. The interior coating has failed and could become a health and safty drinking water quality issue.	300,000	8,133	34,600 05	Monterey	II	2008

		the Salinas River, treated at the SWTP, and supplied to urban users in the City of Marina, the former Fort Ord, Monterey Peninsula, and northern Monterey County. The desalinated water would be supplied to the same end users. In order to maximize benefits and minimize cost, the Regional Desalination Project and the SWTP would share the same treated water conveyance pipeline. By installing a shared transmission system for the treated surface water and desalinated water, users would realize consistent water quality through the blending the two sources, reduced cost for the plants, and local job creation for construction, and operation and maintenance of the lengthy pipeline.The Treated Water Conveyance Pipeline is an 8-mile long force main pipeline. who to 36 inches in diameter, which will deliver		identified in Monterey County in the late 1930s, and in response to this problem, the Monterey County Water Resources Agency (MCWRA) developed and implemented Nacimiento and San Antonio Reservoirs on the Salinas River, the Castroville Seawater Intrusion Project (CSIP), and the Salinas River Diversion Facility (SRDF), currently under construction. These projects have halted the inward migration of subsurface seawater, but Monterey County continues to face water supply challenges.In 1995, the California State Water Resources Control Board (SWRCB) issued Order 95-10 requiring California American Water Company (the primary retail water purveyor on the Monterey Peninsula) to cut back its withdrawals from the Carmel River by 40% by the year 2015. In 2006, the Seaside Groundwater Basin. a maior water source for coastal			
		pipeline, up to 36 inches in diameter, which will deliver product water from the proposed Regional Desalination		Groundwater Basin, a major water source for coastal Monterey County and the Peninsula, was adjudicated			

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2905 2710017 2710017-012 Marina Coast Water District

Monterey Regional Desalination Facility pipeline south primarily for delivery to customers in the A Regional Desalination Facility is proposed to help Μ satisfy regulatory requirements and meet immediate potable water needs within Monterey County. The desalination facility would operate conjunctively with the proposed Regional Surface Water Treatment Plant and would share facilities with that plant. Desalination is a drought-resistant supply and will help meet the needs of Monterey County by providing significant regional benefits such as the development of a reliable, high-quality water supply; reduction in further seawater intrusion into the Salinas Groundwater Basin; and the creation of new jobs for construction, implementation, operation and maintenance of the facility. The Regional Desalination Facility is a part of the broadly supported Water for Monterey County Program, the regional water supply solution to meet northern Monterey County water needs. This component will consist of a 10 million gallon per day reverse osmosis desalination plant that would be located on a 10-acre site in the northwest portion of Armstrong Ranch, immediately adjacent to the existing Salinas Valley Reclamation Plant (SVRP). The project consists primarily of wells for extracting brackish (intruded) groundwater, a feedwater pipeline to transmit the water to the desalination plant, the reverse osmosis treatment plant itself, clearwells for onsite storage, and pipelines to connect potable supplies with the Treated Water

Plant and SWTP (to be located off Reservation Road in

North Marina) to the Monterey Pipeline and Terminal

Reservoir. The transmission pipeline will begin at the

intersection of the TAMC ROW and Reservation Road.

Water would be conveyed through the transmission

local growth and the former Fort Ord redevelopment (to be served by Marina Coast Water District [MCWD]) and the area's isolation from State-wide water Coastal Northern Monterey County has long faced water supply challenges; the problems of seawater intrusion and excessive surface water diversions have existed for decades. Seawater intrusion was first identified in Monterey County in the late 1930s, and in response to this problem, the Monterey County Water Resources Agency (MCWRA), one of the primary custodians of potable water supplies in North Monterey County, developed and implemented Nacimiento and San Antonio Reservoirs on the Salinas River, the Castroville Seawater Intrusion Project (CSIP), and the Salinas River Diversion Facility (SRDF), currently under construction. These projects have halted the inward migration of subsurface seawater, but Monterey County continues to face water supply challenges. In 1995, the California State Water Resources Control Board (SWRCB) issued Order 95-10 requiring California American Water Company (the primary retail water purveyor on the Monterey Peninsula) to cut back its withdrawals from the Carmel River by 40% by the year 2015. In 2006, the Seaside Groundwater Basin, a major water source for coastal Monterey County and the Peninsula, was adjudicated and a legal decision in March of that year further reduced regional water supplies by 20%. Combined with increasing projected future demands resulting from local growth and the former Fort Ord redevelopment (to be served by

and a legal decision in March of that year further

reduced regional water supplies by 20%. Combined with

increasing projected future demands resulting from

164,156,600 8,133 34,600 05 Monterey II 2009

2906 2710017	2710017-013	Marina Coast Water District	Monterey Regional Surfac	e The Surface Water Treatment Plant (SWTP) component of the Phase 1 project will have a treatment capacity of up to 14 million gallons per day. The plant would share facilities with the proposed Regional Desalination Facility, and would receive surface water diverted at the Salinas River Diversion Facility, currently under construction. In general, wintertime water would be diverted from the Salinas River, when available, and treated via a treatment train consisting of pretreatment, microfiltration (MF) membrane treatment, and post-treatment to remove particulate matter and pathogens from the raw surface water and possibly to control taste and odor issues. The Salinas River water quality at Chualar Bridge was used as the basis for the design of the SWTP as well as for the determination of treated water quality requirements. Pretreatment at the SWTP will consist of chemical coagulation with ferric choiride and an anionic polymer, high-rate sedimentation using ballasted flocculation, and turbidity removal using automatic self-cleaning strainers. Turbidity in the Salinas River varies over time and has been recorded as high as 90 Nephelometric turbidity units. Flash mixing of the ferric chloride, to be stored onsite, would be achieved using a pump diffusion	M	0	C	Coastal Northern Monterey County has long faced water supply challenges; the problems of seawater intrusion and excessive surface water diversions have existed for decades. Seawater intrusion was first identified in Monterey County in the late 1930s, and in response to this problem, the Monterey County Water Resources Agency developed and implemented Nacimiento and San Antonio Reservoirs on the Salinas River, the Castroville Seawater Intrusion Project (CSIP), and the Salinas River Diversion Facility (SRDF), currently under construction. These projects have halted the inward migration of subsurface seawater, but Monterey County continues to face water supply challenges.In 1995, the California State Water Resources Control Board (SWRCB) issued Order 95-10 requiring California American Water Company (the primary retail water purveyor on the Monterey Peninsula) to cut back its withdrawals from the Carmel River by 40% by the year 2015. In 2006, the Seaside Groundwater Basin, a major water source for coastal Monterey County and the Peninsula, was adjudicated and a legal decision in March of that year further reduced regional water supplies by 20%. Combined with increasing projected future demands resulting from local growth and the former. Fort Ort redevelopment (to be seaved by	77,910,000	8,133	34,600 05	Monterey	Ι	2009
				the ballasted flocculation system. When raw water turbidity is very low, the ballasted flocculation system				Marina Coast Water District [MCWD]) and the area's isolation from State-wide water distribution						
2907 4110021	4110021-001	Estero Municipal Improvement District		Desgin and Construct alternative water supply main to redundant SFWD supply.	М	0	C	Need an alternate supply main since system supplied by one main.	20,000,000	7,781	35,000 17	San Mateo	П	1998
2908 4210016	4210016-010	Golden State Water Company - Orcutt	GSCW-Orcutt System- Woodmere Plant - Backup 500KW Generator	Install a new generator for the two wells. Also included in the scope are electric panels and connection to power source.	Μ	0	С	There are two wells at the Woodmere Plant that are major producers for the Orcutt System. Currently, the Orcutt System is without permanent back up power generation at plant sites, and it is dependent on water storage in the Orcutt Hill Reservoir in the event of a power outage or other emergency. As a result, with an extended interruption of electrical power on the grid, customers in this system could be without water. A generator at this site will permit the well(s) to continue to produce in such an emergency, and also provide water to the lower pressure zones within the system.	506,000	10,846	35,212 06	Santa Barbara	IV	2009
2909 4210016	4210016-006	Golden State Water Company - Orcutt		Replace 2400 feet of water main.	М	0	С	Distribution system has old and inadequate size mains which do not comply with Water Works standards.	154,000	10,846	35,212 06	Santa Barbara	IV	1998
2910 3010030	3010030-003	City of San Juan Capistrano		Construct 2 MG reservoir and transmission main to link into distribution system.	Μ	0	С	Current reservoir capacity to zone is inadequate causing pressure fluctuation. Reservoir is in need of major repair.	1,815,000	10,810	36,037 08	Orange	V	1998
2911 3010030	3010030-002	City of San Juan Capistrano		Construct new well in Trabuco Creek (North) area of	М	0	С	Loss of capacity due to reduced yield and bio fouling in	276,000	10,810	36,037 08	Orange	v	1998
2912 1910024	1910024-001	GSWC - CLAREMONT		REPLACE OR ABANDON UNDERSIZED MAINS OVER A 2 YEAR PERIOD	Μ	0	С	6100' OF WATER MAINS LESS THAN 4" IN DIAMETER. THESE MAINS DO NOT COMPLY WITH TITLE 22, SECTION 64628 (a)	300,000	11,061	36,435 07	Los Angeles	IV	1998
2913 5610018	5610018-008	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Roseland Booster Pump Station	The Contractor shall furnish all materials, equipment, - tools and labor for the construction of a booster pump station including booster pumps, fire water pump, piping, emergency generator, electrical and instrumentation. Upon completion of the project, customers will be ensured adequate fire protection; thereby protecting their health and safety.	Μ	0	с	The homes in the vicinity of Roseland Avenue within Ventura County Waterworks District No. 1 (outside Moorpark) receive water supply from a nearby water tank. Many homes have their own booster pumps to provide preferred domestic water pressure at their home sites, elevated above Roseland Avenue. During previous fire events, these homes did not have adequate fire-flow supply. The proposed booster station project is necessary in order to provide adequate fire flow protection.	1,000,000	10,180	36,786 06	Ventura	IV	2009

2914 5610018	5610018-007	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Home Acres Pipe Line Replacement	This project will include the replacement of - approximately 8,000 linear feet of aged 12 inch water water lines in segments at various locations throughout the District's water system. The work consists of installation of water lines, gate valves, air and vacuum relief valves, fire hydrants, reconnecting water service lines and appurtenances; and removal and construction of a pressure reducing station. The work also includes, but is not limited to replacement of fittings, disinfecting and testing, potholing, sheeting and shoring, insertion of temporary shut-off valves, temporary by-pass or supply line, removal and reconstruction of existing improvements, traffic control, disposal of all excess excavated or removed materials, and construction of temporary and permanent pavement resurfacing.Completion of this project will ensure a reliable water supply, meeting all Health Department Regulations.This project will also help conserve water, and reduce energy costs.	M 1 3	0	c	Ventura County Waterworks District No. 1 (District) water system is deteriorating because of aging and tuberculation. Consequently, valves, blow-offs, and firehydrants are malfuncting. Operation & Maintenance costs have been on the rise. As is typical of an aging system, the District is experiencing pressure problems, water quality and capacity issues, and frequent water line breaks.	2,200,000	10,180	36,786 06	Ventura	IV	2009
2915 5610018	5610018-010	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District #1 - Water Services Replacement	This project consists of replacing 3,442 linear feet of poly water service lines wiht copper service lines in accordance with the District's specificaitons. Upon completion, the system would be reliable and customers would be assurred a rmore reliable source o water. When completed this project will also help conserve the water and minimize disruptions to our customers.	M	0	c	Poly service water lines became popular in the middle of our last century. They were used mostly for service lines and ranged from 3/4 " to 2 ". It seemed to be the answer for a lifetime of service, until it began to split within ten years of service. It is just a matter of time before more will fail. The quality of service is compromised and interrupted as these services fail. Usually they fail one at a time which means time after time we must interrupt the service to our customers in order to replace these services with copper.	4,106,400	10,180	36,786 06	Ventura	IV	2009
2916 5610018	5610018-004	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Stockton Reservoir Repair	Repair the leaks in the Stockton Reservoir to assure - continued domestic water storage and fire protection in the 994 Zone. When this project is completed it will help to conserve the water supply, and reduce energy costs.	M n o	0	С	Ventura County Waterworks District No. 1 (District) Stockton Reservoir is a bolted steel reservoir. It is leaking at the seams in several locations. The reservoir is the only storage for the 994 Zone within the District. Without the reservoir the Zone would have no storage for domestic water, and fire protection would be a health and safety concern.	80,000	10,180	36,786 06	Ventura	IV	2009
2917 5610018	5610018-003	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Well 96 Rehabilitation	Install a swage patch on the hole in the well casing. - Conduct mechanical cleaning utilizing a standard steel wired brush to restore well performance. Install new column pipe, column tube and shaft, and well pump.When completed this project will also reduce energy costs, conserve the water supply, and reduce dependence on imported State water.	Μ	0	С	Ventura County Waterworks District No. 1 (District) well 96 was drilled and constructed in 1977. The well pump recently failed and was pulled for inspection. After inspection of the well equipment, it was determined that the pump, column pipe, and column tube and shaft need replacement. The well casing is also heavily encrusted with mineral deposits that must be removed.	300,000	10,180	36,786 06	Ventura	IV	2009
2918 5610018	5610018-001	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Home Acres Reservoir	The contractor shall furnish all materials, equipment, - tools, and labor for the construction of a 1.5 million gallon steel water tank. When completed this project will also reduce energy costs, conserve the water supply, and reduce dependence on imported State water.	Μ	0	с	Ventura County Waterworks Distric No. 1 (District) provides water service to the Home Acres Community. The existing Home Acres reservoir tank is a bolted steel tank constructed in 1965. The tank must be replaced in order to provide reliable infrastructure for distribution of potable water and fire protection for the Home Acres service area.	2,000,000	10,180	36,786 06	Ventura	IV	2009

2919 5610018	5610018-006	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Walnut Acres Pipeline Replacement	This project is to replace approximately 7,062 linear feet M of all undersized and inadequate water mainlines, service lines, and fire protection lines and apprutanances. Upon completion of this project this portion of the system would have adequate fire flows, meet current standards thereby ensuring the health and safety of our customers. This project will also reduce energy costs and conserve the water supply.	0	с	When the Walnut Acres Tract in Ventura County Waterworks District No. 1 was developed, the standards for domestic and fire flows were much different. A development could include four inch mainlines and wharf heads for fire protection. The lines are undersized according to our current CDPH standards and are in need of replacement, due to the fact that they are nearly fifty five years old.	1,200,000	10,180	36,786 06	Ventura	IV	2009
2920 5610018	5610018-009	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Wellhead Treatment (Well #20)	The Contractor shall furnish all materials, equipment, M tools and labor for the construction of an operational facility to pump raw water at a rate of 1200 gpm from existing Well No. 20, (drilled and constructed in late 2007), and receive filtration to remove excess concentrations of iron and manganese, before supplying water to the 745 pressure zone and the existing 1 MG Balcom Canyon Reservoir. Work includes construction of the following: Well Pump, Booster Pump Station, Filtration System, Chemical Containment Area, Reclaim Water Tank and Pumps, Electrical and Instrumentation, and Site Work. This project will greatly reduce dependence on imported water	0	с	Well 20 within Ventura County Waterworks Distric No. 1 (District) was constructed by private developer Toll Brothers Inc. as a condition to replace aging and existing local wells within the Toll Brother's Tract 4928 in Moorpark. The District has a separate project to complete the well pump operation, provide filtration treatment, and supply 1200 gpm of local water to the existing 1180 pressure zone within the District. When the well was originally constructed and tested, water was found to have excessive concentrations of Secondary Contaminants, i.e. Iron and Manganese. Until this project is constructed, the subject supply of local water is not available for use to the District.	2,500,000	10,180	36,786 06	Ventura	IV	2009
2921 0710006	0710006-001	City of Martinez	Harborview Reservoir Replacement	The project will consist of the replacement of a 1964 M 1.25 million gallon treated water reservoir. Current capacity is limited to 1 million gallons to ensure structural integrity of the prestressed concrete. Replacement will consist of the demolition of the existing reservoir and the construction of a new 1.65 million gallon welded steel reservoir on the existing site. The existing 16" line will be lowered and 1500 feet of new 16" line will be added to meet the hydraulic flow requirements into the City of Martinez zone 1 system.	0	С	This project is intended to solve a water system deficiency in treated water storage capacity. California code of regulations title 22 chapter 16 california water works standards article 2 §64564 determination of needed storage volume. The project will consist of the replacement of a 1964 1.25 million gallon treated water reservoir. Current capacity is limited to 1 million gallons to ensure structural integrity of the prestressed concrete. The replacement volume will be 1.65 million gallons.	4,126,212	9,975	37,000 04	Contra Costa	Ι	2009
2922 1310002	1310002-002	Calexico, City of	Water Treatment Plant Upgrade	This project will consist of a new clarifier matching the M size of the clarifier built in 1999 and replacing the clarifier built in 1999; two new filters matching the size of the filters built in 1999 and replacing the filters built in 1949; a new chlorination facility that meets new regulatory requirements and codes and replacing the chlorination facilities built in 1949; and an additional standby generator to supplement the existing standby generator. All of the improvements that will be done are necessary to provide a complete and operable facility. The new equipment utilizes the latest available higher efficient technology that will maintain the plant capacity at 16.0 MGD.	0	с	The City of Calexico Utility Services Department is proposing to upgrade the Water Treatment Plant located at 545 Pierce Avenue, Calexico, California. This upgrade is necessary as it will replace existing functional obsolete equipment and structures that are almost 59 years old with new structures and equipment.	10,000,000	7,835	37,000 14	Imperial	v	2009
2923 0710006	0710006-002	City of Martinez	Raw Water Pipeline Replacement	This project consists of the replacement of M approximately 2300 feet of 32 inch steel water line. This pipeline was constructed in 1948 with the original Martinez Water Treatment Plant and is reaching the end of it's useful life. Leaks on the pipeline have developed and been repaired as needed to maintain water to the Martinez Water System. The pipeline is a single point failure to the water plant, and planning this replacement will require coordination with system demand to assure no risk to the Martinez Water system supply.	0	с	The City of Martinez source water pipeline has reached it's expected usefull life. This is a single entry point to the Martinez water treatment plant.California Code of Regulations Title 22 Chapter 16 California Water Works Standards Section 64554 (a) "At all times, a public water system's water sources shall have the capacity to meet the system's maximum day demand (MDD).No violation has occurred to date, but the probability of the pipeline failure increases with age.	1,000,000	9,975	37,000 04	Contra Costa	II	2009

2924 1910028	1910028-004	CRESCENTA VALLEY CWD		Replace the existing 11 wells with up to 16 new wells of modem design and construction to replace existing production.	Μ	0	С	The water systems has 10 old cable tool drilled wells and one (1) mud rotary drilled well. All of the wells were constructed prior to 1951 without sanitary seals and have biological growths, such as iron bacteria, and casing corrosion.	11,069,460	8,133	38,000 15	Los Angeles	IV	1999
2925 4110025	4110025-002	North Coast County Water Dist		Construct intertie with the City of San Bruno which will be second source of supply.	М	0	С	Need alternate water supply in case of emergency.	3,125,000	11,743	38,390 17	San Mateo	Ш	1998
2926 4110025	4110025-004	North Coast County Water Dist		Abandon tank and construct ne waterline to serve area.	М	0	С	Wooden tank has leakage abd a roof in poor condition.	250,000	11,743	38,390 17	San Mateo	Ш	1998
2927 4110025	4110025-003	North Coast County Water Dist		Construct loof to bring second supply line to this area.	М	0	С	Need alternate water supply line for a service area in case of an emergency.	425,000	11,743	38,390 17	San Mateo	Ш	1998
2928 4110025	4110025-009	North Coast County Water Dist	Distribution System Piping - Seismic Upgrade	Construct 8000 ft of seismically hardened piping on the west side of the fault. Additional modifications to pipe crossings.	Μ	0	С	8000 ft of distribution piping is seismically unstable and is connected to the Christen Hill Tank that serves a major portion of the distribution system.	3,090,000	11,743	38,390 17	San Mateo	II	2007
2929 4110025	4110025-010	North Coast County Water Dist	Christen Hill Tank Replacement	Replace tank.	М	0	С	Christen Hill Tank is seismically unstable.	7,500,000	11,743	38,390 17	San Mateo	П	2007
2930 4110025	4110025-008	North Coast County Water Dist	Replace existing 21inch transmission main	Project replaces the existing piping with a seismically hardened 24in ductile iron pipeline. Six isolation valve/transition assemblies will be constructed that isolates damaged pipe and transition flow to above ground after emergency piping installation.	М	0	С	6,000 ft of 21in transmission main is constructed above the San Andreas Fault. Severe damage is expected when the fault moves; it is anticipated to move six to twelve feet during a major earthquake.	2,100,000	11,743	38,390 17	San Mateo	II	2007
2931 3710021	3710021-004	San Dieguito WD	SDWD Water Valve Replacements for Distribution System, CWW09A	SDWD Water Valve Replacement project replaces approximately 60 water isolation valves in the distribution system. The new valves range in size from 8" to 12" gate valves. The valves being replaced are old, corroded, and no longer seal correctly. The replacement of valves involves shutting down the distribution system in an area, providing traffic control, digging out the valves, cutting the water mains 3 feet from the valve, removing the tee or cross, dropping in the new tee or cross with the valves, installing the concrete thrust blocks, backfill and compact area, flush and test water main, place asphalt to repair the road. Replacement of broken valves provides assurance that valves will operate when needed. If not replaced, District personnel will continue to experience operational inefficiencies, loss of resources, and thus impact greater areas upon occurrence water main breaks or shut downs for maintenance purposes. This project has been identified in the District'S Water Master Plan as Project No. HP-4.Supply of potable drinking water is a fundamental responsibility of the District, and is supported in the City's General Plan by RM-1 to, "conserve, protect, and enhance the water resources in the Planning Area."A Programmed Environmental Impact Report was certified by the District Board as part of list of Water Master Plan project son May 22, 2002. This project was determined	Μ.	0	C	SDWD Water Valve Replacement project replaces approximately 60 water isolation valves in the distribution system. The new valves range in size from 8" to 12" gate valves. The valves being replaced are old, corroded, and no longer seal correctly. Replacement of broken valves provides assurance that valves will operate when needed. If not replaced, District personnel will continue to experience operational inefficiencies, loss of resources, and thus impact greater areas upon occurrence water main breaks or shut downs for maintenance purposes. This project has been identified in the District's Water Master Plan as Project No. HP-4.	450,000	11,135	38,500 14	San Diego	v	2009

2932 3710021	3710021-002	San Dieguito WD	SDWD Instrumentation, Telemetry, Centralized Control System and SecurityProject	This project involves the installation of an M Instrumentation, Telemetry, and Centralized Control System. It would replace existing outdated Telemetry, Instrumentation, and Reporting System with a new enhanced automated record keeping and centralized control system. The system will connect 16 remote water facility locations to one centralized location. An enhanced system would offer monitoring, reduce field trips by operational personnel, improve system security and provide invaluable information during emergency situations. Supply of potable drinking water is a fundamental responsibility of the District, and is supported in the City's General Plan by RM-1 to, "conserve, protect, and enhance the water resources in the Planning Area."Categorical ExemptionArt. 19, Section 15302(c)NEPA will require a Categorical Exclusion.	0	с	SDWD Instrumentation, Telemetry, Centralized Control System and SecurityProject No. CWW98BThis project involves the installation of an Instrumentation, Telemetry, and Centralized Control System. It would replace existing outdated Telemetry, Instrumentation, and Reporting System with a new enhanced automated record keeping and centralized control system. The system will connect 16 remote water facility locations to one centralized location.	650,000	11,135	38,500 14	San Diego	v	2009
2933 3710021	3710021-006	San Dieguito WD	SDWD Cathodic Protection for Transmission Mains, Project No. CWW08G	Cathodic protection is used to control the corrosion of M buried steel water pipelines. It has been demonstrated to be a cost effective way to extend the life of a pipeline. The construction of anode stations will include traffic control, trenching and resurfacing to expose the transmission main, remove and reinstall new lead connections, and construct new anode beds. Supply of potable drinking water is a fundamental responsibility of the District, and is supported in the City's General Plan by RM-1 to, "conserve, protect, and enhance the water resources in the Planning Area."Categorical Exemption Art. 19, Section 15302(c)NEPA will require a Categorical Exclusion.	0	С	This project involves installation of cathodic anodes to replace existing anodes that have deteriorated and no longer provides adequate corrosion protection to the District's 36-inch steel transmission main. Locations of the project are:Anode Bed No. 2Anode Bed No. 3Anode Bed No. 6	225,000	11,135	38,500 14	San Diego	v	2009
2934 1910042	1910042-006	PICO RIVERA - CITY, WATER DEPT.	Pico Rivera - SCADA and Automation for Energy Savings and Water Conservation	The project will initially include a comprehensive inspection program of Well #4, including a detailed survey, testing, and video inspections. Based on the results of the inspection program, as a minimum it is anticipated that the following rehabilitation improvements will be necessary at Well #41.1. Re-case the existing well by installation of well liner.2. Air Burst well3. Dual air swab well (mechanical re-development, airlifting, and swabbing, using a swab tool)4. Develop test well (re-development of well via pumping methods)5. Install a New Pump The City completed a SCADA Master Plan (Preliminary Engineering Report) in November 2007 outlining the component needs to upgrade the SCADA system. The SCADA upgrade project will include at a minimum the following:1. SCADA Workstation and new hardware plus redundant workstations2. Historian server for long term archiving3. Replace existing RTU's with PLC's4. Install uninterruptible power supplies for all devices5. Replace the leased telephone line communication with spread spectrum radio communicationsThe City will bid and contract services to design, manufacture, test and install a complete SCADA system for the city's plant and well facilities. The contracted services will hold workshops with City organizations vested in the new SCADA system to review the original plan and discuss changes that may be required due to new functional	0	С	On December 5, 2011, Southern California Edison performed an energy test on Well #4 turbine well pump. The energy test indicated that the pump is running inefficiently most likely due to the pump wear and failure of the pump design to meet existing conditions. The current turbine pump is running at 13.9% overall plant efficiency when taken at 60 Hz (cycles per second) and at 6.8% overall plant efficiency when taken at 56 Hz (cycles per second). At 60 Hz, the turbine pump used 1,539 kWh of energy per Acre Foot of water pumped while at 56 Hz, the turbine pump used 3,323 kWh of energy per Acre Foot of water pumped. The energy efficiency analysis estimated an improvement of overall plant efficiency from 13.9% to 71.0%, which will save the City up to 551,615 kWh of energy and 564,406.55, annually. The kWh savings translate to a 240-ton decrease in carbon dioxide emissions. Table 2.2 shows existing and improved statistics as related to the current and updated turbine pumps.In addition to the Well #4 rehabilitation, the City's current SCADA system is antiquated and many components are not reliable, which subjects the City to potential vulnerabilities should major water supply equipment failures. The City is very concerned that a critical water supply well may not be available and operated during a fire flow event, due to the outdated and unreliable SCADA system. In the past several	700,000	9,335	39,000 07	Los Angeles	IV	2012

2935 4310004	4310004-001	City of Gilroy	First Street Water Main Replacement	Replace existing water main on First Street between M Monterey Street and Santa Teresa Boulevard with a new 24-inch diameter water main. The total project length is approximately 8,000 feet. Ductile iron pipe will be used to replace the existing pit cast iron pipe, which was installed in 1898 and has exceeded its service life. Mainline valves will be installed at each intersection to allow future repair work to be performed without affecting all businesses along the corridor. New fire hydrant, water service and fire service laterals will also be installed as part of the project.	0	с	The existing water main on First Street between Monterey Street and Santa Teresa Boulevard was installed in 1898 and consists of pit cast iron pipe. The pipe is out of round and standard pipe fittings cannot be used, making repairs very difficult. There are no mainline valves between Hanna Street and Westwood Drive, so any shutdowns affect all properties along this 5,000 foot section. A water main break occurred on January 20, 1998, and it took three hours for crews to isolate the leak. This project is intended to replace this water main, which has far exceeded its service life.	2,750,000	11,085	39,050 17	Santa Clara	II	2009
2936 1910090	1910090-005	MONROVIA-CITY, WATER DEPT.	Water Main Replacement	The solution to the issues described would be as M follows:Grand Avenue - Replacement of 600 feet of 8 inch steel pipe with 8 inch ductile iron pipe from Greystone to ProspectGrand Avenue - Replacement of 200 feet of 8 inch steel pipe with 8 inch ductile iron pipe from Grand to Valle VistAFoothill Blvd Installation of 500 feet of ductile iron pipe from Canyon to GrandEl Dorado - Replacement of 900 feet of 6 inch cast iron pipe with 8 inch ductile iron pipe from Mayflower to VioletAny upgrades needed for fire hydrant requirements, air/vacuum release designs, water sampling criteria, or water service improvements will be addressed.All construction will be done by contract and will meet all City, State and Fereral requirements and the installations will meet current American Water Works Standards.	0	C	The City of Monrovia Utilities Division continually strives to improve water service, maintain water quality and improve fire fighting capabilities to the customers and citizens of Monrovia. To accomplish this we continually inspect, test and evaluate our current water mains and appurtenences. The following areas have been identified as substandard due to flow capabilities, high number of repairs required to maintain service, possible or existing water quality issues and the ability to meet fire flow standards/Grand Avenue - From Greystone to ProspectGrand Avenue - From Grand to Valle VistaFoothill Blvd From Canyon to GrandEl Dorado Avenue - From Encino to FifthLinwood Avenue - From Mayflower to Violet.	375,000	9,169	39,147 22	Los Angeles	IV	2009
2937 1910090	1910090-008	MONROVIA-CITY, WATER DEPT.	Install Additional Booster #1-6	The City would hire a contractor to supply and install all M equipment, including electrical requirements, piping and related materials to provide booster #1-6.This additional booster would increase our flow capability to 3500 gallons per minute. Al materials and equipment would meet all current standards and specifications.	0	C	The City of Monrovia Water system is, during high demands, falling short of the amount of water we are able to pump from the City well site into the distribution system. The well site is our source of water and feeds the entire water system. This could interfear with our systems ability to supply fire fighting requirements and ability to recover from system demands from high use or maintenance problems.	100,000	9,169	39,147 22	Los Angeles	IV	2009
2938 1910090	1910090-004	MONROVIA-CITY, WATER DEPT.	Emergency water system connections	The City of Monrovia would have six emergency M connections constructed in various locations in the City Water System. These connections would enable us to pump water from one zone to another, or around critical vunerable locations in a zone to continue providing a usable, uninterupted water supply. Each connection would consist of two (2) 2 1/2 inch and two (2) 4 inch fire hose connections permanently connected to the water system with a normally closed line valve installed in the watermain. In addition to the facilities constructed two trailer mounted potable water pumps, meeting all current Federal and State requirements, would be purchased and maintained by the City Water System. One of the pumps would be capable of pumping at 400 to 500 gallons per minute.	0	с	The City of Monrovia is a community in and near the foothills of Los Angeles County. The City system has five pressure zones and a storage capicity of 23.5 million gallons. Currently there are no internal system connections or pumping equipment that would enable the City to provide water supplies, for extended periods of time, to a majority of it's residents in the event of wildfires, large system wide emergiecies (Edison power outages) or water system failures. These situations could produce low water pressure, or possibly no water pressure, in one or more of the pressure zones. This could result in boil water advisories, possible contamination to the drinking water system and a loss of system fire fighting capibilities.	400,000	9,169	39,147 22	Los Angeles	IV	2009

2939 1910090	1910090-007	MONROVIA-CITY, WATER DEPT.	Replace Electrical Control Panel at Ridgeside Reservoir	The City will hire a contractor to purchase and install a M new electrical panel and conduits to supply all current and future power requirements and meet all standards and regulations that apply. This will ensure a continuing and reliable supply of water and security at the facility.	0	С	The existing electricial panel that is 50+/- years old is in poor condition and may fail at any time. The unit does not meet current National Electrical Code Standards or the standards for metered electrical service of Southern California Edison, our power provider. The panel provides all power for pump control, SCADA controls, lighting and security requirements. Failure of this equipment would seriously jepordize our ability to serve our customer with safe potable drinking water and may interfear with fire fighting needs.	250,000	9,169	39,147 22	Los Angeles	IV	2009
2940 3710019	3710019-006	Ramona Municipal WD	Bargar Water Treatment Plant	Construct a 4 MGD water treatment plant on the current Bargar Plant site by replacing the current inoperative processes with new, more efficient processes that will meet current and future water quality standards. The new plant will be modular in nature to allow further expansion if needed. Because the project is on the current Bargar Plant site, there is no impact to the environment or cultural assests or the area.	0	c	Existing facility fails to meet enhanced coagulation rule and is therefore inoperable. Its unavailability resulted in Do Not Use Order and later a Do Not Drink Order and a Boil Water Order during the Witch Fire. The water system is dependent on pumping imported treated water to the District and loss of power to the pumps, failure of the pumps, or loss of the pipelines would lead a repeat of the Do Not Use Order etc and the lack of water for the CalFire Fire Attack Base located in Ramona. Inaddition the unavailability of this plant leads to higher TDS of effluent produced by two sewer treatment planst in Ramona which has resulted in violation of the RWQCB permit for discharging in the local ground water basin. The water source for this treatment plant has a much lower TDS concentration than CWA water and would result in improved groundwater TDS. Also placing the Bargar plant into operation will lower energy consumption at the District's wastewater treatment plant by lowering the amount of TDS that needs to be removed at the wastewater treatment, which is required by the Regional Water Quality Control Board. Also, with out the Bargar plant the District pumping uses a significant amount of electrical energy that results in a significant carbon footprint. This project will save energy costs associating with pumping treated water up 1000' feet from San Diego County Water Authority's pump sation	3,700,000	9,330	40,000 14	San Diego	V	2009
2941 3710019	3710019-004	Ramona Municipal WD	30 inch Pipeline Repair	The expansion joints are a main area of concern due to M the fact that the original set distance for the joints is unknown and the amount of movement still available to the joints. At a minimum, the expansion joints and pipe should be adjusted in order for the expansion joints to be reset to the manufacturer's recommendations. Recoate the exterior coating of the pipe at various locations. This will ensure that the pipeline is appropriately coated for corrosion protection.Install additional concrete anchor blocks and expansion joints on the pipeline to meet the requirements specified in AVWA M11. The anchor blocks would ensure that concentrations of thrust forces in any direction will be resisted by the rigid concrete anchor rather than the relatively flexible steel pipe.All loose tie downs at pipe supports should be retightened and slipped pads should be moved back to their original positions.These improvements are currently under design.	0	c	Ramona Municipal Water District (RMWD) operates a 30-inch transmission main which delivers water from the Poway Pump Station to Mount Woodson Reservoir and Westend Reservoir. This pipeline extends from the Blue Sky Preserve to the edge of the District's boundary and is the sole active supply of water for the community of Ramona. The cement mortar lined and epoxy coated pipeline was installed in 2003 and travels above and below grade over a horizontal distance of approximately 5,850-feet. The elevation of the pipeline ranges between 800-feet to 1,460-feet. The steel class of the pipeline ranges from CL 500 pipe at lower elevations near Poway Pump Station to CL 200 pipe at the top of the hill where the pipe heads below grade. An 18-inch transmission main travels below grade parallel to the alignment of the above grade portion of the 30-inch pipeline. During the Witch Creek fire in 2007, the surrounding area near the above grade portion of the pipeline was extensively burned and caused visible damage to the pipeline's exterior coating and pipe support pads. A Federal Emergency Management Agency (FEMA) Report was written in December 2007 which documented the visible damage to the exterior of the pipeline. The above groud pipeline is supported by five (5) concrete thrust/anchor blocks and approximately 75 pipe supports spaced between 20 to 40-feet apart. The pipeline also travels	1,240,000	9,330	40,000 14	San Diego	v	2009

2942 4110023	4110023-010		Pump Station No. 4	This project is currently at the 65% design stage and with the build a new pump station, including pumps, motors, controls with SCADA software and emergency generator backup power. The existing pump station will also be disassembled/demolished and the site restored. Construction of a new station was chosen because the site of the existing station lacks space for the required expansion. The new pump station will have three 550- gpm pumps situated above ground that will provide sufficient capacity (maximum day demand concurrent with refill for fire flow storage) for at least the next 50 years in conformance with the City's Water Master Plan Update and will ensure public health and safety. The new masonry block structure will be built on a reinforced concrete pad foundation and will replace the existing undersized wood-frame structure to ensure compliance with the latest codes. Other improvements consist of flexible connections to the water system, paved site access, perimeter fencing, landscaping, security features and lighting. As a portion of the site will be on Caltrans property (Skyline Blvd. SR-35), an encroachment permit from Caltrans has been obtained by the City.	U	C	of College Drive and Skyline Boulevard (CA-S), Pump Station No. 4 is the sole pump station providing water to the City's Pressure Zone 11, covering an area of approximately 460 acres containing approximately 900 residential structures plus the structures at Skyline Community College, the largest of which has an approximate area of 145,000 square feet. The current station does not meet existing water demands (maximum day concurrent with refill for fire flow storage) per the City's 2001 Water System Master Plan Update. The station has a firm capacity of 600 gallons per minute (gpm) but requires a capacity of 2300 gpm resulting in a current deficit of 1700 gpm. The pump station is also situated in proximity to the San Andreas earthquake fault line and currently does not have flexible connections to the water system. Approaching the end of its useful life, a loss of function for a period greater than eight hours would result in severe outage conditions, including loss of fire flow.	2,200,000	11,302	40,105 17	San Mateo	IJ	2009
2943 4110023	4110023-011	City of San Bruno	New Regulators on Four SFPUC Service Connectio	This project will install four new regulators—fabricated M ns vault with associated piping—that would regulate high pressure between from SFPUC supply and San Bruno's distribution system at four additional service connection points, thereby reducing the very high pressure that can damage sections of the City's aging distribution system. In addition, the City would be able to isolate its distribution system from the SFPUC distribution system during a seismic event.	0	с	The City of San Bruno has two sources of water that is delivered to the ratepayers. The two sources are: 1) the City's ground water and, 2) surface water provided by the San Francisco Public Utility Commission (SFPUC). The City has five inner tie connections with (SFPUC). These five connections provide half of the City's daily demand into the distribution system. One out of the five connections between San Bruno's and the SFPUC	400,000	11,502	40,165 17	San Mateo	II	2009

distribution system. All connection lies within a mile of the San Andreas Fault. Without adding the additional four new regulators, the City will not be able to regulate the high pressure from the SFPUC water supply and in addition, in the event of pressure loss in the SFPUC system, San Bruno's system is not adequately protected to maintain its own safe operating pressure.

2944 4110023	4110023-013	City of San Bruno	Sweeny Ridge Water Pipeline Rehabilitation	The City has completed a preliminary design report. The M report suggested a trench less lining of the existing 4,850 feet of pipe. All access points for this lining project will be limited to already available and accessible locations, eliminating the need to perform heavy construction in environmentally sensitive zones. The benefits of doing the project with this methodology is that lining provides a smooth interior thereby reducing friction lost, and the lining strengthens the existing metal pipe. Lining is proven method for working in areas of complexity such as existing structures where dig and replace would inconvenience citizens or, as in this case, where environmental impacts can and will be reduced to zero. The City is familiar with lining projects and has ready to go specifications without significant change. In addition, the City has a qualified consulting engineering firm already under contract to design similar projects that can create the needed specifications and bid documents within a condensed time frame. Contractors would be available for such a project due to its size and dollar value. Again, the City has successfully completed projects of this type and this particular projects is designed to prevent catastrophic failure that would impair fire flow and perhaps draw in contaminates into the City's drinking water supply.	0	c	Located near the uppermost elevation on the western edge of city limits, the Sweeny Ride Water Pipeline extends for approximately 4,850 feet and serves Water Tank No. 7, which is used for standby and fire suppression flows. At 50 years of age, the pipeline is at the end of its useful life, as demonstrated by its failures in recent years. Moreover, servicing the pipeline and responding to repairs is very difficult due to the lack of access roads. For example, during a recent main break in 2007, staff had to carry their gear on foot, taking approximately 45 minutes each way. In the event of a serious break—an event not unlikely given the pipeline's age and close proximity to the San Andreas Fault—staff is unable to respond in a timely manner to prevent significant losses of service. The pipeline is in an environmentally sensitive area that necessitates a carefully planned remediation of the problem pipe to minimize potential impacts. If extensive emergency repair is required, overcoming the obstacles of working in an environmentally sensitive area would make the emergency work time consumptive, thereby increasing the probability of low peak and low fire demand water supply for a long duration.	2,500,000	11,502	40,165 17	San Mateo	11	2009
2945 4110023	4110023-014	City of San Bruno	Mastick Avenue Water Main Replacement Proje	This project will replace approximately 1.6 miles of 2- M ct inch, 4-inch and 8-inch water pipelines. It is the City's intention to replace all lines with a single combined 12- inch ductile iron pipe (DIP). The replacement DIP will follow the existing sewer pipeline alignment with required distances and offsets between water supply and sewer drainpipes. Increasing the water pipeline to 12 inches assures the customer and the City with a supply condition that allows for future expansion to areas of the City fed by this water supply. Most importantly, this project provides an adequate, reliable water supply meeting all Health Code State standards	0	с	The water main pipelines along Mastick Avenue are approximately 80 years old and account for more breaks proportional to its length than any other main section in the City. Breaks cause significant disruptions to water service and enhances the probability of a low- pressure event that can result in dirt and bacteria entering into the drinking water supply. The more breaks there are, the greater the likelihood that a low- pressure event will develop and lead to conditions detrimental to human health. In addition, breaks result in significant overtime costs for the City and divert resources from more proactive maintenance work such	1,000,000	11,502	40,165 17	San Mateo	Π	2009

as troubleshooting existing systems, chemical metering and other active predictive maintenance activities. A long repair in the off work hours will cause a proportional decrease in staff during the next day, for those working on the prior evening or very early morning repairs are due needed rest and recuperation as required by labor bargaining agreements. The City has a complicated water system with wells, SFPUC water and a complex of pumping stations and water storage tanks that require adequate staffing to ensure a reliable and safe drinking water supply. Replacing these pipelines will significantly improve water service and lessen the risks to water quality due to the numerous

breaks.

for the existing customers with larger and new pipe.

2946 4910014	4910014-002	Rohnert Park, City of	Rohnert Park Water Main Improvement Project	The project involves construction of water mains and appurtenances within the City and will include trenching within existing roadways, installing ductile iron or plastic water pipe, backfilling, and restoring the road surface. Where there are existing water mains, new mains will be installed parallel to the existing mains to enhance capacity. The following components are included in the project:(1) A 16" water main in Rohnert Park Expressway, extending from the Sonoma County Water Agency (SCWA) aqueduct located within the railroad right-of-way to Snyder Lane. Three underground vaults will be installed, two with pressure regulating valves and the third with metering facilities.(2) A parallel 12" water main in East Cotati Avenue from the existing aqueduct turnout within the road right-of-way to Camino Colegio, a parallel 8" water main the East Cotati Avenue from Colegio to Snyder Lane, and a parallel 8" water main in Camino Colegio from East Cotati Avenue to Cala Way.(3) A parallel 12" water main in Snyder Lane from the City limit north of Holly Drive southward to Golf Course Drive to an intertie point at Coleman Creek.(4) A parallel 8" water main in Manor Drive between Mason and Apple Drives.(5) A parallel 8" water main in Golf Course Drives Cost for the railroad right-of-way to far Course Drives cost of the railroad right-of-way to Comino Colegio for Super Lane from the City limit north of Holly Drive southward to Golf Course Drive to an intertie point at Coleman Creek.(4) A parallel 8" water main in Manor Drive between Mason and Apple Drives.(5) A parallel 8" water main in Golf Course Drive south wato for the arcss Golf Course Drive det of the railroad right-of-way	Λ	0	c	The City initiated the Water Main Improvement Project to increase the reliability and capacity of the water conveyance system. The project responds to a need for improved water pressure and fire flows in the existing water system and provides for future extension of service to areas designated for annexation by the City's General Plan.	2,235,300	8,720	42,650 18	Sonoma	Ι	2009
2947 4910014	4910014-001	Rohnert Park, City of	Rohnert Park Eastside Potable Water Tank	The Rohnert Park Potable Water Tank Project includes M the construction of a 900,000 gallon gravity flow potable water tank, waterline connection, and service road including bridges/culverts for the service road. In addition to tank and road construction, the project costs also include grading; wet & dry utilities; site lighting; landscaping and irrigation; fencing; construction management; inspection; and resource agencies mitigation. The project will be built by the City on what is currently private property east of the Rohnert Park City Limits. The project includes purchase of the land by the City. At present, the plans are 95% complete and in plan check with the City. A letter of No Effect has been obtained from U.S. Fish & Wildlife Service for California Tiger Salamander. Wetland mitigation credits have also been acquired.	Λ	0	c	If constructed, the Rohnert Park Eastside Potable Water Tank project will be the only gravity-flow tank in the City's water distribution system. Currently, the system relies on booster pumps and 7 tanks to transmit water. The addition of a gravity-flow tank would reduce the reliance on pumping for water pressure and decrease pumping energy costs. The proposed tank would also provide fire flow, emergency water and potable water service for both new and existing development on the east side of the City.	7,400,000	8,720	42,650 18	Sonoma	Ι	2009
2948 5610059	5610059-006	Golden State Water Company - Simi	Simi Valley - Seismic Upgrades	Install double ball joints on lines into and out of two N reservoirs in this system.	Л	0	С	Earth movement in this seismically active area can cause rupturing of pipes running into and out of reservoirs. By installing double ball joints in these lines where they attach to the reservoir, the effects of seismic activity can be mitigated and the storage better protected.	500,000	13,385	42,717 06	Ventura	IV	2009
2949 5610059	5610059-007	Golden State Water Company - Simi	Simi Valley - Katherine Booster Upgrades	An additional 500 gpm of booster capacity should be N added to the Katherine plants current 1,500 gpm total capacity.	Л	0	С	Due to current and future anticipated growth, booster capacity at the Katherine plant is inadequate to meet Maximum Day Demand.	500,000	13,385	42,717 06	Ventura	IV	2009

2950 5610059	5610059-005	Golden State Water Company - Simi	GSWC-Simi Valley - Pineview, Alamo, & Tapo - Tide Flex Valves	Install Tideflex valves in the reservoirs -	Μ	0	с	The Simi System is supplied by a combination of groundwater wells (chlorinated) and purchased water from the Calleguas Municipal Water District. Stagnation in the storage reservoirs can cause loss of residual chlorine or chloramine, resulting in long water age, taste and odors, and potential nitrification. The addition of the Tideflex valves to the reservoirs will increase the turnover and mixing of water within each reservoir, reduce water aging concerns, and ultimately enhance the water quality in the system while preventing taste and odor issues and nitrification.	126,000	13,385	42,717 06	Ventura	IV	2009
2951 1910156	1910156-006	BEVERLY HILLS-CITY, WATER DEPT.	Rehabilitation of fluoride treatment facility	In order to rehabilitate the fluoridation treatment facility, the City will make modifications and additions to meet Technical Requirements in CDC "Engineering and Administrative Recommendations for Water Fluoridation, 1995" below. Included are areas the Citi will need to improve: I. Technical Requirements A. General 1. Fluoride feed system must be installed so that it cannot operate unless water is being produced (interlocked). 2. Fluoride injection point in a water lim should be located in lower one third of the pipe, and 1 end of the injection line should extend into the pipe approximately one third of the pipe's diameter (31,32).3. Two diaphragm-type, antisiphon devices mu be installed in the fluoride feed line when a metering pump is used. The antisiphon device should have a spring-loaded diaphragm in the closed position. Devic should be located at the fluoride injection point and a the metering pump head on the discharge side. The antisiphon device on the head of the metering pump should be selected to provide back pressure required manufacturer of the metaring pump. A. All antisiphon devices should be done semiannually. Operation of a fluoridation system without a functional antisiphon device can lead to an overfeed that exceeds 4 mg/L. 5	M 5 y e the ust t by 5.	0	C	The California state law requires all Cities to provide fluoridated water to their customers. The purpose of fluoridation is to help aide in the prevention of tooth decay. The City of Beverly Hills has been fluoridating their water supply since the 1970's; however, the system is currently shut down and will not be allowed to be re-started until upgrades are made bringing the fluoride treatment facility up to standards as the Technical Requirements in CDC "Engineering and Administrative Recommendations for Water Fluoridation, 1995". Metropolitan Water District has recently begun fluoridating the water that the City purchases, it is essential that the City rehabilitates the fluoride treatment facility in the event that Metropolitan Water District is unable to continue providing fluoridated water. The City made a commitment to its citizens in the 1970's to provide fluoridated water and now the State of California has backed this up by law. The fluoridation saturator systems at the fluoride treatment facility must conform to the standard design for a saturator. In order to consistently achieve the saturated fluoride concentration in an upflow saturator, a water system must maintain no less than 12 inches of sodium fluoride and the up flow make-up water (soft water) should not exceed 2 gallons per minute (to give enough reaction time for the chemicals to dissolve). There are many	37,500	9,898	44,290 22	Los Angeles	IV	2009
2952 1910156	1910156-007	BEVERLY HILLS-CITY, WATER DEPT.	Mechanical mixing with green technology	Install SolarBee Potable Water Circulators in each of t five Steel Water Tanks identified as 3A, 4B, 5, 6, & 7. This will accomplish the following: Completely mixes all sizes of tanks / reservoirs corner to corner • Provid uniform water age and impacts the complete boundal layer • Prevents stagnation, thermal stratification and short circuiting • Self-adjusts for varying water levels Provides efficient system to boost or breakpoint chlorinate • Reduces nitrification and loss of residual chlorine or chloramines• Reduces high heterotrophic plate counts • Reduces excessive ice buildup in cold climates • Fits through hatches as small as 24" diamet • Requires minimal if any infrastructure changes (sola powered) • SCADA outputs for monitoring • Unit operates day and night on solar power • High end motor and control system with a 25 year expected lifeThe City has already installed two units as a pilot study at its largest reservoir which has proven to improve water quality and reduce costs.	he M jes ry j • •	0	C	The steel tanks have inadequate mixing of water in the reservoir that causes stagnation, thermal stratification and short circuiting. The City of Beverly Hills has an agreement with Metropolitan Water District (MWD) to maintain a 7-day supply of water with 25% conservation figured in. The City also needs to maintain adequate fire protection at all times thus these two requirements impact the water age. The water distribution system consists of several pressure zones. The water that is purchased and delivered to the City enter through a structure where it is then pumped to other zones going from one elevation to another as the water is delivered to the highest elevation. The purchased water and local groundwater produced by the City uses chloramines as a disinfectant. A benefit of using chloramines is in keeping disinfectant-by-products within compliance for the health of the public. However, a drawback is that the ammonia in the chloramines can increase the occurrence of nitrification problems especially as water ages.	175,000	9,898	44,290 22	Los Angeles	IV	2009

2953 1910156	1910156-005	BEVERLY HILLS-CITY, WATER DEPT.	Octogenarian water line replacement project	The water lines serve over 35,000 residential and business customers. However the estimated daytime population, which includes employees, shoppers, tourists, and hotel users, includes an additional 70,000, for a total daytime population of over 105,000. The replacements of these aging lines are essential to the citty's infrastructure. Approximately 8,500 linear feet of water lines of various sizes (8, 10, 12, and 16 inch) will be constructed to replace the current antiquated lines constructed in 1924. In addition to the water line replacement, there will be new services installed replacing the old existing services off the water line, fire hydrants and water valves will be replaced to ensure a reliable infrastructure. In addition, the City is replacing 4,000 linear feet of water line and five hydrants in a closed pressure zone that is vulnerable due to age and limited access. As part of this project Beverly Hills is partnering with Los Angeles Department of Water and Power to establish an emergency water connection to this vulnerable section of the City's water system.	M	0	C	The water lines were installed in 1924 and have exceeded their usable life. In fact, one third of the City's water conveyance system is 80 years old. The City has experienced numerous water main breaks on these water lines. The water main breaks result in damage to the piping infrastructure, roads and streets, residential homes, businesses, and threatens the health of consumers. In addition they cost the City in loss revenue due to the loss of water, costs of repairs for parts and labor, and environmental issues to receiving streams. Replacement of the water lines are necessary to improve the water system reliability, supply safe potable water for consumption as well as fire protection, and protect business and residential customers from damage caused by water main breaks.	4,261,700	9,898	44,290 22	Los Angeles	IV	2009
2954 1910156	1910156-004	BEVERLY HILLS-CITY, WATER DEPT.	Green potable water circulatory system	Install SolarBee Potable Water Circulators in each side of the Coldwater Reservoir. This will accomplish the following: • Completely mixes all sizes of tanks / reservoirs corner to corner • Provides uniform water age and impacts the complete boundary layer • Prevents stagnation, thermal stratification and short circuiting • Self-adjusts for varying water levels • Provides efficient system to boost or breakpoint chlorinate • Reduces nitrification and loss of residual chlorine or chloramines• Reduces high heterotrophic plate counts • Reduces excessive ice buildup in cold climates • Fits through hatches as small as 24" diameter • Requires minimal if any infrastructure changes (solar- powered) • SCADA outputs for monitoring • Unit operates day and night on solar power • High end motor and control system with a 25 year expected life	м	0	C	The Coldwater Reservoir has a volume of 8 million gallons and needs to maintain that volume to achieve the agreement the City of Beverly Hills has with Metropolitan Water District (MWD) to maintain a 7-day supply of water with 25% conservation figured in. The City also needs to maintain adequate fire protection at all times thus these two requirements impact the water age. With minimum exchange of the water can result with inadequate mixing of water in the reservoir that causes stagnation, thermal stratification and short circuiting. The purchased water and the water produced by the City use chloramines as a disinfectant. A benefit of using chloramines is in keeping disinfectant-by- products within compliance for the health of the public. However, a drawback is that the ammonia in the chloramines can increase the occurrence of nitrification problems especially as water ages.	125,000	9,898	44,290 22	Los Angeles	IV	2009
2955 1910003	1910003-001	City of Arcadia	Colorado Transmission Main - Chapman to Baldwin	The Project will construct two connected legs of transmission main as follows:1. Install 2,100 linear feet of 12" DIP transmission pipeline connecting intersection of Colorado Street and Altura Road with intersection of Colorado Street. 2. Install 250 linear feet of 10" DIP transmission pipeline connecting intersection of Colorado Street and Monte Vista Road along Monte Vista Road.	М	0	c	Substandard water system network in the area is causing low water pressures which limits flow availability along Colorado Street, Altura Road and Catalpa Road in Arcadia south of I-210 Freeway. Low water pressure has detrimental effect on fire fighting capacity of Arcadia Fire Department. Installation of new transmission pipeline will increase water pressures and will increase available flow in the area to improve supply to residences as well as increase available water hydrant fire flow for fire protection. The preliminary design was completed and the final construction plans can be prepared by City staff within a month.	320,000	14,719	44,814 22	Los Angeles	IV	2009

2956 1910003	1910003-002	City of Arcadia	Hugo Reid Blending Pipeline	The Hugo Reid Blending Pipeline Project will install 2,500 linear feet of new 8" DIP and connect it with existing pipeline in Michillinda Blvd. to connect the Hugo Reid Well to the existing reservoir and booster pumps at the Chapman Facility. Pipes will need to be installed from the Hugo Reid Well, through Hugo Reid Park and Michillinda Blvd. to the intersection of Michillinda Blvd. and Carol Pine L.n., where they will connect to existing pipes to the Chapman Facility. The configuration of pipes at Chapman Facility will be changed to discharge nitrate water to the reservoir, where it will blend with low nitrate water from Chapman Well and will be pumped back into the system using the existing booster pumps at the Chapman Facility. Water monitoring equipment added to the facility to monitor nitrate levels in the reservoir and will be monitored by an existing SCADA System.	Μ	0	c	In 2006 the Hugo Reid Well (Well), a major water supply well for the City of Arcadia went out of service due to high nitrate levels in the water pumped from the well. In order to reduce nitrate levels to meet DHS water standards, water from this Well must be blended with water which has little or no nitrates. The City is proposing to transmit high nitrate water from this Well to the Chapman water facility, where it will blend with other system water within an on-site reservoir. Blending this water will lower the concentration of nitrates which will allow he water to be pumped back into the system for customer consumption. The Arcadia Water Master Plan, 2008 Update, identifies this project as necessary to meet the current and future demands for water in Pressure Zone 2. The project also maintains the use of an existing source of water supply from the Raymond Groundwater Basin without constructing a new well in that basin. A long-term benefit of pumping from the Well is that the removal of nitrates from the basin and reduce the need for treatment in the future.	500,000	14,719	44,814 22	Los Angeles	IV	2009
2957 5610019	5610019-003	CAMARILLO WATER DEPT		Construct a 4 MG water storage reservoir which will provide peak storage capacity for pressure zones 1 and 2.	м	0	с	Inadequate storage capacity causes Water Works standards violation.	4,804,000	12,522	44,831 06	Ventura	IV	1998
2958 1910167	1910167-010	VERNON-CITY, WATER DEPT.	10 Million Gallon Reservoi Rehabilitation	ir The 10 Million Gallon Reservoir plays an intregal role in meeting the City's water demand requirements. The subject facility is an underground reservoir that has excessive corrosion to its interior sections. The work is needed to remove the corrosive properties that have resulted in deterioration to various structural components of the reservoir. The City depends on the subject facility to meet its water demand commitments to its industrial customers. If the repairs are not facilitated in a timely fashion, the structural integrity of the reservoir will be compromised and the City may have to purchase additional imported surface water supplies in order to meet its demand requirements.	Μ	0	c	The City of Vernon (City) had Harper & Associates Engineering, Inc. performed a detailed a dive inspection of the 10 Million Gallon Reservoir. The results of the subject inspection are as follows:1. The appurtenances and must need abrasive blast cleaning in preparation for a comprehensive three-coat epoxy coating system application. This process must be undetaken to remove and protect against further corrosion.2. All interior construction joints must be cleaned by brush-off blast cleaning to remove corrosion, calcium deposits, and loose concrete. The joints must then be filled with a polyurethane elastomeric sealant. If the corrosion is not removed and sealed the structural integrity of the tank could be compromised.3. Random tubercles are present throughout the tank. The tubercles must be cleaned by brush-off blast cleaning and filled with a cementitious material. The removal and sealing of the subject tubercles must be undertaken to prevent further deterioration to the tank. 4. The inspection noted that the carbon steel hardware on the sump ladder braces and manual control rod supports need to be replaced with stainless steel equivalents. This work is needed to ensure long-term structural integrity of the tank. Please contact the City for a copy of the subject in subject in the sub steel hardware on the sump ladder braces and manual control rod supports need to be replaced with stainless the loty for a copy of the subject in spection	200,000	1,217	45,000 15	Los Angeles	IV	2011

reports.

2959 1910167	1910167-009	VERNON-CITY, WATER DEPT.	Elevated Tank Interior Rehabilitation	The Elevated Tank was dive inspected by Harper & Associates Engineering, Inc. The results of the inspection are as follows:1. The coating on the underside of the roof and upper shell is in fair condition with the exception of severe corrosion at the structural connections and platform. The severe corrosion at the structural connections and platform need to be addressed in the near future to minimize any further metal loss at the subject locations. Harper & Associates Engineering, Inc. recommends that abrasive blast cleaning of the entire interior, and application of 15 mils of an epoxy coating system to all surfaces of the subject tank.	0	с	The Elevated Tank has extensive corrosion on the interior roof, bowl, drywell, riser, safety railings, and vent screen. Rehabilitation is needed to ensure for the long-term use of the tank. The Elevated Tank is the sole source of the City's water pressure, extending approximately 160-feet above grade. The City operates on a single water zone and cannot function without the subject tank on-line.	500,000	1,217	45,000 15	Los Angeles	IV	2011
2960 1910167	1910167-014	VERNON-CITY, WATER DEPT.	Vernon - Well 21 Conversion Project	The project will be for the design and technical support M services for the construction of a fully operational pump station; herein referred to as Well 21. Cannon Corporation was awarded the contract to facilitate the development of the construction plans, specifications, and bid documents. The design will include the development of a fully functional pump station; this will entail the installation of electrical, emergency power source connections, disinfection system, SCADA system flow meters, piping to connect to the existing distribution system, and the design of grading, paving, and fencing of site. In addition, the design will include the well flushing cycle. The detention basin will be designed to connect to the City of Vernon storm drain system. The construction phase of the project is estimated to commence in November of 2012. Cannon will be tasked with performing contract management function for the duration of the project. The total project cost, both design and construction, is estimated to be \$1,640,000.	0	c	The City of Vernon's (City) existing production facilities (8 Wells) are not able to produce sufficient water, in terms of gallons per-minute, to meet peak demand conditions. This has historically required the purchase supplimental surface water supplies from the Central Basin MWD. Moreover, with persistent drought conditions, a growing population, and environmental regulations reducing surface water supplies, it is important for water purveyors to do their part in reducing reliance on surface water supplies to meet water demand requirements. The City explored many options in this pursuit, and ultimately located an industrial well that remained on a property purchased by the City. The facility is located at 2170 55th Street, in Vernon, CA.The City retained the services of Richard C. Slade & Associates who performed a hydrogeological evaluation of subject well. The evaluation consisted of a multi phase test pumping methodology to asertain the downwell condition and to access the current production capacity and water quality. The Stage I Phase was performed utilizing a normal pumping sequence without the use of a packer. The initial test results of Stage 1 Phase indicated that the well had elevated levels of Volatile Organic Compounds (VOCs)	1,640,000	1,217	45,000 15	Los Angeles	IV	2012

that exceeded the Maximum Contaminant Levels (MCLs) for those constituents. In the Stage II Phase, a packer was inflated at 500 feet in order to isolate the

2961 1910167	1910167-008	VERNON-CITY, WATER DEPT.	Reservoirs 3-1, 3-2, & 3-3 Interior and Exterior Rehabilitation	1. Reservoir 3-1 was dive inspected by Harper & Associates Engineering, Inc. The exterior coating was found to be in fair condition, but due to its advanced age and needed spot repairs, the City had elected to recommend repainting of the entire exterior shell. The interior of the subject reservoir needs to have the existing coating removed by means of abrasive blast cleaning to Near White Metal (SSPC-SP10) and have a three coat epoxy coating system applied to a minimum thickness of 15 mils.2. Reservoir 3-2 was dive inspected by Harper & Associates Engineering, Inc. The exterior coating was found to be in fair condition, but due to its advanced age and needed spot repairs, the City had elected to recommend repainting of the entire exterior shell. The interior of the subject reservoir needs to have the existing coating removed by means of abrasive blast cleaning to Near White Metal (SSPC-SP10) and have a three coat epoxy coating system applied to a minimum thickness of 15 mils.3. Reservoir 3-3 was dive inspected by Harper & Associates Engineering, Inc. The exterior coating was found to be in fair condition, but due to its advanced age and needed spot repairs, the City had elected to recommend repainting of the entire exterior shell. The interior of the subject reservoir needs to have the existing coating removed by means of abrasive blast cleaning to Near White Metal (SSPC-SP10) and have a three coat epoxy coating system applied to a minimum thickness of 15 mils.3.	M t	0	C	The interior and exterior shells of reservoirs 3-1, 3-2, and 3-3 are in need of rehabilitation. The work will require the existing paint/coatings be removed per developed specification. The existing exterior paints of the subject reservoirs are advanced in age and have several areas in need of spot repairs. The interiors of each reservoir need to be removed and reapplied.	900,000	1,217	45,000 15	Los Angeles	IV	2011
2962 1910059	1910059-001	SUBURBAN WATER SYSTEMS-LA MIRADA		PHASE 1 OF 2: DEMOLITION AND PREPARATION WORK	М	0	С	PHASE 1 OF 2: RESERVOIR 408 HAS AN OLD CORRUGATED METAL ROOF THAT HAS DETERIORATED BEYOND REPAIR	850,000	14,083	46,362 07	Los Angeles	IV	1998
2963 1910173	1910173-001	WHITTIER-CITY, WATER DEPT.	Palm Ave. And Southwind/Park Street water mains replacement	The project consist of replacing the existing 2-inch, 4- inch, and the 6-inch water mains on Palm Ave and Southwind/Park street with properly sized ( 8-inch) water mains, isolation valves and adequate fire hydrants to deliver adequate fire flow, pressure and volume for the community.	Μ	0	с	The existing water mains on Palm Ave. and Southwind/Park Street were built in 1928 and 1968 respectively. The water main on Palm Ave. is 2-inch and 4-inch diameter galvanized and cast iron pipe. The water main on Southwind/ Palm Street is 6-inch cast iron pipe. The water mains have been experiencing frequent failures and repairs because of their age, deteriorated condition, unfavorable soil condition, and restricted capacity to deliver adequate fire flow and pressure.	625,000	23,156	48,000 07	Los Angeles	IV	2009
2964 3610038	3610038-001	RIALTO-CITY		Construct new reservoir	М	0	С	Roof leaks on reservoirs	6,000,000	11,923	48,418 13	San Bernardino	v	1998
2965 4410017	4410017-025	Soquel Creek Water District		Replace pipes.	М	0	С	Distribution pipe replacement at Humes and Los Altos.	2,011,400	15,115	50,000 05	Santa Cruz	Ш	1998
2966 4410017	4410017-016	Soquel Creek Water District		Replace pipes.	м	0	С	Transmission main replacement at Soquel Center and Bridge.	2,021,400	15,115	50,000 05	Santa Cruz	Ш	1998
2967 4410017	4410017-011	Soquel Creek Water District		Replace reservoir with 500,000 gallon steel reservoir at Vista Del Mar Site	М	0	С	Redwood storage tank is old and leaking - causing water	520,000	15,115	50,000 05	Santa Cruz	П	1998
2968 5610020	5610020-005	THOUSAND OAKS WATER DEPT	Pump Station Improvements	This project will construct a new pump station as back up to the existing La Granada pump station which currently is the sole source of providing domestic water and fire storage to more than 16000 residents and businesses within the City's water service boundaries. Existing aging station, as stand alone, is in risk of break down and it is crucial that City provide a second station as back up to the existing system. Additional pumps including diesel fueled pumps or connection for transportable generators to provide power to three of the existing pump stations citywide are an extremely important measure during power outage (which could easily happen during natural or man made disasters). City will provide 20% matching fund.	м.	0	С	Lack sufficient pumps during system's peak time, lack of back up in the system incase of existing station's malfunction or break down, and lack of diesel fueled pump to provide water to thousands of residents during power outage.	1,200,000	16,436	50,000 06	Ventura	IV	2009
2969 4410017	4410017-017	Soquel Creek Water District		Replace pipes.	М	0	с	Transmission main replacement at Huntington and Wallace.	819,300	15,115	50,000 05	Santa Cruz	Ш	1998

2970 4410017	4410017-028	Soquel Creek Water District	SqCWD - Cathedral Drive Area Main Replacements Project	The Cathedral Area Main Replacement Project will include the replacement of 410 lineal feet of 2-inch steel water main on Mattison Lane from 138 Mattisor Lane to Cathedral Dr. with 6-inch water main, 550 line feet of 2-inch steel water main on Trillium Way from Cathedral Dr. and Farr Ave., up Farr Ave. to the end o' Trillium Way with 4-inch water main, 1,900 lineal feet 2-inch steel through an easement and along Cathedra Dr. and Campus Dr. with 4-inch water mains, and 350 lineal feet of 2-inch steel water main on Redwood Dr. from 1889 redwood Dr. to 1931 Redwood Dr. with 4- inch water main. This project includes 24 services to 1 replaced, trying into existing water mains, abandonment of the existing water mains, abandonment of the existing water mains and all oth incidental work.All of the undersized watermain identified to be replaced are in excess of 40 years old and the District has minimal as-built information on their original layout. A new fire hydrant with associat control valves will be constructed as part of this proje and and overall increase in flow and water availability will provide more reliable fire protection. The Distric also anticipates that the construction of the new wat mainswill eliminate the problems associated with an antiquated mains (such as corrosion, leakage, low pressure, and poor water quality).	M Pall of I Pe ed ct / / t t	0	C	The District strives to optimize and upgrade deficient infrastructure as part of our ongoing watermain replacement strategy to replace antiquated pipelines that are substandard and lacking fire protection. The Cathedral Drive Area Mains Replacement Project includes several areas identified for system improvements: Mattison Lane, Farr Ave., Trillium Way, Cathedral Drive, Campus Drive, and Redwood Drive. This area in the foothills of Aptos, CA includes windy terrain, steep slopes, and discontinuous roadway surfaces. The 2" main on Mattison is an old section of pipe that was not replaced when a larger 6" AC main was connected to it in 1971. A 'bottleneck' has occurred whereby creating inadequate fire flow protection for the properties downstream side of the 2" main. In addition, like most pipes that have been in service for over 40 years, it is plagued with leaks which requires much staff time to keep up with all of the leaks that occurs. The Trillium-Farr project area currently has an above-ground 2-inch steel water main that rests on a steep brushy slope. This area is considered one of our high priority replacement projects in terms of staff safety since to perform any leak repairs or service on this section of pipe is arduous and dangerous. Cathedral Drive iand Campus Drive are currently served by an exposed 1.25" steel main with a 1" PE jumper on a steep slope that is used to feed Campus Dr. Again, this	480,000	15,115	50,000 05	Santa Cruz	Ι	2009
2971 5610020	5610020-006	THOUSAND OAKS WATER DEPT	GROUNDWATER FOR POTABLE USE	The City of Thousand Oaks proposes to install a one (1 MGD MF/UF water treatment system at the LRGC groundwater pump station to produce potable water supply. The project will include pilot testing to develo design parameters and criteria, designing an enclosed MF/UF treatment system facility adjacent to the LRGC groundwater pump station, construction of the facility and connecting to the Calleguas Municipal Water District's water distribution system. The project is estimated to produce potable water at a total cost (capital plus O&M) of less than \$200 per acre-feet. Th project will be one of five or more projects planned to develop and exploit the local groundwater resource in the Conejo Valley estimated at more than 500,000 acr feet.	) M p : , , , , , , , , , , , ,	0	с	The City of Thousand Oaks imports 100 percent of its more than 25 million gallons per day (MGD) water requirement from the State Water project. With the ever increasing threat of reduction in importable water, the City is looking at developing its local groundwater resources to augment the imported water supply. The city owned Los Robles Golf Course (LRGC) groundwater pump station is currently very much underutilized and is only used for non-potable water purposes (golf course irrigation). The 800 gpm well can supply at least one (1) MGD of potable water if treated through a microfiltration/ultrafiltration (MF/UF) water treatment system. The strategic goal is to produce about 10 MGD by developing other local groundwater supply citywide.	2,000,000	16,436	50,000 06	Ventura	IV	2009
2972 4410017	4410017-021	Soquel Creek Water District		Replace pipes.	м	0	с	Distribution pipe replacement at Rio Del Mar.	866.400	15.115	50.000 05	Santa Cruz	Ш	1998
2973 4410017	4410017-019	Soquel Creek Water District		Replace distribution pipes.	м	0	С	Distribution pipe replacement at Monroe Ave.	735,700	15,115	50,000 05	Santa Cruz	П	1998
2974 4410017	4410017-023	Soquel Creek Water District		Replace pipes.	м	0	C	Distribution pipe replacement at Shoreview, Wixon and Moosehead.	2,186,000	15,115	50,000 05	Santa Cruz	Ш	1998
29/2 2010020	2010020-004	INUUSANU UAKS WATER DEPT	wilder water storage and Pump Stations	commutum or a second winder reservoir and pump stations facilities (proposed) with the existing Wilder facilities will provide water service directly to 12,000 residents and businesses within the service area, and an additional 2,400 customers through serving as the sole source of supply to Grissom reservoirs and their pump station. In addition to deficiency in available storage, outage of the existing reservoir or the pump station without the proposed back up system will leav well over 14,000 residents and businesses without water. Given that the City is a public entity and a non profit organization, safety and wellbeing of the residents are the ultimate goals of this project. City w provide 25% matching fund for implementation of this project.	e - -	U	L	In spruject will address the LU million gallon storage shortage to meet the standards for domestic and fire flow storage in Wilder service area of the City water system. Additionally, the wilder service area is the only system in the City with no back up facilities and should either the existing reservoir or the pump station go out of service and become disabled a large number of residents will remain without water for domestic and fire fighting use. Considering the recent Ventura County wild fire events, lack of sufficient storage and redundancy in the system have been growing concerns with the City.	2,925,000	10,430	20,000 06	ventura	īv	2009

2976 4410017	4410017-024	Soquel Creek Water District		Replace pipes.	м	0	С	Distribution pipe replacement at Center St., Rio Del Mar flats.	957,800	15,115	50,000 05	Santa Cruz	Ш	1998
2977 4410017	4410017-026	Soquel Creek Water District	SqCWD - Barrett Way Main Replacement Projec	The Barrett Way Main Replacement Project in La Selvat Beach, CA will include the replacement of 440 lineal fe of 6-inch water main on Barrett Way from Robak Dr. to the end. This project also includes 7 services to be replaced and reconnected and one new 6-inch steame fire hydrant to be installed. The project will include tying into an existing water main, abandonment of the existing water main, and all other incidental work. This undersized watermain identified to be replaced is in excess of 40 years old and the District has no as-built information since the original installation pre-date the inception of our Water District. This section of Barrett Way severely lacks fire protection but the proposed project will increase flow and water availability with th larger main size diameter and the installation of a steamer fire hydrant. The District also anticipates that the construction of a new 6-inch PVC water main will eliminate the problems associated with an antiquated 2" STL line (such as corrosion, leakage, low pressure, and poor water quality).	M et r	0	C	The District strives to optimize and upgrade deficient infrastructure as part of our ongoing watermain replacement strategy to replace antiquated pipelines that are substandard. Barrett Way in La Selva Beach currently is served with a 2-inch steel line that was built before the 1970's. There is no as-built information on this 2-inch line that is has recently been plagued with leaks. Served by a small diameter pipe, residents on Barrett Way are lacking fire protection. The nearest fire hydrant for homes at the end of Barrett Way approx. 480' which exceeds the Fire District's recommended 250' max. distance from a property to a hydrant.Corrosion, low pressure, poor water quality, and shut-downs for main repairs are other problems that occur with the water service on Barrett Way. These problems have resulted in considerable irrecoverable water loss, staff downtime and numerous customer complaints.	100,000	15,115	50,000 05	Santa Cruz	u	2009
2978 4410017	4410017-027	Soquel Creek Water District	SqCWD - Vienna Woods Area Main Replacements Project	The Vienna Woods Main Replacement Project will include the replacement of 2,000 lineal feet of 4-inch <i>I</i> water main on Vienna Dr. from Austrian Way to Wilshire Dr. with 8-inch water main, 1,900 lineal feet 4 inch AC water main on Jennifer Dr. and Jennifer Place from Vienna Dr. to end near 2001 Jennifer Place with 6 inch water main, and 280 lineal feet of 4-inch AC water main on Vienna Dr. from Austrian Way to the fire hydrant at 3430 Vienna Dr. with 6-inch water main. Th project includes 93 services to be replaced and reconnected. Two new 6-inch steamer fire hydrant wi be installed along with all related valves and appurtenances to upgrade existing wharf hydrants. Th project will also include tying into existing water mains abandonment of the existing water mains, and all othe incidental work.By constructing these main replacements in the Vienna Woods Area, the District anticipates moving the watermains into the right-of- way, removing the bottleneck between the Austrian and Park Wilshire Tanks, reducing staff time required th the leaky water main and services and improving system reliability and fire protection.	M 	0	c	The District strives to optimize and upgrade deficient infrastructure as part of our ongoing watermain replacement strategy to replace antiquated pipelines that are substandard and lacking fire protection. The Vienna Woods Main Replacements Project includes Vienna Drive, Jennifer Drive, and Jennifer Way. This area in a moderately hilly neighborhood of Aptos, CA.Water system reliability, public safety, and the ability to meet fire flow demands are a priority for the District. The present piping in the Vienna Woods Area includes several deficiencies: undersized mains, poor operability between pressure zones, bottlenecking in the distribution system, leaky service connections, and inadequate fire protection. This watermain replacement project is both necessary and critical. Main replacements outlined in this project would significantly enhance the reliability of safe, high quality water to be delivered for drinking in addition to the required pressure/flow for fire protection. In addition, the nearly 100 service connections in this are are extremely substandard (bullhead-type) which amount to numerous service calls to respond and repair. On an increasing frequency, this has caused interruption of water service to our customers to remediate the problems.	900,000	15,115	50,000 05	Santa Cruz	Π	2009

2979 5610020	5610020-002	THOUSAND OAKS WATER DEPT	Reservoir Mixing Improvements	City is proposing to use solar-powered, long-distance water circulation technology to install mixers at all reservoirs (total of eight reservoirs) experiencing the reduced water quality due to stagnation, thermal stratification and short circuiting. The intended improvements will entail installation of the mixing system while the reservoir is in service without disrupting the City's water system normal operations. The installed system will accomplish the followings at each reservoir: prevents stagnation, thermal stratification and short circuiting; provides uniform water age; self-adjusts to varying water levels; and reduces nitrification and loss of residual chlorine or chloramine. The proposed system will require minimal infrastructure changes, and provides SCADA outputs for monitoring day and night using solar power. This innovative green technology provides the City an energy-efficient, renewable-energy solution to marinating or improving the water quality delivered to its residents. The City will provide a 20% matching fund for implementing this project.	M r	0	c	Several of the City's reservoirs experience loss of chlorine residual and therefore putting the quality of the stored potable water at risk. This has been an on- going challenge for the City to monitor and correct.	320,000	16,436	50,000 06	Ventura	IV	2009
2980 4410017	4410017-010	Soquel Creek Water District		Install reservoir - 50,000 gallon welded steel tank.	м	0	с	Additional storage tank needed to meet high demands and prevent water quality problems.	900,000	15,115	50,000 05	Santa Cruz	Ш	1998
2981 3710015	3710015-001	Poway - City of	High Valley Water Line Replacement	The existing High Valley Waterline is a 10-inch welded steel main which starts from the High Valley Pump Station at Espola Road and extends approximatley 4000 easterly along High Valley Road. There have been numerous leaks in the line requiring costly repairs and resulted in interpution of service to approximately 210 homes being served by this line. The proposed project will replace the entire lengh of the 10-inch CL&C welder steel pipe with a new 12-inch CL&C welded steel pipe. The replacement of the existing waterline will ensure continuous water service to the single family residents served by this line.	M	0	c	The existing 10-inch welded steel pipe has experienced numerous leaks which results high repair costs and interruption of service.	1,000,000	14,017	50,542 14	San Diego	v	2009
2982 3010079 2983 3010079	3010079-004 3010079-005	El Toro Water District El Toro Water District		Drilling wells and conveyance system Replacement of floating cover	M M	0 0	c c	No backup sources of supply Deteriorating floating cover	4,500,000 4,500,000	10,032 10,032	50,800 08 50,800 08	Orange Orange	v v	2006 2006

2984 1910019	1910019-001	CERRITOS - CITY, WATER DEPT.	Well C-5 Phase Two Project	The next phase would be to install a submersible motor bowls, column pipe, pump house, chlorination equipment, meter, electrical, SCADA system, and other equipment. The city's engineer has estimated that an additional \$3.0 million would be necessary to complete the project. Having this new well C-5 would increase the pumping capacity and reliability of the system. The city historically uses approximately 9,300 to 11,000 acre feet annually. Presently, if Cerritos were to lose one of the three wells that the city relies upon, it would put an undue hardship upon the City of Cerritos as well as the private water company and the municipal utility that supplies water to Artesia, Lakewood, Norwalk, and Hawaiian Gardens. The undue hardship would come in the form of a much higher cost per acre foot from MWDSC. The cost to deliver one acre foot of well water is approximately \$528 and the cost to import one acre foot of surface water would be \$980 at Tier 2 rate. This is an increase of approximately 46 percent. From a financial prospective, the Department of Water and Power is an enterprise fund and over the last nine of ten years the Department has been operating at a loss. Because of this fact, Well C-5 has not been able to be completed.	r, M	0	C	The City of Cerritos serves a population of 51,000 and a daytime population of 90,000 plus. The city also serves portions of adjacent communities of Artesia, Norwalk, Lakewood, and Hawaiian Gardens. Three wells supply approximately 9,300 to 11,000 acre feet or 95% of all water demands on an annual base. The remaining 5% comes from an interconnection with MWDSC. All three wells are located on the northern boundary of the city. This is an operational deficiency because the city's largest water users, a private water company and a municipal utility, may draw up to 4,500 gallons per minute on a continual base. Well C-5 is located midway on the southern boundary of the city is part 51,041,000 in drilling the city's newest Well C-5. At the same time the city also installed a new 16 inch ductile iron transmission main at a cost of \$794,000 that is 2,300 feet long was laid from the well site to the city's distribution system in anticipation of the well coming online. The next phase would be to install a submersible motor, bowls, column pipe, pump house, chlorination equipment, meter, electrical, SCADA system, and other equipment. The city's engineer has estimated that an additional \$3.0 million would be necessary to complete the project. Having this new well C-5 would increase the pumping capacity and reliability of the system. The city historically uses approximately 9,300 to 11,000 acre feet annually. Presently, if Cerritos	3,000,000	15,483	51,488 16	Los Angeles	IV	2011
2985 5110002	5110002-019	City of Yuba City	Eliminate Deadend Mains by Adding Connecting Loops	Construct approximately 2,195 feet of connecting water main as follows: 1) Construct 800 linear feet of 8-inch diameter distribution main and related appurtenances on Cassidy Avenue between Clark Avenue and Live Oak Boulevard. 2) Construct 465 linear feet of 6-inch diameter distribution main and related appurtenances on Grant Way between Live Oak Boulevard and Plumas street. 3) Construct 930 linear feet of 8-inch diameter distribution main and related appurtenances on Littlejohn Road between Richland Road and 498 Littlejohn Road.	r M	0	с	The following areas are experiencing water quality issues due to deadend water mains. Construction of waterlines to connect the the deadends will complete distribution loops and thereby, improve water quality by reducing turbidity and disinfectant by-products, and increasing water flow. 1) 8-inch diameter water mains are stubbed at each end of Cassidy Avenue;2) 6-inch diameter water mains are stubbed at each end of Grant Way;3) 8-inch diameter water mains are stubbed at each end of the section of Littlejohn Road between Richland Road and 498 Littlejohn Road.	500,000	13,550	51,504 21	Sutter	I	2009
2986 1910142	1910142-001	GSWC-SAN DIMAS		REPLACE UNDERSIZED MAINS OVER A 2 YEARS PERIOD	м	0	с	3850' OF WATER MAINS LESS THAN 4" IN DIAMETER THAT DO NOT COMPLY WITH TITLE 22, SECTION 64628 (a)	385,000	15,996	52,582 07	Los Angeles	IV	1998
2987 3610003	3610003-006	APPLE VALLEY RANCHOS WC		Construct new reservoir	М	0	С	Inadequate storage	800,000	16,844	52,879 13	San Bernardino	V	1998
2988 3610003	3610003-008	APPLE VALLEY RANCHOS WC		Construct new booster facility	М	0	С	Inadequate source capacity	200,000	16,844	52,879 13	San Bernardino	V	1998
2989 3610003	3610003-004	APPLE VALLEY RANCHOS WC		Construct new well	М	0	C	Inadequate source capacity	800,000	16,844	52,879 13	San Bernardino	V	1998
2990 3610003	3610003-002	APPLE VALLEY RANCHOS WC		Replace mainline	м	0	С	Old, substandard mainline	1,000,000	16,844	52,879 13	San Bernardino	V	1998

2992 1910044	1910044-004	GLENDORA-CITY, WATER DEPT.	Well 14 Drill and Equip	The CIty of Gendora is a local community in eastern to Angeles County. We typically produce 80% of our community water demand from local groundwater wells. Rainfall shortages of the past several years have made the purchase of supplemental water from MWD necessary and expensive. The San Gabriel Plant Water Improvement project will provide for greater pumping and storage capacity as well as possible treatment alternatives for some of our wells that are currently ou of service due to contaminants. This project will involve the demolition and replacement of an existing 185,000 gallon concrete reservoir constructed in the early 1900's. The proposed replacement reservoir will be 1,000,000 MG which will provide adequate storage for longer service-ability in the event of a well failure, as well as serve as a forebay for well water chlorine contact time before entering the system. The plant construction project will also include the replacement of 4 existing, undersized (8780 gpm of designed 11,300 gpm) and aged booster pumps (cir. 1959, 1961, 1967 & 1971) complete with sound proof building. This buildin will also house an on-site chlorine generation system that will eliminate the need for delivery and use of dangerous chemicals in our facility as well as the surrounding residential neighborhood. Because of the groudwater wells at this location, the site currently utilized "temporary sanitary facilities". A recent The existing Well 2 (located at the Arthur E. Cook, Jr., Water Production Facility, 1051 E. Sierra Madre Avenus Glendora) was originally constructed in 1922 and has exceeded its useful life. Production loss has been recorded over the past several years due to deterioration of the casing and the hardening of the surrounding geologic formation. The City of Glendora's Water System Master Plan established a need for replacement as Well 14. A hydrogeolic/engineering firm has been hired and plans are very near completion The proposed well is to be located on a City owned parcel of land, in the Main San Gabriel Basi	e M e, M s s	0	c	The City of Gendora is a local community in eastern Los Angeles County. We typically produce 80% of our community water demand from local groundwater wells. Rainfall shortages of the past several years have made the purchase of supplemental water from MWD necessary and expensive. The San Gabriel Plant Water Improvement project will provide for greater pumping and storage capacity as well as possible treatment alternatives for some of our wells that are currently out of service due to contaminants. This project will involve the demolition and replacement of an existing 185,000 gallon concrete reservoir constructed in the early 1900's. The proposed replacement reservoir will be 1,000,000 MG which will provide adequate storage for longer service-ability in the event of a well failure, as well as serve as a forebay for well water chlorine contact time before entering the system. The plant construction project will also include the replacement of 4 existing, undersized and aged booster pumps complete with sound proof building. This building will also house an on-site chlorine generation system that will eliminate the need for delivery and use of dangerous chemicals in our facility as well as the surrounding residential neighborhood.Because of the groudwater wells at this location, the site currently utilized "temporary sanitary facilities". A recent housing development in the immediate area has made The existing Well 2 (located at the Arthur E. Cook, <i>i.r.</i> , Water Production Facility, 1051 E. Sierra Madre Avenue, Glendora') was originally constructed in 1922 and has exceeded its useful life. Production loss has been recorded over the past several years due to deterioration of the casing and the hardening of the surrounding geologic formation. The City of Glendora's Water System Master Plan established a need for replacement as Well 14. A hydrogeolic/engineering firm has been hired and plans are very near completion. The proposed well is to be located on a City owned parcel of land, in the Main San Gabriel Basin, nea	1,200,000	13,802	53,000 07	Los Angeles	IV	2009
2993 3610036	3610036-015	City of Chino Hills		Construct 2 MG reservoir R22	м	0	С	Inadequate source capacity resulting in service connection limitation	1,125,000	18,927	55,000 13	San Bernardino	v	1998
2994 3610036	3610036-005	City of Chino Hills		Construct 5 MG reservoir R21	М	0	с	Inadequate source capacity resulting in service connection limitation	2,500,000	18,927	55,000 13	San Bernardino	v	1998
2995 3610036	3610036-019	City of Chino Hills		Upgrade Carbon Cyn PRV	М	0	с	Inadequate source capacity resulting in service connection limitation	125,000	18,927	55,000 13	San Bernardino	v	1998
2996 3610036	3610036-006	City of Chino Hills		Construct reservoir R23	М	0	с	Inadequate source capacity resulting in service connection limitation	1,125,000	18,927	55,000 13	San Bernardino	v	1998
2997 3610036	3610036-011	City of Chino Hills	Care Care I Do 110"	Drill 8 to 14 new wells	м	0	c	Inadequate source capacity resulting in service connection limitation	5,390,000	18,927	55,000 13	San Bernardino	v	1998
2998 4910006	4910006-005	Petaluma, City of	Casa Grande Road 16" Water Main	Project would loop needed areas in the system to provide adequate fire fighting pressures and ensure water turnover and protect public health.	Μ	0	С	Ine Project will relieve pressure and water turn over in an extended part of the system.	1,300,000	19,125	55,900 18	Sonoma	II	2009
2999 4910006	4910006-009	Petaluma, City of	Buckingham Lane 12" Water Main	Project would loop needed areas in the system to provide adequate fire fighting pressures and ensure water turnover and protect public health.	М	0	С	The Project will relieve pressure and water turn over in an extended part of the system.	450,000	19,125	55,900 18	Sonoma	Ш	2009
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3000 4910006	4910006-004	Petaluma, City of	Washington Street 16" Water Main (Edith to Washington St. Bridge)	project replaces a failing pair of mains and combines them into one. This will allow the city to reunify the system and protect the public heath and provide fire fighting pressure accross town on it's backbone line.	М	0	С	The project is to replace one 8" and one 10" water main with a 16" need PVC main. current mains are failing and have been isolated to prevent further damage to the system and endanger public health.	1,500,000	19,125	55,900 18	Sonoma	II	2009
3001 4910006	4910006-008	Petaluma, City of	Washington Street 16" Water Main (101-Edith)	Project would replace this section of the failing main and the allow the system to provide addequat fire fighting pressures and ensure water turnover and protect public health.	М	0	С	Current 10" steel water main is failing and has required the city to isolate the main and pump around the city. This has severed the City's system and requires imidiate attention.	1,500,000	19,125	55,900 18	Sonoma	II	2009
3002 4910006	4910006-007	Petaluma, City of	Riesling Rd. 12" Water Main	Project would loop needed areas in the system to provide addequat fire fighting pressures and ensure water turnover and protect public health.	М	0	с	The system struggles in this area to meet need preassures	150,000	19,125	55,900 18	Sonoma	II	2009
3003 4910006	4910006-003	Petaluma, City of	Cross Creek 12" Water Main	Project would loop needed areas in the system to provide addequat fire fighting pressures and ensure water turnover and protect public health.	М	0	С	System Pressures in this area of the system require looping to get need water exchange and provide for more consistant fire fighting pressures.	500,000	19,125	55,900 18	Sonoma	Ш	2009
3004 4910006	4910006-002	Petaluma, City of	Petaluma Blvd. North 12" Water Main Extension	Project would loop needed areas in the system to provide adequate fire fighting pressures and ensure water turnover and protect public health.	М	0	С	The Project will relieve pressure and water turn over in an extended part of the system.	1,100,000	19,125	55,900 18	Sonoma	Ш	2009
3005 4910006	4910006-001	Petaluma, City of	Paula Lane Reservoir #2	The City of Petaluma is proposing to make improvements to its water distribution system to meet existing demand within the pressure zone. Proposed improvements include construction of a 1.6-million- gallon, above-grade, welded-steel, potable water reservoir at an existing reservoir site on Lavender Hill Lane.	Μ	0	с	Paula Lane Reservoir #2 is required to support the current Paula Lane Reservoir. The current reservoir is in a degraded condition and in need of repair, but due to its critical nature to the system it cannot be brought out of service for repair and recoating. This project alleviates the vulnerability of the city's water system, in terms of demand availability and water quality in this segment and provides for additionally needed storage to areas users.	2,250,000	19,125	55,900 18	Sonoma	Ι	2008
3006 4910006	4910006-006	Petaluma, City of	Petaluma Eastside Aqueduct 48"	The project is a parallel aqueduct to increase reliability for our delivery system and ensure that three public entities are able to access much needed water.	Μ	0	с	The current Aqueduct is undersized and is 50 years old. I its the back bone to southern sonoma county and 2 water districts in marin county. We have indications that this line is loosing its lining and that steel wall thicknesses are entering the critical stages. We anticipate that the line will be declaired impared to reduce flows in the line culminating in delivery reductions and increased demand on grownwater.	40,000,000	19,125	55,900 18	Sonoma	II	2009
3007 4910006	4910006-010	Petaluma, City of	Paula Lane Tank #2	Project replaces a 2MG tank. This is critical inferstructure to the city and protects public heath as the current tank is in poor condition and requires overhaul and recoating. Because of the system configuration the Existing tank cannot be taken out of service to repair and so the second tank is required.	М	0	с	The Current tank is Failing and a replacement Tank is required to maintain system operation and protect the public health,	2,996,000	19,125	55,900 18	Sonoma	II	2009
3008 2110003	2110003-038	North Marin Water District	Trumbull Pump Station Upgrades	This project proposes to upgrade the pumps at the Trumbull Pump Station. All three pumps would be replaced with 25hp pumps. Aging electrical service controls would be replaced and installed in an onsite enclosure to protect them from the elements and extend their useful life. Also, the valves in the pump station would be replaced and a new check valve addec to increase operational flexibility of the pump station and increase water distribution efficiency. These upgrades would ensure that the 1,000 customers can be guaranteed water delivery during times of peak demand.	M I e	0	С	As identified in the Novato Water System Master Plan, Trumbull Pump Station does not have sufficient pumping capacity to keep up with current demands. Trumbull Pump Station is the sole pump station that provides water to approximately 1,000 services in the distribution system. The three 15hp pumps are undersized and peak system demands can barley be met with all three units operating; leaving no backup pump available if one fails.	150,000	20,639	56,000 18	Marin	Ι	2009
3009 5710006	5710006-011	City of Woodland	Replacement of wells 6 and 1	This project involves the replacement of the below fround structures. The above ground structure of the existing wells will be re-utilize for the new well.	М	0	с	These wells (6 and 1) has nitrate levels above the 45Mg/L, they need to be replaced in order to comply with drinking water standard.	6,500,000	14,065	56,000 09	Yolo	I	2009

3010 2110003	2110003-015	North Marin Water District	emergency power for WT	P STUDY NEEDS, IMPLEMENT AS APPROPRIATE.	М	0	С	Surface WTP lacks emergency power.	100,000	20,639	56,000 18	Marin	Ш	1998
3011 2110003	2110003-035	North Marin Water District	Pacheco Valle Tank Mixing System	g The project proposes to install a mixing system inside the tank to improve water quality and to bring this ta connection up to the current Water Works Standards This mixing system will eliminate stratification that occurs in the tank and increase historically low chlori residual levels. The addition of the mixing system wi eliminate the need to manually monitor the water quality on a weekly basis and should eliminate the nee for frequent chlorine additions.	e of M ank s. ne II eed	0	с	Pacheco Valle Tank is a 5MG water tank the currently has only one inlet/outlet valve and no internal mixing system & piping. This does not meet current Water Works Standards. Water quality is impacted by this current tank configuration not allowing regular turnover of water resulting in decreased disinfection residuals. Staff are currently required to manually monitor the residual chlorine levels inside the tank on a weekly basis. The chlorine levels typically drop below detectable levels during peak demand and frequent chlorine additions are necessary.	110,000	20,639	56,000 18	Marin	I	2009
3012 2110003	2110003-034	North Marin Water District	2nd Feed to Amaroli Tank	This project proposes to construct a second pipeline feed to Amaroli Tank. A second feed to the tank fror the north would significantly enhance flows and prov direct connection to a greater portion of the souther distribution system area. Installation of 1,500-feet of 16" pipe from end of Pamaron Way to the existing 11 pipe along Igloo Road (at the base of Ammo Hill) wou ensure that sufficient water supply could be delivere to the approximately 900 customers in this southernmost portion of the distribution system.	M n ride n : : s'' uld d	0	C	The 4.5 MG Amaroli Tank is currently served by a single pipeline from the northern section of the distribution system to serve customers in the southern portion of the system. This pipeline does not efficiently deliver water to or from the tank, and water flows from the northern to southern portion of the distribution system are limited. The existing tank supply line extends a distance of over 13,500 feet. The reliance on such a long single pipeline to supply the tank makes the South Novato area vulnerable to loss of storage capacity. Changes need to be made so that Amaroli Tank can be utilized more efficiently to increase flow capacity of the system within the area, enabling sufficient water delivery capability to meet current demand.	550,000	20,639	56,000 18	Marin	11	2009
3013 2110003	2110003-036	North Marin Water District	Lynwood & San Marin Pump Station Upgrades	This project proposes to replace the motor control centers at the Lynwood and San Marin Pump Station These replacements will enable the pumps to restart when the power is restored after an outage, restorin water service to those approximately 12,000 custom who would otherwise have to wait until the motor control centers could be manually fixed.	M S. g ers	0	C	The Lynwood and San Marin Pump Stations are the sole pump stations that provide water to approximately 12,000 services in the distribution system. Due to the age and condition of the electrical distribution equipment at these pump stations, if a power outage were to occur catastrophic failure of motor control centers would interrupt water service to all of these customers. Massive water service to all of these customers. Massive water outages would result, as all the customers would be required to wait until the pumps electrical systems could be manually rewired. The Lynwood & San Marin Pump Stations need to be upgraded to continuously provide enough water delivery capacity to supply current demands.	176,000	20,639	56,000 18	Marin	Ι	2009

### 3014 2010002 2010002-013 MADERA-CITY

City of Madera Water Tank Work to be accomplished includes the complete м removal of all existing interior coatings and replacement with an ANSI/NSF Certified immersion grade epoxy liner. As part of this effort the contractor shall apply caulking to the shell/roof interface, all roof plate lap seams, and other crevices that preclude proper coating application. Additionally, the repair of all exterior paint, which includes spot repairs of rusting areas and overcoating the entire vessel using epoxy and polyurethane protective coatings will be included in the project's scope of work.Completion of this project is considered to provide the most effective method to combat further metal loss and prevent rust and iron particles from entering the water system. Additionally, the recoating of the water tower exterior will prevent further chalking, mildew growth and small areas of flash corrosion due to spots of exterior coating breakdown.

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3015 3310020 3310020-005 Indio Water Authority

Facility

Indio Hills Reservoir

**Recoating Project** 

The City/IWA is currently seeking funding for Indio Hills M Emergency Water Storage Reservoir emergency water storage and distribution facilities. The objective for this Project is to increase emergency storage by 10 million gallons. Other elements of the Project include:.. Indio Hills Distribution and Transmission Pinelines – The Project includes 23,000 feet of 18-inch diameter transmission lines from Wells 13-A, 13-B, and X to a booster station for pumping to the elevated emergency storage reservoir. The Project also includes 18-inch diameter distribution pipelines from the reservoir to the distribution network. The pipeline is needed to provide water to the reservoir and to provide gravity flow to Zone 2 properties located north and west of the Whitewater storm channel. The reservoir and pipeline design, technical specification and bid documents are completed. The Indio Hills emergency storage project is "construction ready"... Indio Hills Booster Pump Station - The project includes a Booster Pump Station equipped with emergency power supply and a photovoltaic (PV) solar power system. The pump station has a capacity of 9,000 gallons per minute at built-out conditions. The Indio Hills Booster Pump Station is required to pump well water to the reservoir located at a higher elevation. In case of an emergency, water can then be supplied by gravity forces (no external power source is required) to satisfy

Madera is an elevated reservoir built in 1966. The structure is approximately 134 feet tall with the tank body, or bowl approximately 76 feet in diameter by 35 feet high, providing a nominal storage capacity of 1.000.000 gallons of potable water. The interior coal tar enamel coating system on the roof plates and the area above the high water level is in extremely poor condition. Additionally, the interior coating on the tank sidewalls is in poor condition. The extremely poor condition of the coal tar enamel system has led to massive areas of corrosion. As a result of the breakdown of the interior coating, rust and iron particles are able to enter the potable water. Therefore, the interior coal coating system should be removed and relined as soon as possible to prevent further metal. loss. In addition to the condition of the interior of the tank, the exterior of the water tower exhibits several conditions that need to be addressed as well. While the exterior coating system is in fair condition, the tower coating does exhibit chalking, mildew growth and small areas of flash corrosion due to a lack of coating as well as spots of complete coating breakdown. In order to prevent further breakdown, the exterior coating system should be re-coated as soon as possible. This preapplication is to pay for the costs of recoating the water tower exterior and replacing the interior coating system Since 2000, the City has experienced exponential

The Loy E. Cook Water Storage Tower in the City of

population growth from 49,116 to its current population of 83,937: This is a 70% increase in the population over eight years. As one of the fastest growing cities in California, residential growth has lead to commercial, retail and industrial opportunities. However, water infrastructure developments have lagged behind. Current emergency water storage capacity is 11.5 million gallons, which is far short of a required minimum of 37 million gallons, based on operational, emergency and fire flow demands. The proposed Project will add 10 million gallons of emergency storage capacity enabling the City to meet its emergency water needs for existing developments north and west of the Whitewater Stormwater Channel. Project design is completed. However, due to the unforeseen decrease in the IWA's Development Impact Fees payments and the IWA's obligation to pay debt service on a 2006 bond for \$61.8 million, without Federal funding, the IWA will not be able to proceed with all of the projects identified in the 2007 Water Master Plan to meet the IWA's need for emergency water storage facilities.

500,000	12,419	57,318 11	Madera	ш	2011

22,000,000

19,453 58,823 20 Riverside 2009 1

### 3016 3310020 3310020-004 Indio Water Authority

## Facility

Lost Horse Reservoir The City/IWA is currently seeking funding for Lost Horse M Emergency Water Storage Reservoir emergency water storage and distribution facilities. The objective for this Project is to increase emergency storage by 5 million gallons. Other elements of the Project include:.. Lost Horse Pipeline – The Project includes two pipelines, 18-inch diameter, 5,100 feet long from the reservoir to the City's Terra Lago pump station. The pipeline is needed to provide water to the reservoir and to provide gravity flow to Zone 5 and multiple zone properties. The reservoir and pipeline design, technical specification and bid documents are completed. The Lost Horse emergency storage project is "construction ready". .. Lost Horse Well 13-A - With the addition of new emergency storage facilities, a new well, has been drilled to provide additional water supply north of the I-10 corridor. The new well is 1,300 feet deep, it has been test pumped, and Title 22 water quality testing has also completed. The Lost Horse Well 13-A equipment project is "construction ready"... Zone Separation Pressure Reducing Valves (PRV) - To manage water pressure throughout the system, PRV stations are necessary. The installation of required PRV stations will be in accordance with the City's/IWA standard drawings. The PRV project comprising two PRV stations is "construction ready".

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Since 2000, the City has experienced exponential population growth from 49,116 to its current population of 83,937: This is a 70% increase in the population over eight years. As one of the fastest growing cities in California, residential growth has lead to commercial, retail and industrial opportunities. However, water infrastructure developments have lagged behind. Current emergency water storage capacity is 11.5 million gallons, which is far short of a required minimum of 37 million gallons, based on operational, emergency and fire flow demands. The proposed Project will add 5 million gallons of emergency storage capacity enabling the City to partially meet its water needs for planned development projects north of the I-10 corridor and west of Dillon Road. Project design is completed. However, due to the unforeseen decrease in the IWA's Development Impact Fees payments and the IWA's obligation to pay debt service on a 2006 bond for \$61.8 million, without Federal funding, the IWA will not be able to proceed with all of the projects identified in the 2007 Water Master Plan to meet the IWA's need for emergency water storage facilities.

Since 2000, the City has experienced exponential population growth from 49,116 to its current population of 83,937: This is a 70% increase in the population over eight years. As one of the fastest growing cities in California, residential growth has lead to commercial, retail and industrial opportunities. However, water infrastructure developments have lagged behind. Current emergency water storage capacity is 11.5 of 37 million gallons, based on operational, emergency million gallons of emergency storage capacity enabling the City to partially meet its water needs for planned development projects south of the I-10 corridor. Project design is completed. However, due to the unforeseen decrease in the IWA's Development Impact Fees payments and the IWA's obligation to pay debt service on a 2006 bond for \$61.8 million, without Federal funding, the IWA will not be able to proceed with all of the projects identified in the 2007 Water Master Plan to meet the IWA's need for emergency water storage facilities.

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12,568,520	19,453	58,823 20	Riverside	V	2009

3017 3310020 3310020-003 Indio Water Authority

ReservoirEmergency Water Storage Facility

Plant 2; 5 Million Gallon

The City of Indio is currently seeking funding for Plant 2 M Reservoir emergency water storage and distribution facilities. The objective for this Project is to replace the existing 2 million gallon concrete reservoir that is not seismically sound with a 5 million gallon concrete reservoir; thereby increasing emergency storage by 3 million gallons. Other elements of the Project include ... Plant 2 Pipeline - The Project includes four pipelines, 18inch pump suction lines leading to the vertical turbine pump cans. Isolation valves will be provided on each 18inch pump suction line. Also, to provide for more flexibility, a 20-inch by-pass line will interconnect the pump suction line and the well inlet manifold. These pipeline enhancements will provide greater pressure stability to Zone 2. The reservoir and pipeline design, technical specification and bid documents are completed. The Plant 2 emergency storage project is "construction ready"... New Well 2E - With the addition of new emergency storage facilities, a new well, has been designed to the City/IWA's current well designed standards. The new well will be located offsite, to a depth of 1,300 feet. The land for construction of the well has been purchased and a pumped and Title 22 water quality testing will commence at the same time as construction of the Plant 2 reservoir. Plant 2 Well 2E equipment project is "construction ready". Solar Panel System – A photovoltaic (PV) system will be

million gallons, which is far short of a required minimum and fire flow demands. The proposed Project will add 5

### 14,492,644 19,453 58,823 20 Riverside v 2009

3018 3010018	3010018-003	City of La Habra	Municipal Water Yard/Water Facility SCADA Upgrades and Security Improvements	The Project is located at the City's Municipal Water Yard, three reservoir sites, six booster pump stations, and a number of import connections. The appropriation would assist in providing the needed security to City property, the prevention of vandalism and damage to critical facilities, and providing safety for City employees and those otherwise providing safety for City employees and those otherwise providing safety for City employees contral facilities, and providing safety for City and the project includes upgrades to and the addition of video surveilance equipment for the Water Division's central SCADA system. The upgrades to the SCADA system would provide for the control of of the remote site facilities from the central SCADA location as well as the ability for the enhanced security equipment to be integrated into the SCADA system. The enhanced security system would provide monitoring. A proposed card or code entry system would be utilized at all points of entry. The security improvements to the various sites would be monitored as "satellite" locations from the central maintenance yard facility and would provide enhanced protection to the City's extensive water supply facilities and reservoirs, protection against potential threats to public health, and protection against vandalism or potential acts of terrorism. In addition to the security improvements, the project	M 5	0	C	The City of La Habra owns and operates facilities deemed critical to the operations of the City and to the reliable delivery of potable water. Providing protection to these facilities from vandalism and potential acts of terrorism is critical to the protection of the City's water supply for fire protection and general public consumption purposes, as documented in the City's Security Vulnerability Assessment. Additionally, improvements to the operations of these facilities with the integration of emergency back up power generators would help prevent loss of system pressure and potential compromise or contamination of the public drinking supply, and enhance overall system reliability.	1,000,000	12,548	61,454 08	Orange	v	2009
3019 3010018	3010018-002	City of La Habra	ldaho Well Motor Control Center and Backup Generator	The project consists of the replacement of the existing obsolete motor control center with a fully automated PLC-based design. In efforts to conserve energy, the deep well pump will utilize a soft-start configuration and the booster pump will be controlled by a variable- frequency-drive. The addition of an approximately 400KW emergency backup generator will help to ensure the reliability of the City's only local groundwater source and the well's 24/7 operation. The use of a PLC- based motor control center will allow for the compatibility to the City's SCADA system and ability to provide both local and remote operation of the well, as well as provide the ability to remotely monitor and control treatment and other system processes.	Μ	0	с	The Idaho Well and Booster Station is currently the City's only source of local groundwater and operates 24 hrs/day. The existing motor control center is over 25 years old and has outlived its designed life expectancy. Parts are currently unavailable or increasingly hard to obtain. During events where the motor control center experiences electrical component or power failures, the well can be offline for days or weeks at a time, until repairs can be completed or power to the area restored. Currently, there is no available backup power for a loss of imported water supply, this well becomes the City's only source of water. The installation of a modern motor control center with an emergency backup generator will ensure the availability of at least one water source for the City, enhancing system reliability and maintaining the ability to provide fire protection .	400,000	12,548	61,454 08	Orange	v	2009
3020 4310009	4310009-001	City of Palo Alto		Replace water mains.	М	0	С	Water mains are aging and need to be replaced. Main breaks cause customer service problems.	2,200,200	19,344	62,000 17	Santa Clara	Ш	1998
3021 4310009	4310009-008	City of Palo Alto		Contract a new intertie to Hetch-Hetchy Division tubes 3 & 4 to add second feed into Hospital Zone.	М	0	С	Needs improvement on transmission lines.	1,800,000	19,344	62,000 17	Santa Clara	Ш	1998
3022 4310009	4310009-005	City of Palo Alto		Construct a new return pipe from Montbello reservoir to pressure zone 1.	м	0	С	System's ability to utililize stored water needs to be improved.	2,000,000	19,344	62,000 17	Santa Clara	П	1998
3023 4310009	4310009-004	City of Palo Alto		Install variable frequency drives and water treatment to connect wells to standby wells.	м	0	С	More storage is necessary for emergency water supply. Current city wells need repairs and treatment.	1,200,000	19,344	62,000 17	Santa Clara	II	1998

3024 0710008	0710008-001	City of Pittsburg	Buchanan Place Water Main Replacement	This project will replace deteriorated distribution infrastructure within a publicly owned water distribution system operated by the City of Pittsburg in Contra Costa County. Specifically, the project will replace approximately 300 LF of 8" water main and 650 LF of poly water service lines with 1" copper service lines. The project also involves replacement of 4, 8" gate valves and residential fire hydrants in an effort to eliminate a maintenance problem area identified within the water distribution system. This segment requires more maintenance than other segments of similar age in order to maintain service to our water customers. This capital project will reduce these maintenance expenses and service interruptions, thereby presenting a cost-effective solution.	Μ	0	c	The Buchanan Place Water Main project will replace a segment of water distribution line within a publicly owned water system that is subject to frequent waterline breaks. The segment is an area identified as requiring a disproportionate share of the total system maintenance performed by the City of Pittsburg, which is the water purveyor and also owns, operates and maintains the water distribution system. The project will also replace poly service lines, which according to adopted policy is a cost to be borne by the City of Pittsburg. While the problems are significant, to date this problem has not required public notification or involved violation of drinking water standards, regulations or CDPH directives.	300,000	16,041	62,000 04	Contra Costa	II	2009
3025 4310009	4310009-006	City of Palo Alto		A two million gallon reservoir is needed to improve storage	М	0	С	System's water storage needs improvement.	4,000,000	19,344	62,000 17	Santa Clara	П	1998
3026 3010046	3010046-004	City of Tustin		Repairs will consist of installing a new top slab on the existing reservoir along with repairs to the columns and roof beams. A hypalon liner is proposed for the floor and side slopes of the reservoir after the existing roots have been removed and th	м	0	С	Aged Simon Ranch reservoir could cause contamination.	670,000	14,071	62,100 08	Orange	V	1998
3027 3010046	3010046-006	City of Tustin	RAWLINGS RESERVOIR - E	R The City's water distribution system is divided into three pressure zones and currently provides 7.83MG of the total storage from five reservoirs. Before Rawlings Reservoir was taken out of service, it provided an additional 3.82 MG (33%) of storage for the City's Zones 1 and 2 to meet operational, fire and emergency storage requirements. The Rawlings Reservoir Replacement Project involves the: (1) demolition of the existing reservoir; (2) the construction of two partially buried prestressed concrete 3.0 MG water tanks and associated improvements; and (3) the construction of off-site storm drain facilities. The construction of the two new reservoirs is estimated at approximately 22 months per the following schedule: site excavation and grading:2 months; new tank construction.15 months; site backfill:1 month; pipeline construction and other appurtenances:2 months; site paving:1 month; and clean-up/demobilization:1 month.Reservoir Demolition. The proposed project includes demolition of the existing reservoir. During the first stage of demolition, the reservoir roof, roof-support columns, perimeter side walls to grade, and the reservoir membrane liner will be removed. Asbestos containing materials have been identified in the existing roof mastic, floor and wall mastic, and in the wall fiberboard. These materials will be removed and disposed per applicable State and local regulations. The second	Μ	0	C	The City of Tustin is located in central Orange County, and is responsible for providing drinking water to the community and adjacent unincorporated areas. The City's water distribution system includes six reservoirs, the largest being the 4MG Rawlings Reservoir. It was built in 1971 and is a partially buried, rectangular, concrete-lined, earthen reservoir, covered by a timber and sheet metal roof. The NE and NW sides of the reservoir are cut into a hillside which is partially retained with concrete-block retaining walls. The earthen side walls and the floor are constructed with asphalt concrete overlay and two layers of asphalt panel lining. The earthen sides and floor are lined with a hypalon liner to prevent leakage. Rawlings Reservoir was taken out of service in late 2004 due to the following significant structural deficiencies:1. The splitting and delamination of the glulaminated roof beams prevents the structure from supporting the code- required 20 psf live load.2. The lateral force resisting horizontal diaphragm is inappropriate and not approved for transferring the lateral seismic forces to the perimeter shear walls. There are no horizontal load resisting elements to transfer horizontal load through the roof cupola opening.3. The live-load capacity of the roof rafters does not meet current code requirements.4. The column tie spacing in the precast	14,000,000	14,071	62,100 08	Orange	V	2009

3028 3010046	3010046-007	City of Tustin	TUSTIN AVENUE WELL - EI	R The Tustin Avenue Well project includes the demolition M of an existing well, followed by the drilling and equipping of a modern well facility. The new well will improve domestic water service for Tustin's water service area. The proposed project also includes the replacement of approximately 500 feet of undersized 8- inch waterlines with new 12-inch water mains. The Tustin Avenue Well project consists of a drilling and an equipping phase. The new well will be drilled to a depth of 1,200 feet. The diameter of the borehole will be 30 inches. The drilled hole will be stabilized with alternating sections of solid and perforated 20 inch diameter stainless steel casing. The perforations will maintain the integrity of the hole while allowing water to flow through it. A gravel pack, sanitary seal, and accessory tubes will be installed around the steel casing to ensure well stability and protect the local groundwater from potential contamination. A temporary sound barrier will be erected around the well site to minimize construction noise effects on adjacent commercial businesses. The well will also be tested to determine its pumping capacity and developed. The test data will be used to design the pump and other ancillary equipment. The drilling phase is estimated to be completed in approximately three months.During the equipping phase, a 3,025 square foot concrete reinforced masonry block building will be built to secure	0	c	The City of Tustin [City] is located in central Orange County [OC] and supplies domestic water to the community and adjacent unincorporated areas. Approximately 80% of the City's water supply comes from local groundwater, with the balance purchased from imported water supplies. The City has several older wells that were not built to California Department of Water Resources water well standards that are beyond their useful production life and must be replaced. The City's Tustin Avenue Well project includes the demolition of the existing 1950's era Tustin Well, and the construction/equipping of a new well. An additional old well would be taken out of service and demolished once the project is on-line. The Tustin Avenue Well will feature several significant improvements, not found in the older wells: a disinfection system, back-up power, post-911 security improved sanitary seal and provide for future floridation capability per DPH standards. The construction of Tustin Avenue Well will dat an extra 3,548 AF of annual pumping capacity, and reduce the City's reliance on more expensive imported water by approximately 50%. The City's long-term groundwater objective is to meet approximately 85-90% of its customer needs from groundwater, with the balance	4,500,000	14,071	62,100 08	Orange	v	2009
3029 3010046	3010046-008	City of Tustin	ABANDONED WELL DESTRUCTION PROJECT	Once funding becomes available, a licensed contractor M will be hired to inspect the wells, to remove associated equipments and obstructions, destroy the well casing, fit the well and annual space with cement/grout, then seal and cap the well according to standard specifications. The contractor who will perform the well destruction activities will be selected through a competitive bidding process. The contractor will properly destroy the well, restore the property as appropriate, and prepare a well destruction reports, which will be distributed to local regulatory agencies and to the Department of Water Resources.	0	c	In City of Tustin's service area, there are two abandoned wells that pose a significant risk for contaminants to migrate into deeper groundwater aquifers. Abandoned wells have the potential to provide a conduit for anthropogenic contaminants to migrate into the the deeper groundwater aquifers. These abandoned wells were taken out of service in 1990s due to high nitrate concentration and excessive sand production. Well rehabilitation or drilling a new well have been ruled out due for several reasons. Well site is too small to drill a new well that is an adequate distance from the old well; site is surrounded by residences; site access and logistics for drilling are poor; no guarantee on improved water quality; and no onsite or proximal storm drains for discharge of water from drilling or rehabilitation operations. The abandonment and destruction of these wells are recommended by the Department of Water Resources to eliminate the threat of contamination into deeper aquifers. These sites are surrounded by residential area and potential high risk businesses such as a gas station. With minimal monitoring and access control, these abandoned wells pose a significant risk to larger groundwater for 60 to 75 percent of its water supply, all practical measures should be undertaken to help preserve the quality of groundwater in this area.	50,000	14,071	62,100 08	Orange	v	2011
3030 3010046	3010046-001	City of Tustin		Removing soil from the roof and installation a M waterprood cement based slurry on the roof deck. The columns will be repaired by providing additional ties, vertical reinforcement and concrete cover around the	0	С	Aged reservoir could cause contamination (foothill)	476,000	14,071	62,100 08	Orange	v	1998

columns. Ret.walls will be removed and rep

3031 3710029	3710029-004	Olivenhain MWD	Elfin Forest Loop Pipeline	The Elfin Forest Looped Pipeline will resolve a potential M water quality issue in a particular area of the District. In this area, a large (30") pipeline is in a dead end condition with inadequate number of service connections to keep the water fresh. This new project will connect that 30" pipeline to a nearby part of our larger distribution system thereby creating a looped system that will allow us to keep water moving through the pipeline for water quality purposes.	1	0	с	The Elfin Forest Looped Pipeline will resolve a potential water quality issue in a particular area of the District. In this area, a large (30") pipeline is in a dead end condition with inadequate number of service connections to keep the water fresh. This new project will connect that 30" pipeline to a nearby part of our larger distribution system thereby creating a looped system that will allow us to keep water moving through the pipeline for water quality purposes.	82,500	23,109	63,000 14	San Diego	V	2009
3032 1910174	1910174-001	SUBURBAN WATER SYSTEMS-WHITTIER		PHASE 1 OF 2: DEMOLITION AND PREPARATION WORK M	1	0	С	PHASE 1 OF 2: RESERVOIR 216 HAS AN OLD CORRUGATED METAL ROOF THAT HAS DETERIORATED BEYOND REPAIR	950,000	19,088	63,188 07	Los Angeles	IV	1998
3033 5010019	5010019-002	Turlock, City of	City of Turlock - Well #40	The City has found a suitable site for a new well (Well M 40) and a test hole was drilled to confirm that water quality meets all applicable drinking water regulations. In addition, a pump test was completed to determine the potential capacity of the well. Based on the preliminary information from the test well, a well with a capacity of 1,250 gpm can be constructed at this site. Construction of the well will include site preparation, drilling the well, installing distribution water lines, installing security fencing and monitoring equipment, and installing equipment and controls. This project is ready to be bid and the environmental review process is close to complete (Notice of Intent to Adopt a Negative Declaration). Construction could start in a few months.	I	0	c	A new water well is necessary increase supply to meet peak demands and fire flows. Currently, the only water source available to the City of Turlock is deep wells that draw water from below the E-clay. The City of Turlock historically has been operating these wells with only a minimal reserve capacity available. During the summer peak hour demands, all of the wells are on the line in order to maintain water pressure and volume. Just recently, Well 24 had to be removed from service due to nitrates that exceeded the MCL. Because this well was one of the largest water producers, peak hour demands and/or additional fire flow demands will likely drop water pressure and flow to minimal levels. The Department of Health Services (Southern California Drinking Water Field Operations Branch – Stockton) has recommended that the City increase the water supply production. In the 2006 Annual Inspection report they state "Based on this analysis, it appears that total City capacity may not be adequate during prolonged peak water usage. If one or more wells were off line for mechanical problems or MCL exceedences, the City's ability to meet peak demands would be further diminished." The proposed project helps rectify this existing, documented deficiency in the City's water system.	750,000	16,691	64,215 10	Stanislaus	Ш	2009
3034 5010019	5010019-001	Turlock, City of	Turlock Storage Project	Design and construct two above ground water storage M tanks and related pump stations	1	0	с	System has no storage.	2,000,000	16,691	64,215 10	Stanislaus	Ш	2004
3035 5610024	5610024-003	CASITAS MUNICIPAL WATER DIST		Coastal pipelione from a location near city of ventura, M extending northward and connecting the coastal communities.	1	0	с	Pipeline breaks during storm events. Does not comply with Water Works standards.	8,000,000	3,184	65,000 06	Ventura	IV	1998

3036 1910239	1910239-009	LAKEWOOD - CITY, WATER DEPT.	Rehabilitation of Plant 13 Booster Station	The rehabilitation of Plant No. 13 includes the following: 1. Replacement of the electric planel, which currently has no intetgrated safety system. The project removes the 3 wire set up that connect the electrical panel to each booster pump and replaces it with a 4 wire configuration with G.F.I. to meet current standards.2. Inceases the reliability, security and safety of the booster pumps. The existing booster pumps are in an unsecured confined space. This project removes the confined space and installs a new structure to house the steel piping that connects the five water tanks to the booster pumps to the discharge into the water distribution system. The piping from the tanks to the boosters and from the boosters to the water distribution system. The piping from the tanks to the boosters and from the boosters to the water discharge have never been replaced. This project would increase the reliability from this storage facility and reduce the potential of water quality complaints triggered from this facility.	M e s	0	C	Plant No. 13 contains five welded steel tanks and four boosters. It maintains a storage capacity of 2.1 million gallons. Plant No. 13 has been operational for over 50 years without rehabilitation to the electrical and piping structure of the plant. The proposed project would correct seismic, safety and security problems at the facility.	1,900,000	20,219	66,000 07	Los Angeles	IV	2009
3037 1910239	1910239-010	LAKEWOOD - CITY, WATER DEPT.	City of Lakewood Water Main Replacement Project	The City of Lakewood has replaced over 33 miles of 4 inch unlined cast iron water mains since 1990. However, approximately 50 miles of 4 inch cast iron mains remains in the water distribution system. These mains not only create flow problems for fighting fires, but create water quality complaints due to rust suspended in the water. This project proposes to replace another 10.5 miles of water main. The project, once complete, will eliminate the rust which becomes suspended in the water when water flows increase in volume or change direction in the neighborhoods slated for water main replacement.	м ;	0	С	The City of Lakewood is plagued with customer complaints regarding rusty water. Most of the 109 complaints received in 2008 were related to rusty water. The source of rusty water is generally the 4 inch cast iron mains in the water distribution system. The City has approximately 50 miles if unlined cast iron mains and plans to replace these mains with C900 pipe.	5,320,000	20,219	66,000 07	Los Angeles	IV	2009
3038 1910239	1910239-008	LAKEWOOD - CITY, WATER DEPT.	City of Lakewood Plant #2 Reservoir Replacement Project	2 Though the inspector indicated that costs to repair the reservoir would not be cost effective, the proposed project would include an analysis of the renovation and retrofitting the tank to meet current structural standards, including seismic needs. The large expense associated with the rehabilitation of the existing structure has two significant drawbacks: requires a decrease in the reservoir's capacity due to the need to strengthen the existing walls and floor to meet new structural standards, and only extends the life of the facility approximately 20 years.Plant #22 is located in an established neighborhood. Adjacent homes are as close as 15 feet from the reservoir, this makes replacement a difficult task. Shoring restrictions, construction (clearance, and construction sequencing need careful consideration. The replace of the reservoir would include the preparation of a pre-design report to determine project alternatives, geotechnical evaluation, fully engineered plans and specifications to construct the reservoir, demolition of the reservoir, hooster pumps, construction of the reservoir adjacent well and associated electrical required for operation of the storage facility.	M ,	0	C	Plant #22 is a 2.5 million gallon partially buried all concrete reservoir built in the early 1950s. The reservoir is the only water storage facility on the west side of the service area, which makes it an important source of water generally but an essential source during emergency situations like earthquakes. According to the most recent inspection, the reservoir has significant structural concerns including cracks in the roof large enough to let rain enter the storage facility, a significant gap near the overflow weir, rust stains caused by exposed rebar and cracks in the floor. The joints in the reservoir are in poor condition. The inspector suspects seepage in several locations. The underdrain system is always wet, which could be the result of leakage, groundwater intrusion or both. The shape, size and design of the existing reservoir is conductive to stagnant water pockets which can result in the loss of chlorine residual and promote water quality problems. Plant #22 reservoir does not meet modern standards for water storage facilities. Replacement, rather than repair, is the more cost effective method of solving these structural problems. Plant #22 reservoir does not meet ACI 350-06 and ACI 350.3-06, that is an essential structure intended to remain usable for emergency services after a maximum credible earthquake. In fact, past earthquakes have moved the walls enough to initiate leaking at the joints. In addition the reservoir	5,500,000	20,219	66,000 07	Los Angeles	IV	2008

3039 4310005	4310005-002	City of Milpitas	Well Upgrade Project- Curtis 7076	This proposed project would complete the construction M of the replacement well and meets Category C ranking criteria. The needed facilities include pumps, motors, controls, building, back-up generator, yard piping, and chloramination facilities. Preliminary indications are the well would have a capacity of approximately 1.5 mgd. Completion of this well would increase the local emergency water supply to 3.2 mgd, which is equivalent to 41% of winter demand. The project plans and specifications were completed in 2006 and construction bids were received. Due to higher than anticipated costs, the city did not award a construction contract. The plans and specifications went through peer-review and are being modified to incorporate suggestions. The City's Well Upgrade project includes multiple phases of work. These phases have been completed: design and construction of Pinewood Well improvements, design of Curtis Well improvements, and Curtis well drilling with casing. The City's accounting system does not allow us to identify the portion of the total project cost that were attributable to the Pinewood Well work. Therefore, the total project of \$5,000,000 reflects the combined total amounts for both Pinewood Well and Curtis Well. The requested amount of \$3,100,000 reflects only the amount needed to construct the remaining Curtis Well improvements as described above.	0	c	The City of Milpitas needs additional funding to construct the Curtis Well. The well is needed to increase the amount of local emergency water supply in the event a major seismic event or other catastrophe interrupts deliveries of imported supplies. The Curtis Well is a replacement for the City's former Marylinn Well, which was originally drilled in the 1950's as an irrigation well and did not meet Water Well Standards. In 1995-1996, the City was directed by CDPH to rehabilitate or destroy the Marylinn Well due to the direct influence of surface water and an inadequate sanitary seal. Due to the extensive amount of rehabilitation needed, the City destroyed the Marylinn Well and is constructing a replacement. This Curtis Well project falls under Category C in the project ranking criteria. The City of Milpitas is located between the Cities of San Jose and Fremont. The City is home to 66,200 residents, large and medium commercial retail outlets, and various industries including high- technical/electronic facilities. The City purchases treated drinking water from two wholesalers, San Francisco Public Ultilites Commission (SFPUC) and Santa Clara Valley Water District (SCVWD). Average daily potable water purchase is 10.5 million gallons per day (mgd) through 14,808 service connections. The winter potable water demand is about 7.9 million wallor able water demand is SFPUC wholesale water supply is seismically vulnerable	3,100,000	14,808	66,200 17	Santa Clara	Π	2009
3040 4310005	4310005-003	City of Milpitas	Gibraltar Reservoir & Pump Station Improvements 7101	This project provides for significant rehabilitation of the M Gibraltar Pump Station and Reservoir facility to correct the deficiencies. The proposed work includes: pump rehabilitation, replacement of diesel engines with electric motors to meet recently updated Bay Area Air Quality Management District regulations, automated chloramination facilities, overhaul of operational controls to allow for pressure set points, seismic upgrades for roof, wall, and diaphragm, sealing of concrete floors and masonry walls, installation of additional piping to allow for water recirculation and testing, plumbing of reservoir overflow to sanitary sewer to meet urban runoff program requirements, existing control room soundproofing, construction of an auxiliary building to house the operational control equipment, SCADA Center, and water quality monitoring equipment, installation of conduit and connections for future solar panels, installation of yard piping for future Curtis well connection, clean and paint the pump station exterior, exterior reservoir ladder replacement, pavement repair, and other related work.	0	C	The City of Milpitas needs additional funding to rebuild its Gibraltar Pump Station and Reservoir. This is a critical component in the City's potable water distribution system. The existing station pumps and engines are past their design lives and need to be replaced to comply with new air quality standards. The City of Milpitas is located between the Cities of San Jose and Fremont in the seismically active Silicon Valley. The City is home to 66,200 residents, large and medium commercial retail outlets, and various industries including high-technical/electronic facilities. The city purchases an average of 10.5 million gallons per day potable water purchase. The Gibraltar Pump Station and Reservoir facility is located at 641 Gibraltar Court. It houses 3 pump stations under one roof and two 5 million gallon reservoirs. Also located at this site are two of the City's five wholesaler Turnouts. Two peak- shaving pump stations can draw water from either reservoir into the distribution system at a capacity of 11,000 gallons per minute each. A booster station provides the capability to increase SCVWD Turnout pressure in the event SCVWD is experiencing water	7,500,000	14,808	66,200 17	Santa Clara	Π	2009

supply pressure problems. This facility is the heart of the Milpitas distribution system and its continued operation is essential to maintaining a safe water supply. This facility has been designated as a critical facility in the City's Seismic Improvements Strategic Plan

3041 4310005	4310005-001	City of Milpitas	S Milpitas Boulevard Pipeline Replacement 7098	The proposed project will replace approximately 4,800 8 linear feet of backbone piping consisting of aging unreliable 16-inch diameter welded steel water main with a seismically strengthened pipeline intended to withstand seismic events. The design criteria have been upgraded to meet backbone standards for pipelines located within liquefiable soils. These criteria include the use of a ductile material, restrained joints along the entire length, additional gate valves to allow for greater isolation of small pipeline segments, and polyethylene replacement spans along South Milpitas Boulevard between East Calaveras Boulevard and Yosemite Drive. In addition, the project scope will replace eight broken fire hydrant valves on Los Coches Street. If in the future one of these hydrants is sheared, the distribution system would remain in service while the hydrant is replaced.	Μ	0	c	The City of Milpitas needs additional funding to rebuild the backbone water pipeline in South Milpitas Boulevard. This major distribution pipeline is a critical component in the City's potable water distribution system. The existing pipeline is reaching the end of its useful life and has experienced several breaks. Replacement is needed to insure continuous water supply to the City's industrial service area under normal operating conditions and city-wide during emergencies. The City of Milpitas is located between the Cities of San Jose and Fremont. The City is home to 66,200 residents, large and medium commercial retail outlets, and various industries including high- technical/electronic facilities. Most of the city sits on liquefiable sandy/sity sediments. The Hayward Fault passes through the City's eastern foothills. The city purchases an average of 10.5 million gallons per day potable treated water supply. The water distribution system pipeline in South Milpitas Boulevard is a 16 inch diameter welded steel cylinder pipe that was installed in 1975. This pipeline conveys water from the SCVWD Turnout and City's primary pump station and reservoir facility to the distribution system. The pipe has experienced several breaks in the past 10 years due to corrosion as a result of failure of the exterior coating. The temporary solution of installing additional galvanic anodes along the pipeline has successfully delaved	3,100,000	14,808	66,200 17	Santa Clara	II	2009
3042 1910104	1910104-001	CALIFORNIA WATER SERVICE CO PALOS V	/ER	DESIGN AND CONSTRUCT A SECOND LIFT TRANSMISSION MAIN TO PROVIDE GREATER RELIABILITY OF THIS COMMUNITY'S WATER SUPPLY.	М	0	C	COMPLETELY RELIANT ON MWD AND IT'S SINGLE TRANSMISSION MAIN FOR 90% OF THE WATER SUPPLY.	3,200,000	23,966	68,380 22	Los Angeles	IV	1998
3043 1910225	1910225-003	LAS VIRGENES MWD	Twin Lakes Pump Station Emergency Intertie	The Twin Lakes Pump Station Emergency Intertie project consists of three pipeline segments: 1) a 2,900 foot long 14-inch main between the pump station and a 30-inch Las Virgenes MWD feeder.2) a 750 foot long 10- inch main between the MWD meter and pump station, 3) a 200 foot long 12-inch main between the MWD feeder and meter as well as a meter upgrade. The pipelines will be installed in the public right of way (City of Los Angeles Streets), a public park (City of Los Angeles Chatsworth Park South) and existing Las Virgenes MWD easements.	Μ	0	С	Twin Lakes Pump Station serves the area north and south of 118 Freeway west of Topanga Canyon Blvd and east of Ventura County. Supply for the pump station is treated water from the Metropolitan Water District of Southern California (MWD). The meter connection is on their West Valley Feeder # 2. Existing and future domestic and fire flow demands will exceed the capacity of the pump station and pipelines from the MWD connection to the pump station in the near future. When service is not available from MWD due to either planned or unplanned interruptions a temporary connection is made with the City of Los Angeles but is very limited in capacity. The construction of a 2,900 foot long 14-inch emergency connection to a Las Viregenes MWD 30-inch feeder will provide critical back up to meet maximum day demand at all times as required by section 64554 (a) of the Waterworks Standards.	1,398,000	20,838	70,000 22	Los Angeles	IV	2009

3044 4110022	4110022-001	City of Redwood City	Seaport Boulevard Water Transmission Pipelines Cathodic Protection Project	It is known that Providing Cathodic Protection to metallic infrastructure would increase its live up to more than 50%. This project proposes the replacement of the depleted cathodic protection system with a new system consisting of installation of Cathodic Protection Rectifiers for "active" type protection; installation of Galvanic Anodes for "passive" type protection; drilling and installing deep well anodes; and installation of test stations for system monitoring.	Μ	0	C	Seaport area is located on the east side of Redwood City; and is the venue of a very active Industrial and Business Park and also the Port of Redwood City. The water supply to these businesses relies on two transmission pipelines: one, 8 inch steel pipe installed in 1937; and two, a 16 inch steel pipe installed in 1978. Approximately 7,500 feet in length, each. Since its original installation, the pipes were provided with corrosion protection systems. However, the existing corrosion protection systems are no longer operational and need to be updated or replaced in order to extend the live of the pipelines. These pipelines have experienced breakages due to corrosion effects; resulting on service disruption, asphalt damage, traffic delays, man hours, and the potential risk of system contamination.Service disruption to this area represents great economic loses to private and public sectors.	300,000	22,992	75,402 17	San Mateo	Ι	2009
3045 4110022	4110022-006	City of Redwood City	Roosevelt Avenue and Valota Road Area Watermain Replacement Project	The decaying water mains, valves, domestic water services and deficient fire hydrants will be replaced with water systems made with safe, durable, functional and reliable materials in order to provide safe drinking water to the community and avoid risk of contamination. the minimum size of the water mains to be installed is 8 inch, the fire hydrant runs are 6 inch to comply with Fire Fighting requirements. In general, the work will consist on: B turnishing and installing new water systems, including pipes, shut off valves, air release valves, corrosion protection, pipe restraints, and all associated fittings, connecting to existing pipelines, vehicular and pedestrian traffic control and safety. B furnishing and installing new domestic water services, meter boxes, and service connections. B furnishing and installing new free hydrant assemblies and removing existing fire hydrants. Performing all necessary pressure testing and disinfection of water pipe; and bacteriological examination in compliance with CDPH.B All work to be performed providing storm water pollution prevention.	M ,	0	C	The Project proposes replacement of highly tuberculated cast iron water mains, some of them up to 87 years old. These water mains show a high incidence of breakage; this condition results not only in service disruption, but also releases a series of Health Risks:1- Potential system contamination,2-Redish color in the drinking water due to operation of highly corroded valves; and3-Potential spread of Iron Bacteria. The sizes of the water mains to be replaced ranges from 2 through 6 inch in diameter. All of these sizes are considered sub-standard, as the 2 inch mains provide deficient water supply to the homes been served and will not support the functioning of domestic fire sprinkler systems due to low water flow and excessive pressure losses. 4 inch mains do not support the functioning of Fire Hydrants. The majority of the existing Fire Hydrants are tapped to the 6 inch water mains. The distance between existing Fire Hydrants exceeds the maximum distance allowed by the Fire Code. In general, due to the degree of tuberculation, the inside diameter of the pipes is expected to be reduced and the internal wall roughness to be high,	1,430,000	22,992	75,402 17	San Mateo	Ι	2009

resulting in low Fire Flows.

3046 4110022	4110022-003	City of Redwood City	Poplar and Junipero Area Watermain Replacement Project	The decaying water mains, valves, domestic water M services and deficient fire hydrants will be replaced with water systems made with safe, durable, functional and reliable materials in order to provide safe drinking water to the community and avoid risk of contamination. The minimum size of watermain will be 8 inch. The Fire Hydrant runs will be 6 inch to comply with fire fighting requirements. The project includes the installation of 2,650 linear foot of 12 inch mainline that will serve as transmission line from the SFPUC Bay Division Pipelines to the area and connect to another backbone waterline to provide additional water source in case of emergency. In general, the work will consist on: Ø Furnishing and installing new water systems, including pipes, shut off valves, air release valves, corrosion protection, pipe restraints, and all associated fittings, connecting to existing pipelines, vehicular and pedestrian traffic control and safety. Ø Furnishing and installing new fire hydrant assemblies and removing existing fire hydrant assemblies and removing existing fire hydrants. Ø Performing all necessary pressure testing and disinfection of water pipe; and bacteriological examination in compliance with CDPH.Ø All work to be performed providing storm water pollution prevention.	0	c	The Project proposes replacement of highly tuberculated cast iron water mains, some of them up to 81 years old. These water mains show a high incidence of breakage; this condition results not only in service disruption, but also releases a series of Health Risks:1- Potential system contamination,2-Redish color in the drinking water due to operation of highly corroded valves; and3-Potential spread of Iron Bacteria. The sizes of the water mains to be replaced are 6 inch in diameter. This size is considered sub-standard, as the majority of the existing Fire Hydrants are tapped to the 6 inch water mains. The distance between existing Fire Hydrants exceeds the maximum distance allowed by the Fire Code. In general, due to the degree of tuberculation, the inside diameter of the pipes is expected to be reduced and the internal wall roughness to be high, resulting in low Fire Flows.	1,126,000	22,992	75,402 17	San Mateo	Ι	2009
3047 4110022	4110022-002	City of Redwood City	Valota and Jefferson Area Watermain Replacement Project	The decaying water mains, valves, domestic water M services and deficient fire hydrants will be replaced with water systems made with safe, durable, functional and reliable materials in order to provide safe drinking water to the community and avoid risk of contamination. Minimum size of watermains to be installed is 8 inch. Fire hydrants run will be 6 inch to comply with fire protection requirements. In general, the work will consist on:Ø Furnishing and installing new water systems, including pipes, shut off valves, air release valves, corrosion protection, pipe restraints, and all associated fittings, connecting to existing pipelines, vehicular and pedestrian traffic control and safety. Ø Furnishing and installing new domestic water services, meter boxes, and service connections.Ø Furnishing and installing new fire hydrant assemblies and removing existing fire hydrants.Ø Performing all necessary pressure testing and disinfection of water pipe; and bacteriological examination in compliance with CDPH.Ø All work to be performed providing storm water pollution prevention.	0	C	The Project proposes replacement of highly tuberculated cast iron water mains, some of them up to 87 years old. These water mains show a high incidence of breakage; this condition results not only in service disruption, but also releases a series of Health Risks:1- Potential system contamination,2-Redish color in the drinking water due to operation of highly corroded valves; and3-Potential spread of Iron Bacteria. The sizes of the water mains to be replaced ranges from 2 through 6 inch in diameter. All of these sizes are considered sub-standard, as the 2 inch mains provide deficient water supply to the homes been served and will not support the functioning of domestic fire sprinkler systems due to low water flow and excessive pressure losses. 4 inch mains do not support the functioning of Fire Hydrants. The majority of the existing Fire Hydrants are tapped to the 6 inch water mains. The distance between existing Fire Hydrants exceeds the maximum distance allowed by the Fire Code. In general, due to the degree of tuberculation, the inside diameter of the pipes is expected to be reduced and the internal wall roughness to be high, resulting in low Fire Flows.	1,378,000	22,992	75,402 17	San Mateo	Ι	2009
3048 4110022	4110022-004	City of Redwood City	Glenwood Pump Station Retrofit	The Glenwood Pump Station Improvements Project M consists of upgrading the existing motors, pumps, furnishing VFDs, building enclosure, and permanent standby engine generator.	0	С	The operation of the Glenwood Pump Station was evaluated to determine whether it meets the flow and pressure requirements to convey water into the Lakeview Reservoir and Lakeview Pump Station for reliability and emergency supply. The evaluation concluded that the Glenwood Pump Station needed to be improved by increasing the horsepower of the motors and changing the existing vertical turbine pumps. The reliability of the Glenwood Pump Station is	700,000	22,992	75,402 17	San Mateo	Ι	2009

critical since it is one of the two sources that is connected to the San Francisco Public Utilities Commission Hetch Hetchy pipeline turnout.

3049 4310007	4310007-015	City of Mountain View		Design and construction of upgrades of pump station - variable frequency drive motors, automated controls, standby power etc.	м	0	С	The Whisman pump station was upgraded with new drive motors, automated controls, etc.	1,749,000	16,246	76,000 17	Santa Clara	Ш	1998
3050 4310007	4310007-014	City of Mountain View		Design and construction of upgrade of Miramonte pump station.	М	0	С	Obsolete equipment at the Miramonte pump station was upgraded.	852,000	16,246	76,000 17	Santa Clara	Ш	1998
3051 4310007	4310007-011	City of Mountain View		Upgrading older, smaller diameter, and deteriorating mains from 1993-1996.	М	0	с	Certain water mains in the city are old and deteriorating. They are also undersized.	2,457,000	16,246	76,000 17	Santa Clara	Ш	1998
3052 4310007	4310007-006	City of Mountain View		Water main replacement throughout the water system.	М	0	С	Certain water mains in the city are old and deteriorating. They are also undersized.	13,900,000	16,246	76,000 17	Santa Clara	Ш	1998
3053 4310007	4310007-007	City of Mountain View		Prepare environmental and construction documents to install a new 2.1 million gallon reservoir.	м	0	С	The City needs to increase water storage capacity.	307,000	16,246	76,000 17	Santa Clara	Ш	1998
3054 4310007	4310007-001	City of Mountain View		Construction of the wells.	м	0	с	The city needs two new groundwater wells.	1,100,000	16,246	76,000 17	Santa Clara	Ш	1998
3055 4310007	4310007-002	City of Mountain View		Design and construct two new wells and one new reservoir to meet demand.	М	0	С	The city has inadequate storage capacity.	110,000	16,246	76,000 17	Santa Clara	II	1998
3056 4310007	4310007-003	City of Mountain View		Design and construction of well #21 for pressure zone 1 of water system.	Μ	0	С	Well #18 collapsed so City constructed new well #21 at site of old well #18.	375,000	16,246	76,000 17	Santa Clara	Ш	1998
3057 4310007	4310007-008	City of Mountain View		Construction of a new 2.1 million gallon reservoir.	М	0	С	The City needs to increase water storage capacity.	2,200,000	16,246	76,000 17	Santa Clara	Ш	1998
3058 4310007	4310007-013	City of Mountain View		Installed automatic valves, a variable frequency drive, and a waste cycle at Well #9.	М	0	С	Automatic valves and a waste cycle were installed at Well #9.	170,000	16,246	76,000 17	Santa Clara	Ш	1998
3059 1910009	1910009-016	VALLEY COUNTY WATER DIST.	Distribution System Piping Replacement	The District's consulting engineer will prepare Engineering Plans and Specifications for the identified pipelines to be replaced with a minimum 8-inch diameter. The District will then solicit competitive bids for the construction of the pipelines and award a contract. The District will perform all construction inspection as well as project management of the pipeline construction.	м	0	С	The District currently has approximately 14.5 miles of undersized mains 4-inch and smaller, equaling about 13% of the total system . These pipelines are also 50- years and older, therefore approaching the end of their useful life cycle. These undersized mains pose problems for flows and pressures in the areas of the Distribution system where they are located.	4,600,000	12,323	77,130 15	Los Angeles	IV	2011
3060 1910009	1910009-009	VALLEY COUNTY WATER DIST.	Infrastructure Replacement	To purchase new and improved SCADA equipment for monitoring of the water system. To install intrusion alarms on all water production and storage facilities to be monitored by the SCADA system.	м	0	С	Water security improvements needed.	400,000	12,323	77,130 15	Los Angeles	IV	2008
3061 1910009	1910009-011	VALLEY COUNTY WATER DIST.	Water Storage Improvements	The District will purchase land and construct two 3.0 million gallon ground storage reservoirs and an affiliated booster pumping station and necessary piping to connect to the existing distribution system.	M	0	С	The District needs to acquire property and construct new storage reservoirs and a booster pumping station to help meet storage requirements for max day and peak hour demands as well as fire flow requirements. The District has an identified need for an additional six million gallons of storage capacity.	3,175,000	12,323	77,130 15	Los Angeles	IV	2008
3062 1910009	1910009-010	VALLEY COUNTY WATER DIST.	Distribution Piping Replacement	The District will have its Consulting Engineer develop Plans and Specifications for the installation of the required pipelines as well as assist with Project Management. The District will competitively bid out the project, award a contract and inspect construction. The District would replace all 4-inch and under pipelines with a minimum of 8-inch pipe.	M	0	С	The District currently has approximately 110 miles of water mains, of this approximately 14.5 miles are 4-inch and smaller in size. This equates to 13% of the total system pipes. By replacing these pipelines with a larger size, will improve distribution system pressures and fire flows.	2,500,000	12,323	77,130 15	Los Angeles	IV	2008

3063 2810003	2810003-008	Napa, City of	Alta Heights DBP Compliance and Fire Protection Improvements	Each pressure zone in the region was analyzed individually, as the upper and lower pressure zone. In order to facilitate the movement of fresh water and meet the fire flows in the upper region, it was determined that the existing pump station needs to be upgraded with larger pumps. Since these pumps need to push water 3/4 of a mile to a pressure tank, the losses in the pipe are too severe, even with the existing pumps. It is clear that the full length of pipeline between the pump station and the pressure tank needed to be upgraded to reduce the friction losses.To improve the movement of fresh water, meet fire flows, and obtain regular use of the water from the gravity	Μ	0	С	There are two immense benefits that result by making improvements to the water system in the Alta Heights Area of the City of Napa: ensure compliance with the Department of Public Health's Disinfection By-product Rule DBPR) and increase fire flows to meet current Fire Code Regulations. Due to heightened awareness after the fires in Oakland hills, the fire risk areas of the City of Napa (City) were analyzed. The Alta Heights regions were deemed to be the largest risk for fires in the City due to the topography of the area, and the proximity of the homes. If a fire were to reach this area, and the fire breached the hill, the entire City would be at risk from the fire, as the high home density and tree-covered hills	3,000,000	24,990	79,959 03	Napa	Π	2009
				tank to eliminate the stagnant water issue and avoid the creation of THMs and HAAs, the system must be redesigned so all fire hydrants are connected to the gravity system, and only the homes above a certain elevation to be served off of the pressure system (which would reduce the number of homes dependent on the pressure system by 80%). This will provide better turnover of the large gravity tank and make the fire hydrants more reliable. This will also increase the reliability of critical water supplied to the area by reducing the impacts of the small pressure tank, and be able to provide water to the residences in this area for a longer period of time if power is lost as is common during an emergency event. The lower system, currently	1 3			would facilitate rapid spreading of the fires through the adjacent area of high density homes. The Alta Heights region was originally developed in the 1950's, thus the water system was not designed to meet today's fire flow requirements. The water system consists of two pressure zones. Both pressure systems depend on a single pump station (located at the base of hill) to maintain power and not be taken off-line. This single pump station system currently serves the entire region along the fire risk area. The only support available is aircraft water drop support. The upper zone consists of a single long dead-end pipe approximately 1-mile in length, with a 60,000 gallon fire tank as the only redundancy to the system. This system lies along the						
3064 2810003	2810003-010	Napa, City of	Pressure Regulator Monitoring Improvement	This project will include the installation of pressure s gauges on each side of the pressure regulators, remote valve operation installed for each meter at each regulator, and remote monitoring on the City's SCADA system. This project incorporates all 12 pressure regulators. The work will incorporate providing power to each regulator pit, equipment necessary to remotely operate the valves, equipment to monitor flow and pressure on each side of the meters, and SCADA changes to incorporate the pressure regulators, the	M	0	с	The City of Napa's water system is broken down into five pressure zones. Of these pressure zones, two are served by gravity tanks and supported by pressure regulators. There are twelve regulators, each with two meters to move water from the main pressure zone (directly served by the City's treatment plants) into the lower pressure zones. The regulators are not on the City's SCADA system which would allow staff to monitor water movement through the pressure regulators. Currently, flow gauges are used to monitor the flow	800,000	24,990	79,959 03	Napa	II	2009

through the meters, but the information is collected

or why they are open. Several years ago, during a

manually, and does not indicate if the valves are open

standard shutdown for construction, 700 homes were

unexpectedly out of water. It took over an hour to determine the regulator that should have been backfeeding the area was closed. Although all confirmation water quality tests met regulations, and no contamination was introduced into the system, there was cause for great concern associated with the uncertainty. This issue could have been resolved immediately and staff assured of the system integrity if the regulator status information was available through the SCADA system.In early 2009, one of the tanks in the lower pressure zone reached higher levels than permitted by the settings of the altitude valve. No settings in the system had been changed, so significant

settings, and activity at each regulator. This work results

in less than significant environmental impacts because it

complete at this time and upon approval of funding the

is upgrading existing facilities. The design is near

construction can commence during July 2009.

3065 2810003	2810003-011	Napa, City of	Silverado Area Pressure Zone Modifications	This project will shift homes impacted by the low pressure areas into a higher pressure zone. This work includes the installation of approximately 7,000-ft of env 12" water main along the main access road. This water main will facilitate better system flow by looping a series of dead-end water mains and will provide the means to transfer services to the upper pressure zone. As each property owner may need to add a pressure reducer on their service to manage the additional pressure, the City's contribution to the project will cover the significant cost to transfer each of the services to the facility. Approximately 275 residents will be switched over to the higher pressure compliance with the DBPR and meet the goal of delivering high quality water at a consistent pressure to each customer. This project has no significant environmental impacts since it all takes place in the existing roadway and street section. The design of this system will be complete by April such that the bid package can be released in June. Upon confirmation of funding, construction of this work can start in early July 2009.	0	c	The Silverado region of the City of Napa's water service area contains three pressure zones due to the nature of the distribution system. The majority of this water infrastucture was designed and installed in the late 1960's. The system included transmission mains, a pump station, and a storage tank. Portions of the water mains installed in the 1960's served la large number of homes from the lower of the three pressure zones. Due to the fact that this system is served by conveyance of water through a long dead-end line at the furthest point from the City's primary treatment facilities, the water quality is reduced, chlorine residual is low and the formation of Trihalomethanes (THMs) and Haloacetic Acids (HAAs) can occur due to the time elapsed for the water to travel from the treatment plant to this location. This area threatens the City's ability to meet the Disinfenction Byproduct Rule (DBPR). In addition, the pressure at several high points along the main access road has been determined to be extremely low, too low to incorporate fire flows to the region as it might reduce the pressure below 20 psi and increase the potential of system contamination due to backpressure on the system from the higher elevations.	1,400,000	24,990	79,959 03	Napa	IJ	2009
3066 2810003	2810003-009	Napa, City of	Replacement of Failed 4MG A-Tank	The project replenishes 4MG of treated water storage in M the distribution system that was lost during the summer of 2006 due to failure of the prestressed concrete tank. The project will demolish the failed 4 MG concrete tank and replace it with a 4 MG steel tank within the same footprint on the site. The new replacement tank will tie into the distribution piping that exists to the site. There are no significant environmental impacts on the site since it is replacement of an existing tank within the footprint of the failed tank. The site is on preoperty owned by the City of Napa and the construction impact area will be within an area that is paved with asphalt.The design of this replacement project is near complete and the drawings and specifications will be ready to go out to bid in May 2009. Upon approval of funding, construction of this project can start in July 2009.This project will contribute to job creation or retention within the steel manufacturing, transportation, and construction industries.	0	c	The existing 4 million gallon (MG) prestressed concrete tank, A-Tank, in the City of Napa's distribution system unravelled and failed during summer 2006. The distribution system has been void of 4 MG of system storage since the tank failure. The reduced water storage decreases the reliability of the water system in the event of transmission main leaks and the need for temporary shut downs. There is increased risk to public safety with reduced system storage since there is less fire flow storage available especially during the dry summer months when peak system demands and high fire dangers coincide.	5,100,000	24,990	79,959 03	Napa	Ι	2009

3067 2810003	2810003-013	Napa, City of	Browns Valley Corrosion	Our corrosion specialist has devised two basic options M	0	С	From the 1960's through the 1980's, ductile iron pipe	1,500,000	24,990	79,959 03	Napa	П	2009
			Protection Project	that would ensure protection of the existing pipe and			and copper services were installed throughout the City						
				avoid total pipe replacement. One of the options is to			of Napa (City). In 2002 water mains that were only 30						
				dig up each section of pipeline and bond each section			years old started to fail in the Browns Valley region of						
				together with anodes (which would cost approximately			the City. When crews repairded the leaks, the pipe was						
				\$13,000,000). This method would create more certainty			observed to be seriously corroded around the pipe or						
				of connection to the services and the water mains, and			along the bottom. For the past 5 years, the number of						
				ensure corrosion protection on all services. However,			leaks in Browns Valley has increased dramatically						
				the most cost-effective method and highly preferred by			indicating the need for action to protect the water						
				the City is to attach corrosion protection at each water			facilities in the region from further corrosion damage.						
				meter and hydrant. The density of the houses in this			Recently, a corrosion specialist conducted a basic soils						
				area ensures that the majority of pipelines will be			test in the region to analyze the severity of corrosion						
				protected, and it will avoid the need to dig in the street			that will continue to our distribution system if the						
				sections. This will protect over 90% of the water mains			problem is not addressed. The whole area was						
				for \$1,600,000. This corrosion protection will retain the			determined to have highly corrosive soils, and the						
				condition of the pipelines, noting that minimal pipeline			problem is exasperated due to high levels of fast						
				replacements will be required in select areas if the			moving groundwater in the region. Approximately 1500						
				pipes are too corroded. However the project will have			homes, 100 commercial services, and a school are						
				low impact on the streets and services, and will gain 30			impacted by this issue in addition to approximately 30						
				to 50 years of life on the existing pipe, allowing funds to			miles of pipelines. To replace the water mains would						
				be focused towards upgrading under sized water mains			cost over \$31,000,000, an excessive cost that the City						
				and pipelines in the City that have reached their useful			can not afford. Each leak is a potential health risk to our						
				lives of 80 to 100 years old. With this project, we will			customers due to the potential for contamination to						
				attach sacraficial anodes to approximately 1400 services			enter into the distribution system. Some leaks aren't						
				and approximately 300 hydrants with a corrosion			discovered for long periods of time, further increasing						
				designed to protect the water services and water mains			contamination risks and contributing to the loss of						
				for 50 years. The design ill be simple and consistent			water in a time when water supply and conservation of						
2068 2610027	2610027 010		Country Club Rosonyoir #	1. City of Bodlande's Country Club reconvoir number 1. was M	0	C	City of Bodlands's Country Club recorder number 1 was	1 900 000	21 051	90.000.12	Can Pornardino	V	2000
3008 3010037	5010057-010	REDEARDS CITERIOD-WATER DIV	Lingrade	constructed in 1924 in a residential neighborhood in the	0	C	constructed in 1924 in a recidential neighborhood in the	1,800,000	21,001	80,000 15	Jan Demarumo	v	2005
			opgrade	city and bas a storage capacity of 1.0 million gallons			city and has a storage canacity of 1.0 million gallons						
				The partially buried petable water reconvoir has an			The partially buried petable water recorver bac ap						
				outside diameter of approximately 102 feet and a denth			autoide diameter of approximately 102 feet and a dopth						
				of search 10 feet. The secondary 105 feet and a depth			of pearly 10 feet. The recerve a surrently encretes in						
				of hearly 18 feet. The reservoir currently operates in			of fielding 18 feet. The reservoir currently operates in						
				landern with Country Club Reservoir number 2 which is			Landern with Country Club Reservoir humber 2 which is						
				located at the same site. In order to effectuate needed			located at the same site. In the 1970's the California						
				improvements at the country club reservoir site, city			Department of Public Health began requiring potable						
				will need to repair, upgrade or install approximately			water reservoirs be covered. In turn, Country Club						
				\$1.8 million of infrastructure. These facilities will allow			number 1 nad a membrane-type covering installed. In						
				city to meet existing and future demands and improve			1980, this cover was replaced with an aluminum						
				water quality, distribution, and storage. To meet these			geodesic dome. This added additional weight to the top						
				demands, city will install at the Country Club Reservoir			of the reservoir wall which was not considered during						
				Site: • New one-million gallon reservoir. The findings of			the original design to support. This additional weight						
				a Dive Corr inspection report indicated numerous			coupled with the reservoirs age has caused the cracking						
				norizontal cracks around the circumterence of the walls,			and leaks in the side of the walls. As part of a routine						
				root intrusion through cracks at the bottom slab and			maintenance program, city had the reservoir inspected						

in July of 2003 by Dive Corr Inc. Inspection activities

reservoir by an experienced diver and tank inspector

inspection identified numerous horizontal cracks around

the circumference of the walls, root intrusion through

cracks at the bottom slab and walls, extensive concrete

spalling at the exterior walls above grade, and potential

leaking along the joint at the base of the wall. Severe

included a visual inspection of the interior of the

with the reservoir in service. The findings of the

walls, extensive concrete spalling at the exterior walls

base of the wall. Because of these findings city is

currently designing a replacement reservoir. This

reservoir is to be the same volume and at the same

location as the existing one. • Installation of 3,650

gallon per minute booster station. The existing booster

at the County Clus site are equipped with out-of-date

electrical panels and controls that no longer provide

above grade, and possible leaking along the joint at the

3069 2410009	2410009-008	MERCED, CITY OF	Source Water Contaminants Removal	The City proposes to install an ion exchange wellhead M treatment at well site 7 for nitrate removal. The equipment is anticipated to include three 12 foot diameter ion exchange vessels, a brine storage tank, brine waste storage tank, pumps, water softeners, analyzers and system control panels, inline continuous monitoring equipment, and a building. The City proposes to treat Arsenic using coagulation/filtration treatment system. The system consists of: Design and Construction at two different well sites. Components would include: Static mixers, six seven feet (7ft) diameter by fourteen foot (14ft) long filter vessels, actuated control valves, control panels, two thirty feet (30ft) diameter by sixteen feet (16ft) tall wash water holding tank, pumps, chemical feed systems, chemical storage tanks, inline continuous monitoring equipment, and two buildings to house the equipment.	0	c	The City of Merced Water System has two Source water wells that contain an average of 50 milligrams per Liter (52 mg/L) of Nitrates each, the Maximum Contaminant Level (MCL) is 45 mg/ L. The CDPH regulates Nitrates at 38 mg/L. The City has to remove some of the Nitrates in order to meet regulatory requirements. One of the City of Merced Source wells has an average of 12 micrograms per Liter of Arsenic while another well averages 9 micrograms per Liter of Arsenic. The MCL for Arsenic is 10 micrograms per Liter. The City has to remove some of the Arsenic in order to meet regulatory requirements.	10,000,000	20,262	80,608 11	Merced	11	2011
3070 3010003	3010003-001	City of Buena Park	Emergency Intertie Between City of Buena Park and Anaheim	Buena Park would connect an existing 12" water main M to an underground connection facility in a secured vault at one of several possible locations. The City of Anaheim would do likewise. The interconnection facility will include components such as control valve, check valve, isolation valve, blow off valve, flow metering and telemetry connections. The control valve would automatically activate in case of pressure drop to either water system. Once constructed, the intertie will provide both cities with access to supplemental water during an emergency that interrupts flow from their own sources. The proposed intertie will be able to deliver up to 4.5 MGD during emergencies.	0	с	The City of Buena Park (City) currently has no emergency interties. The City's 2005 Water Master Plan Study recommended that several be installed. The proposed intertie between the City and Anaheim water systems would be a two-way emergency only interconnection. The City of Anaheim previously submitted this intertie for funding in 2007 along with another intertie between Anaheim and the City of Orange. The intertie was listed as number 30 on the list for water system security projects, chapter 3 of Prop 50. The cover page of the list stated that almost all funding for that section was committed. "Most likely no projects will be invited for funding in 2008/2009." No funding was offered.	300,000	20,422	82,450 08	Orange	v	2009
3071 4210004	4210004-014	GOLETA WATER DISRICT	GWD-City of SB Sterret Interconnect	Install new water system interconnection including: M New concrete interconnect enclosure, two booster pumps, pressure and flow control valves, shutoff valves, metering equipment, associated piping into interconnect enclosure, approximately 800 feet of 20 inch piping in street to tie into the city of Santa Barbara's water system, electrical switchgear panels, control and SCADA panels. This would allow for transfer of approximately 2800 gpm in either direction (a 42% increase in water transfer rate).	0	с	During warm weather, high water demand periods or when either water system treatment plant is offline for maintenance purposes, moving water from one system to another is currently very restricted to a maximum of 1600 gpm in either direction. Both water systems could use substantially more capacity to transfer water in case of treatment problems during high summer demand periods or having the ability to have one treatment plant offline for an extended period in wintertime for construction or maintenance purposes.	500,000	16,088	84,000 06	Santa Barbara	IV	2009

3072 4210004	4210004-013	GOLETA WATER DISRICT	San Ricardo Well ASR Rehab	Rehabilitate the existing well for Aquifer Storage and Production (ASR). Clean existing well bore. Test for well production and injection capacities. Install new - well pump/motor, pump column, injection piping, electrical motor control center, filter under drains and media, valves and electric actuators, ASR control panel with new PLC and tied to district SCADA system, liquid chemical feed systems, well water level transducer for constant level monitoring, online chlorine residual and turbidimeter, auto-dialing alarm monitor, video-graphic chart recorder with historical data retention capability. Replace filter backwash settling tank and aeration/detention tank.	0	C	San Ricardo well was last used for production purposes in 1991 during a severe drought. The well has sat idle since then and is now in need of major repairs. The well pump and motor were recently tested with an overall efficiency of 2.5%, so the pump and motor need to be replaced. The district has switched all of its treatment facilities to liquid chemical feed systems, from gas chlorination, so this equipment also needs to be replaced. The filtronics Iron and Manganese filter needs to have the media replaced and all valves and actuators replaced. The electrical switchegar does not meet current standards and needs to be replaced. The original well control system is obsolete and needs to be replaced to work with our current SCADA system. The well is expected to produce 500-750 gpm and would reduce our need to import State water by making better use of our existing groundwater supply. The district has also used this well for injection purposes in the past, and would like to automate this for higher injection rates in the future.	600,000	16,088	84,000 06	Santa Barbara	IV	2009
3073 1910146	1910146-008	SANTA MONICA-CITY, WATER DIVISION	10th Court, 11th Court an Marguerita Avenue	d This project entails replacement of mains in three streets. The project groups three streets into one project for geographic proximity and cost efficiency. Tenth Court - replace 1570 I.f. of 6" CIP with 8" DIP. Eleventh Court - replace 1355 I.f. of 6" CIP with 8" DIP. Marguerita Avenue - replace 1620 I.f. 8" CIP with 8" DIP.	0	С	Existing mains are cast iron pipe and were installed in approximately 1920. Repeated main breaks indicate pipes are at their end of useful life. Mains are undersized to meet present day domestic and fire flow demands.	748,603	17,098	84,184 16	Los Angeles	IV	2009
3074 1910146	1910146-007	SANTA MONICA-CITY, WATER DIVISION	Euclid Court and 12th Court Main Line Replacement	The project entails three main replacement projects in M two streets. The project groups the streets into one project for geographic proximity and cost efficiency. Twelfth Court - replace 688 l.f. of 6"CIP with 8" DIP. Euclid Court - replace 2100 l.f. of 8" CIP with 8" DIP. Euclid Court - replace 3880 l.f. of 12" CIP with 12" DIP.	0	C	Existing mains are cast iron pipe and were installed in approximately 1920. Repeated main breaks indicate pipes are at the end of their useful life. Mains are undersized to meet present day domestic and fire flow demands.	1,100,634	17,098	84,184 16	Los Angeles	IV	2009
3075 1910146	1910146-009	SANTA MONICA-CITY, WATER DIVISION	Third Court Water Main Replacement	Replace 2120 I.f. of 8" CIP with 12" DIP. Project includes M replacement of all domestic and fire protection services. The project is located in a high density office/professional/commercial/residential area with adjacent underground garage parking for all buildings. Third Court is a concrete paved alley which presents significant construction and staging challenges.	0	C	Existing main is 8" cast iron pipe installed approximately 1920. Repeated breaks indicate pipe is at the end of its useful life. This main is located in a high value commercial district. The existing pipe is undersized to meet present day domestic and fire flow demands.	1,584,700	17,098	84,184 16	Los Angeles	IV	2009

3076 5610023	5610023-003	VENTURA WWD NO. 8 - SIMI VALLEY	1330 / 1172 Interzone Connection	The 1330 / 1172 Zone Interconnection consists of construction of approximately 1,000 feet of 8-inch water line and a pressure reducing station to connect the 1330 Zone with the 1172 Zone. The pressure reducing station will include monitoring and control equipment to operate the valves supplying the 1172 Zone from the 1330 Zone while maintaining a range of water levels and storage in the Mellow Lane Tank.	Μ	0	c	The City of Simi Valley, Ventura County Waterworks District No. 8 (District) operates the 1172 Zone and the 1330 Zone to supply water to a portion of the City of Simi Valley. Water facilities for the 1172 Zone include the Mellow Lane Tank, which is deficient in storage capacity with only 423,000 gallons that does not provide for adequate reliability and fire storage. The 1172 Zone requires a minimum of 390,000 gallons of storage to maintain proper pressure regulation plus 360,000 gallons of additional storage in reserve to meet the District standard for fire storage and reliability. The Casual Court Pump Station operates with the Mellow Lane Tank to supply the 1172 Zone. With deficient storage, the 1172 Zone is more vulnerable to a loss of supply and water pressure from a pump station failure, power outage affecting the pump station, or broken fire hydrants or water mains that could result in boil water orders to be issued. Water facilities for the 1330 Zone include the Wood Ranch Tank No. 3 with a capacity of 3,000,000 gallons, which has excess capacity that lead to excessive stored water detention times resulting in water quality degradation from disinfectant residual loss and nitrification of the stored water. Chlorine treatment of the stored water to address nitrification leads to increased trihalomethanes and other disinfection byproducts that can exceed Maximum Contaminant Levels. Interconnecting the 1330 Zone to	300,000	24,811	86,000 06	Ventura	IV	2009
3077 5610023	5610023-005	VENTURA WWD NO. 8 - SIMI VALLEY	Emergency Generators for Select Pump Stations	r The project consists of the installation of one emergency generator, driven by natural gas or propane, at the following facilities:a) Oak Knolls Pump Station Station No. 2 Pump Stationc) Station No. 3 Pump Stationd) Alta Vista Pump Statione) Cottonwood Pump Stationf) Bridal Path No. 2 Pump Station	M ,	0	C	The City of Simi Valley, Ventura County Waterworks District No. 8 (District) operates a number of pump stations that supply water to various areas with distribution systems that have marginal water storage capacity and are potentially deficient in relability. These pump stations include the following:a) Oak Knolls Pump Station serving the Santa Susana Knolls areab) Station No. 2 Pump Station serving the Box Canyon aread) Alta Vista Pump Station serving the Box Canyon aread) Alta Vista Pump Station serving the Santa Susana Knolls and Box Canyon areac) Station serving a portion of the City of Simi Valleyf) Bridal Path No. 2 Pump Station serving a portion of the City of Simi ValleyEach of these pump stations operate in distribution systems with marginal water storage capacity and have experienced power outages that have resulted in severe water pressure losses and near loss of supply.Boil water orders can result from a loss of supply.Boil water orders can pump station failure from a power outage.	720,000	24,811	86,000 06	Ventura	IV	2009

3078 5610023	5610023-004	VENTURA WWD NO. 8 - SIMI VALLEY	Water Storage Mixing Systems	The project consists of the installation of Solar Bee Water Circulation Systems (or equivalent systems) in the following District water storage tanks:a) Walnut Tank No. 1b) Walnut Tank No. 2c) Stow Street Tank No. 1d) Stow Street Tank No. 2e) Stow Street Tank No. 3f) Stow Street Tank No. 2g) First Street Tank No. 3j) First Street Tank No. 4J) First Street Tank No. 3j) First Street Tank No. 4J) First Street Tank No. 3j) First street Tank No. 4The circulation systems will also include a chemical feed system designed to work with the circulation systems to add sodium hypochlorite solution at a low dose and with efficient mixing to boost a declining disinfectant residual, if necessary due to excessive stored water detention time, while limiting trihalomethane and other disinfection byproduct formation.	Λ	0	C	The City of Simi Valley, Ventura County Waterworks District No. 8 (District) operates and maintains more than 40 water storage tanks, ranging in capacity from 20,000 gallons to 5,000,000 gallons, throughout its service area including portions of the City of Simi Valley and unincorporated areas of Ventura County. The tanks provide operating storage for proper regulation of water pressures, water supply reliability, and fire storage in reserve for their service areas. Under normal operating conditions, a small portion of the stored water is used while the larger portion remains in the tank for reserve and fire resulting in longer detention time for the water stored in the tank. Stored water quality degradation due to disinfectant residual loss and nitrification. The lack of proper water circulation and related temperature stratification effectively increases the stored water detention Times and exacerbates the water quality degradation.Treating the stored water with chlorine to address the residual loss and nitrification can increase trihalomethanes (THMs) and other disinfection byproducts to exceed Maximum Contaminant Levels (MCL). Also, inefficient chlorine feed to treat the stored water can further exacerbate the levels to THMs and other disinfection byproducts to exceed the MCL.	800,000	24,811	86,000 06	Ventura	IV	2009
3079 4310020	4310020-001	City of San Jose - Evergreen/Edenvale	Timberline Drive Main Replacement	Replace existing steel mains with approximately 1,500 M feet of ductile iron pipe and reconnect customers.	И	0	С	Aging infrastructure and deteriorating steel mains resulting in increased main breaks and decreased system reliability	660,000	21,902	88,196 17	Santa Clara	Ш	2009
3080 4310020	4310020-005	City of San Jose - Evergreen/Edenvale	Gumdrop Drive Main Replacement	Replace existing steel water mains with approximately M 2,500 feet of ductile iron pipe and reconnect customers.	И	0	С	Aging infrastructure and deteriorating steel water mains resulting in increased water main breaks and decreased system reliability	1,300,000	21,902	88,196 17	Santa Clara	II	2009
3081 4310020	4310020-011	City of San Jose - Evergreen/Edenvale	System Security - Video Survellance For Pump Stations	Contract to purchase and install a video survelliance M system. Contractors will install video cameras, wiring and software for 32 pump station sites. Connections would be made at Operations Headquarters using the existing SCADA radio system. The video system will allow water distribution operators to recieve an alarm when motion is detected at a site and view real time videoon a monitor at headquarters.	Λ	0	c	San Jose Municipal Water has 32 remote pump station sites. The sites pump drinking water into the water system. The sites are un-manned, and remotely operated. The sites are only monitored physically once a week. San Jose Municipal Water would like to monitor the sites continuosly 24 / 7 in order to maintain a higher level of security for the system and security of the residents of San Jose.Video survelliance system currently exist that can monitor movements around eachsite, video them and then send alerts and video clips over a SCADA radio to the Operations Headquarters.Municipal Water already has a SCADA radio system for operating pumps at the sites remotely. This existing SCADA radio system has the capacity to handle a new video survelliance system. The video cameras, wiring and software installation would be need to be installed by a contractor.	450,000	21,902	88,196 17	Santa Clara	Ι	2009
3082 4310020	4310020-003	City of San Jose - Evergreen/Edenvale	Dove Road Water Pipeline	Connect the small service area to a larger service area M with both groundwater and treated water supplies to increase system reliability. Project includes approximately 3000 feet of pipe and a new pump station.	Л	0	С	A small service area is supplied soley by ground water. During drought years, the water supply may decrease or become unavailable. Drilling of additional wells has not produced favorable results.	5,000,000	21,902	88,196 17	Santa Clara	II	2009
3083 4310020	4310020-010	City of San Jose - Evergreen/Edenvale	Castleton Drive Main Replacement	Replace existing steel water mains with approximately M 1,500 feet of ductile iron pipe and reconnect customers.	Л	0	С	Aging infrastructure and deteriorating steel water mains resulting in increased water main breaks and decreased system reliability	900,000	21,902	88,196 17	Santa Clara	Ш	2009

3084 4310020	4310020-009	City of San Jose - Evergreen/Edenvale	Edenvale Reservoir Rehabiliation	Drain and repaint the 3.0 million gallon Edenvale reservoir. Establish an alternate supply using temporar storage tanks and modifying pumping controls. Installation of seismic retrofits to the piping system.	M y	0	С	Edenvale Reservoir is 27 years old and requires repainting the steel tank interior. Since the reservoir is the only source of water for the Edenvale water service area, substantial planning for a temporay alternate source of supply will need to be undertaken. Installation of seismic upgrades are required to meet current codes.	2,000,000	21,902	88,196 17	Santa Clara	II	2009
3085 4310020	4310020-007	City of San Jose - Evergreen/Edenvale	Partridge Drive Main Replacement	Replace existing steel mains with approximately 1,500 feet of ductile iron pipe and reconnect customers.	м	0	с	Aging infrastructure and deteriorating steel mains resulting in increased main breaks and decreased system reliability	795,000	21,902	88,196 17	Santa Clara	II	2009
3086 4310020	4310020-004	City of San Jose - Evergreen/Edenvale	Peppermint Drive Main Replacement	Replace existing steel water mains with approximately 2,500 feet of ductile iron pipe and reconnect customers	M 5.	0	с	Aging infrastructure and deteriorating steel water mains resulting in increased water main breaks and decreased system reliability	1,265,000	21,902	88,196 17	Santa Clara	II	2009
3087 4310020	4310020-002	City of San Jose - Evergreen/Edenvale	Aborn Pump Station, Alessandro/Aborn	Connect the small service area to a larger service area with both groundwater and treated water supplies to increase system reliability. Project includes approximately 3000 feet of pipe and a new pump station.	М	0	С	A small service area is supplied soley by ground water. During drought years, the water supply may decrease or become unavailable. Drilling of additional wells has not produced favorable results.	118,000	21,902	88,196 17	Santa Clara	II	2009
3088 4310020	4310020-012	City of San Jose - Evergreen/Edenvale	Bonbon Drive Main Replacement	Replace existing steel water mains with approximately 2,000 feet of ductile iron pipe and reconnect customers	M 5.	0	с	Aging infrastructure and deteriorating steel water mains resulting in increased water main breaks and decreased system reliability causing health and safety problems to the public.	1,000,000	21,902	88,196 17	Santa Clara	Ш	2009
3089 4310020	4310020-008	City of San Jose - Evergreen/Edenvale	Elkins Way Main Replacement	Replace existing steel mains with approximately 1500 feet of ductile iron pipe and reconnect customers.	М	0	С	Aging infrastructure and deteriorating steel mains resulting in increased main breaks and decreased system reliability	800,000	21,902	88,196 17	Santa Clara	II	2009
3090 4310020	4310020-006	City of San Jose - Evergreen/Edenvale	Villa Vista Pump Station and Tank Infrastructure Upgrades	Modify and upgrade existing piping at pump station and reservoir facility, including the installation of siesmic retrofits.	d M	0	С	Aging infrastructure and current piping configurations may result in increased main breaks and failure during siesmic events	1,030,000	21,902	88,196 17	Santa Clara	II	2009
3091 1910051	1910051-006	INGLEWOOD- CITY, WATER DEPT.	Water main improvement project	Tasks involved for the project includes replacement of old water main, install numerous sampling stations and flushing stations.	М	0	с	In some areas there was a presence of nitrate detected. Most water pipes are very old, approximately 50 years old, and needs replacement.	2,000,000	14,916	100,000 15	Los Angeles	IV	2012
3092 1910051	1910051-002	INGLEWOOD- CITY, WATER DEPT.	Morningside Reservoir Rehabilitation	Rehabilitation of the City's Morningside water supply reservoir is anticipated to provide assurance of water quality, reliability, for operational, emergency and fire storage to the water distribution system, during and after a major seismic event.	Μ	0	c	Incorporated in 1908 the City of Inglewood serves a constituency of 112, 600 persons, located on the Coastal Plain adjacent to the Baldwin Hills in Los Angeles County. The City is responsible for domestic water supple to 14,000 customers. The City completed a water master plan update in 2005 which identified several major improvements to its water system. The programs and projects described herein will increase water system reliability for domestic and fire suppression supplies within the City's water service area. This effort will be completed in time to provide definitive input as to specific projects which will be initially addressed under the proposed "Water System Infrastructure Program" (WSIP). This program is considered to be a significant first step and of primary importance toward reaching the City's goal of a more effective and efficient water supply and storage system.	3,200,000	14,916	100,000 15	Los Angeles	IV	2009
3093 1910051	1910051-001	INGLEWOOD- CITY, WATER DEPT.		DEMOLISH THE EXISTING RESERVOIR AND RECONSTRUCT THREE 5.3 MG PRESTRESSED CONCRETE RESERVOIRS.	М	0	с	16 MG RESERVOIR IS DETERIORATED DUE TO AGE AND SEISMIC ACTIVITY OF THE REGION. IT ALSO HAD BACTI PROBLEMS.	10,000,000	14,916	100,000 15	Los Angeles	IV	1998

3094 4810003	4810003-001	City of Fairfield	East-West Water Transmission Pipeline, Easterly Segment 6B	The ambitious East-West Water Transmission Pipeline M (Project) was developed to address both of the previously described service and supply problems. The Project was originally planned in two large, distinct portions, including about 2.5 miles of 30-inch pipeline from Hale Ranch Road near the Fairfield Anheuser- Busch brewery to the intersection of Westamerica Drive and Echo Valley Drive ("Westerly Portion") and 7.5 miles of 36-inch pipeline from the intersection of Clay Bank Road and Cement Hill Road to the intersection of Cordeila Road and Hale Ranch Road ("Easterly Portion").For economic and technical reasons, the City has divided the Project into 15 segments that will be constructed as individual projects. Construction is complete or underway on 3 segments to date. Of the remaining 12 segments, several have been assigned to development projects that are now delayed, but two that are "shovel ready" are under City control and could go out to bid as soon as financing is available: Easterly Segment 3 and Easterly Segment 6B.Descriptions:East- West Water Transmission Pipeline, Easterly Segment 3 (separate application)Approximately 3.900 feet; 36-inch diameterBroadway and Illinois Streets from Union Avenue to Pennsylvania AvenueEstimated cost \$2,400,000East-West Water Transmission Pipeline, Easterly Segment 6B (this application)Approximately 2,000 feet; 36-inch diameterClay Bank Road from Quail	0	C	As part of its water system planning in the 1980's, the City of Fairfield, California, identified the existing single 36-inch pipeline crossing of Suisun Valley from the central city to its Cordelia area as a fundamental weakness of the water system. Failure of this single line, or interruption of the lone treatment plant (Waterman WTP; the City has two plants) feeding that line, could result in an inability to supply water to Cordelia from the City system. Another concern was the existing system's inability to sure water to large parts of the City from the new North Bay Regional Water Treatment Plant (NBR Plant), which was the City's only source of Sacramento River delta water.	1,200,000	27,235	100,147 04	Solano	Π	2009
3095 1910234	1910234-003	WALNUT VALLEY WATER DISTRICT	Eastgate Reservoir Seismi Retrofit and Recoating Project	ic This project will ensure that the District's system served M from the Eastgate reservoirs will continue to provide domestic service and fire protection following a significant seismic event. This will accomplished by constructing a foundation and bolting the 1.5 MG tank, and upgrading the flexible joints on both tanks.In addition, the project will include installation of an internal mixing system within the tanks to enhance water quality and minimize the potential for nitrification and subsequent water quality issues while allowing the reservoirs to remain at higher operating water levels.Finally, as part of this project, the District intends to re-coat the two reservoirs to remove the coal tar and existing epoxy from the reservoir interior and exterior to ensure that the tanks are adequately protected.	0	C	The District's Eastgate Reservoir site consists of two tanks (a 1.5 MG and a 4.4 MG). The 1.5 MG tanks is not currently bolted to a foundation.Both of the existing tanks have older style flexible joints that will need provide adeqaute movement during the design siemic event. Historically, both tanks have experienced nitrification related water quality issues requiring the deep cycling of the reservoirs to maintain adequate chlorine residuals within the distribution system.Both reservoirs were last coated in 1990 with a combination epoxy coating and coal tar coaing on the inertior and an epoxy coating on the exterior.	1,100,000	26,638	100,406 16	Los Angeles	IV	2011
3096 3710037	3710037-009	Padre Dam MWD	Alpine Blvd. Valve and Main Modifications, Phas 2	This project is the second phase of a project designed to M e provide greater operational flexibility of Padre Dam MWD's steel transmission mains through the installation of isolation valves. The scope of the Phase 2 project has been expanded to not only include the installation of valves, but also to provide for replacement of segments of damaged steel transmission main. This project includes the following tasks:1) Installation of a valve on the 27-inch steel transmission main in Alpine Blvd. to allow for isolation of the main with continued use of the Chocolate Summit Reservoir.2) Installation of a valve on the 27- inch steel inlet/outlet pipe to the Blossom Valley Reservoir to assist in hydraulic balancing with the East County Square Reservoir (Job No. 202024, IFP No. W- 1022 and W-1023).3) Replacement of a segment of 27- inch steel transmission main in Arnold Way.4) Replacement of a segment of 20-inch steel transmission main connecting to Alpine Blvd.	0	С	Replace a portion of damaged steel transmission main in the Eastern Service area. Additionally, installing additional isolation valves so smaller number of customers will be affected if a problem exists with the water distribution system.	750,000	22,768	100,509 14	San Diego	V	2009

3097 3710037	3710037-016	Padre Dam MWD	Five Reservoir Retrofit Program - Phase 1 (Chocolate Summit)	In 1996, the Department of Health Services (DOHS) inspected the District's reservoirs, pump stations, and general system operations. The DOHS concluded that although the District has a well-operated and maintained water system, the roofing structures on Blossom Valley, Mountain Top, Chocolate Summit, Wes Victoria, and, East Victoria Reservoirs needed to be replaced. The Five Reservoir Retrofit Program is a comprehensive project that addresses all of the DOHS concerns. The execution of the project is divided in phases to ensure the water deliver system maintains its ability to serve potable water to existing customers. Phase 1 of this project includes the following scope of the existing wood-framed roofs with new aluminum flat roof covers. o Structural and seismic retrofits.o Overflow structure improvements.o Site drainage improvements.	M t f t v	0	с	Chocolate Summit Reservoir is partial buried concrete reservoir with a decaying roof system (timber frame). Roof system had an interim repair after it failed 10 years ago and was under CDPH directive to repair to ensure water quality is adequately protected. Additionally, the concrete structure was not designed to meet today's seismic code/standards.	2,500,000	22,768	100,509 14	San Diego	v	2009
3098 3710037	3710037-018	Padre Dam MWD	5 Reservoir Retrofit Project, Phase 3	In 1996, the Department of Health Services (DOHS) inspected the District's reservoirs, pump stations, and general system operations. The DOHS concluded that although the District has a well-operated and maintained water system, the roofing structures on Blossom Valley, Mountain Top, Chocolate Summit, Wess Victoria, and, East Victoria Reservoirs needed to be replaced. The Five Reservoir Retrofit Program is a comprehensive project that addresses all of the DOHS concerns. The execution of the project is divided in phases to ensure the water deliver system maintains its ability to serve potable water to existing customers. Phase 2 of this project includes the following scope of work for Mountain Top and East Victoria Reservoir:o Replacement of the existing wood-framed roofs with new aluminum flat roof covers. o Structural and seismic retrofits. o Overflow structure improvements.o Site drainage improvements.o Replace the existing East Victoria Reservoir with a new, 125-foot diameter, circular pre-stressed concrete reservoir.o Replace the existing East Victoria Pump Station with a new pump station. A new pump station would be constructed north of the existing pump station. The existing pump station will be operational during construction of the new pump station. Once construction of the new pump station is complete, the existing pump station will be demolished.	M t	0	C	Padre Dam's water distribution system serves 85 square miles and includes 24 reservoir tanks. The West Victoria Reservoir and Blossom Valley Reservoir are both partially buried concrete tanks with decaying roof systems (timber frame). The roof system on each tank was repaired on an interim basis after it failed 10 years ago and the California Department of Public Health issued a directive to repair each roof to ensure water quality is protected. Additionally, the concrete structure of the tanks was not designed to meet today's seismic code/standards. Included in this project is the replacement of the West Victoria pump station to meet the new design standards to ensure reliable water delivery.	6,500,000	22,768	100,509 14	San Diego	v	2009

3099 3710037	3710037-011	Padre Dam MWD	Flinn Springs Pump Static Emergency Generator Project	M This project will provide a new emergency generator at M the Flinn Springs Pump Station. Following the devastating Cedar Fire in 2003, the District fast-tracked a strategy of redundancy and reliability for the Eastern Service Area. Currently the ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as emergency power supply for key pump stations. Currently the Chocolate Summit zone and all zones to the east are dependent on the Flinn Springs Pump Station. The scope of this project will include the installation of a 1.5 MW power generator with appropriate automated transfer switch and instrumentations and controls to properly operate the generators.	0	C	Over 500 customers living in Padre Dam's mountainous Eastern Service Area (ESA) lost their homes in 2003 to the Cedar Fire. Serving the ESA involves a 2000 foot elevation gain and pump stations are critical for providing water and for firefighting.Following the Cedar Fire, the District fast-tracked a strategy of redundancy and reliability for the customers in the ESA. Currently the ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as emergency power supply for key pump stations. Residents in the Mountain Top and Crest Pressure Zones are dependent on the Rios Canyon Pump Station. This emergency generator became critical in Fall 2008, when SDG&E announced that they will proactively shut off power in mountainous areas during high wind conditions to prevent fires. Padre Dam, other water district and school district are opposing SDG&E's plan to the Public Utilities Commission (PUC) and negotiating with SDG&E, but, to date, the issue is unresolved.	1,300,000	22,768	100,509 14	San Diego	v	2009
3100 3710037	3710037-010	Padre Dam MWD	Rios Canyon Pump Statio Emergency Generator	n This project will provide a new emergency generator at M the Rios Canyon Pump Station. Following the devastating Cedar Fire in 2003, the District fast-tracked a strategy of redundancy and reliability for the Eastern Service Area. Currently the ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as emergency power supply for key pump stations. Currently the Mt. Top and Crest Pressure Zone are dependent on the Rios Canyon Pump Station. The scope of this project will include the installaltion of a 750 kW emergency generator with appropriate automatic transfer switch and instrumentations and controls to properly operate the generator.	0	C	Over 500 customers living in Padre Dam's mountainous Eastern Service Area (ESA) lost their homes in 2003 to the Cedar Fire. Serving the ESA involves a 2000 foot elevation gain and pump stations are critical for providing water and for firefighting.Following the Cedar Fire, the District fast-tracked a strategy of redundancy and reliability for the customers in the ESA. Currently the ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as emergency power supply for key pump stations. Residents in the Mountain Top and Crest Pressure Zones are dependent on the Rios Canyon Pump Station. This emergency generator became critical in Fall 2008, when SDG&E announced that they will proactively shut off power in mountainous areas during high wind conditions to prevent fires. Padre Dam, other water district and school district are opposing SDG&E's plan to the Public Utilities Commission (PUC) and negotiating with SDG&E, but, to date, the issue is unresolved.	800,000	22,768	100,509 14	San Diego	V	2009
3101 3710037	3710037-017	Padre Dam MWD	Alpine Pump Station - Emergency Generator	This project will provide a new emergency generator at M the Alpine Pump Station. Following the devastating Cedar Fire in 2003, the District fast-tracked a strategy of redundancy and reliability for the Eastern Service Area. Currently the ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as emergency power supply for key pump stations. Currently the Alpine zone and all zones to the east are dependent on the Alpine Pump Station. The scope of this project includes the installation of an emergency power generator with appropriate automated transfer switch and instrumentation and controls to properly operate the generator.	0	C	Over 500 customers in Padre Dam's mountainous Eastern Service Area (ESA) lost their homes to the Cedar Fire in 2003. Serving the ESA involves a 2000 foot elevation gain and pump stations are essential to providing water and to firefighting. Following the Cedar Fire, the district fast-tracked a strategy of redundancy and reliability for our ESA customers. The ESA is served by one transmission main. The strategy includes construction of new parallel water supply transmission mains and pump stations, as well as an emergency power supply for key existing pump stations. This project became more critical in Fall 2008, when San Diego Gas and Electric (SDG&E) announced they will proactively shut off the power in mountainous areas during high wind conditions to reduce fire danger. Padre Dam, other water districts and school districts have opposed SDG&E's plan to the Public Utilities Commission but the issue remains unresolved.	500,000	22,768	100,509 14	San Diego	v	2009

3102 3710037	3710037-014	Padre Dam MWD	ESA Secondary Connection Project	As part of the East County Regional Treated Water Improvement Program (ECRTWIP), a comprehensive program of capital improvements and usage guarantees involving the PDMWD, San Diego County Water District, and Lakeside Water District, Otay Water District, and Lakeside Water District. The ESA Secondary Supply Connection Project consists of approximately 4,000 feet of new pipeline, a new forebay reservoir (approximately 2 million gallons), and a new 12 million gallon per day (MGD) pump station. In addition, Padre Dam will design and construct the new CWA Flow Control Facility No. 7 which will be located on the site. This facility will replace the existing El Capitan Pump Station and Connection #6 as the primary potable feed into the District's Eastern Service Area. This project is the corner stone of a comprehensive capital improvement to provide potable water transmission reliability to address concerns raised from the last two wild fires experienced by the District.	Μ	0	C	Over 500 customers in Padre Dam's Eastern Service Area (ESA) lost their homes to the Cedar Fire in 2003. The ESA is devastated by fire approximately every 30 years; San Diego County experienced extensive wildfires again in 2007; and, climate change studies indicate less annual precipitation in this area in coming decades. The ESA is mountainous and serving water to these customers involves a 2000 foot elevation gain. These customers rely on one distribution pipe and multiple pump stations for their water supply and for firefighting.Padre Dam has developed a comprehensive capital improvement program to improve the reliability of the water distribution system in the ESA. This project will provide a new, more reliable source of water for the ESA, and eliminate dependency on one pump station.	18,000,000	22,768	100,509 14	San Diego	v	2009
3103 3710037	3710037-015	Padre Dam MWD	Five Reservoir Retrofit Program, Phase 2 - Mt. Top & East Victoria	In 1996, the Department of Health Services (DOHS) inspected the District's reservoirs, pump stations, and general system operations. The DOHS concluded that although the District has a well-operated and maintained water system, the roofing structures on Blossom Valley, Mountain Top, Chocolate Summit, West Victoria, and, East Victoria Reservoirs needed to be replaced. The Five Reservoir Retrofit Program is a comprehensive project that addresses all of the DOHS concerns. The execution of the project is divided in phases to ensure the water deliver system maintains its ability to serve potable water to existing customers. Phase 2 of this project includes the following scope of work for Mountain Top and East Victoria Reservoir: Replacement of the existing wood-framed roofs with new aluminum flat roof covers.o Structural and seismic retrofits.o Overflow structure improvements.o Site drainage improvements.o Replace the existing East Victoria Pump Station with a new pump station. A new pump station is and be orstruction of the new pump station is complete, the existing pump station will be operational during construction of the new pump station. Once construction of the new pump station is complete, the existing pump station will be demolished.	Μ	0	C	Padre Dam's water distribution system serves 85 square miles and includes 24 reservoir tanks. Mountain Top Reservoir is a partial buried concrete reservoir with a decaying roof system (timber frame). The roof was repaired on an interim basis after it failed 10 years ago and the California Department of Public Health issued a directive to ensure water quality is protected. Additionally, the concrete structure was not designed to meet today's seismic code/standards. East Victoria Reservoir is a partial buried concrete reservoir with a decaying roof system (timber frame). The roof was repaired on an interim basis after it failed 10 years ago and the California Department of Public Health issued a directive to ensure water quality is protected. Included in this project is the replacement of the the East Victoria pump station to meet new design standards and ensure reliable water delivery.	6,500,000	22,768	100,509 14	San Diego	v	2009
3104 4110013	4110013-005	City of Daly City	Chester/Sylvan Street Water Main Improvement Project	Water System Master Plan Project - "T-d and T- c"Replace 6 inch with 700 feet of 12 inch DI water main on Sylvan (Hillside to Chester)Replace 6 and 8 inch with 1,600 feet of 12 inch DI water main on Chester (Sylvan to Orange)	М	0	С	To address needed fire flow improvements identified in the City's Water System Master Plan Study performed by Brown and Caldwell	600,000	22,316	103,000 17	San Mateo	Ι	2009
3105 4110013	4110013-004	City of Daly City	Shipley/King Water Main Improvement Project	Water Sytem Master Plan Projects:"Z-1" REPLACEMENT OF 1,100 FT OF 6 INCH PIPE WITH 16" D.I WATER MAIN ON SHIPLEY (NELSON TO KING) "Z-2" REPLACEMENT OF 1,500 FT OF 8 INCH PIPE WITH 16" D.I. WATER MAIN ON KING (SHIPLEY TO VERDUCCI) "BB-B" REPLACEMENT OF 700 FT OF 8 INCH PIPE WITH 12 D.I. WATER MAIN ON KING (VERDUCCI TO BRIGHTON)	Μ	0	с	To address needed fire flow improvements identified in the City's Water System Master Plan Study performed by Brown and Caldwell	1,375,000	22,316	103,000 17	San Mateo	ΙΙ	2009

3106 4110013	4110013-007	City of Daly City	County/Valley/Hillside Water Main Improvement	Water Master Plan Projects"T-a" Replace 700 ft of 6 and M 8 inch pipe with 12" DI Pipe on County St. (East Market to Valley St.)"T-b" Replace 1,200 ft of 2, 4, 6 and 8 inch pipe with 12 DI pipe on Valley St. (County to Hillside)"T- c" Replace 700 ft of 6 and 8 inch pipe with 12 inch DI Pipe on Hillside Blv. (Market to Valley)	0	С	To address needed fire flow improvements identified in the City's Water System Master Plan Study performed by Brown and Calwell	1,650,000	22,316	103,000 17	San Mateo	II	2009
3107 4110013	4110013-002	City of Daly City	Schwerin Street Water Main Improvments	Water Master Plan Projects:THE REPLACEMENT ONE M AND A HALF AND SIX INCH MAINS WITH 2,000 FEET OF 12" D.I. WATER MAIN ON SCHWERIN AT MARTIN TO GENEVA	0	С	To address needed fire flow improvements identified in the City's Water System Master Plan Study performed by Brown and Caldwell	720,000	22,316	103,000 17	San Mateo	II	2009
3108 4110013	4110013-006	City of Daly City	Mission Street - Top of the	Consists of the replacement of an existing 10-inch Asbestos Concrete (AC) and 4-inch Cast Iron (CI) water mains with a new 12-inch Ductile Iron Pipe (DIP) water main along John Daly Boulevard from Knowles Avenue to Mission Street, approximately 190 feet. Replacement of existing 10-inch and 8-inch Cast Iron water mains with a 12-inch DIP water main along Mission Street from John Daly Boulevard to south of Parkview Avenue, approximately 1,450 feet. The project includes the installation of 8 fire hydrants, replacement of approximately 39 water services, 4 fire services and side street connections at Theta Avenue, Vista Grande Avenue and Parkview Avenue.	0	c	To address needed fire flow improvements identified by the City's Engineering Divsion	1,000,000	22,316	103,000 17	San Mateo	11	2009
3109 4110013	4110013-003	City of Daly City	Rio Verde Water Main Improvement Project	Water Master Plan Project:THE REPLACEMENT OF 2,000 M FT. of 4 and 8 inch with 12" D.I. WATER MAIN ON RIO VFRDF (MARTIN TO GENEVA)	0	С	To address needed fire flow improvements identified in the City's Water System Master Plan Study performed by Brown and Caldwell	750,000	22,316	103,000 17	San Mateo	Ш	2009
3110 3810010	3810010-002	SAN FRANCISCO INT L. AIRPORT		Clean and refurbish a fire protection storage tank for ise M in an emergency as a potable water source.	0	с	No storage or backup water supply. San Francisco Water Dept. unable to send us water.	250,000	1,001	103,423 04	San Francisco	Ш	2001
3111 4310012	4310012-004	City of Santa Clara	Walsh Elevated Tank Replacement Project	Demolition and removal of existing 500,000 gallon steel M elevated tank and reconstruction of a new 500,000 gallon steel fluted pedestal tank, including foundation, painting, piping, accessories, etc., to be known as the "Walsh Avenue Elevated Tank" for the City of Santa Clara, California in accordance with the Specifications and Drawings.	0	c	The Walsh tank is located in an extremely high risk seismic hazard area. A seismic vulnerability study, completed by G&E Engineering (2005) has identified major seismic vulnerabilities. The conclusion of the study is that the Walsh tank has major structural deficiencies with a high potential for damage and loss of function in future earthquakes. The tank provides the primary storage for about 10,000 people in the City of Santa Clara as well as more than half the 135,000 workers employed in the northern industrial portion of the City. The tank provides the primary fire flows via gravity flow for the northern industrial part of the City of Santa Clara. Loss of water service would have great economic impact on the more than 10,000 residents and to the great number of high value business enterprises in the City of Santa Clara.	3,200,000	26,610	105,831 17	Santa Clara	Ι	2009
3112 4310012	4310012-002	City of Santa Clara		Purchase and install ground motion sensors and motor M activated valves at seven tank outlets. This will include ancillary pipe reconstruction and SCADA expansion.	0	С	City needs automated shutoff valves at seven existing reservoirs and needs ground motion sensors and motorized valves.	1,050,000	26,610	105,831 17	Santa Clara	Ш	1998

3113 5610017	5610017-013	VENTURA WATER DEPARTMENT	Water Storage Tank Circulation Improvements	The Preliminary Design Report for Water Storage M Circulation Improvements (Project) indicated that the SolarBee mixing technology has the lowest maintenance and operating cost, is clog free, is equiped with solar panels and a chlorine injection system. The Project includes the installation of 6 (six) SolarBee mixing systems. One SolarBee will be installed in each compartment for each reservoir and include the following:Power Reservoir stores 15,000,000 gallons in two rectangular compartments. Bailey Reservoir stores 5,100,000 gallons in two rectangular compartments. Hall Canyon Reservoir stores 8,200,000 gallons in two rectangular compartments.	I	0	C	The water system began using chloramination for the disinfection of its potable water in December 2002. Although the use of chloramination has improved water quality, it has created nitrification concerns due to the lack of adequate mixing in the large water storage reservoirs. Prolonged detention time and stagnation, temperature stratification and short circuiting in the large rectangular reservoirs are the cause of nitrification problems. Our monthly nitrification sampling program has indiated at times an increase in HPCs, the presence of nitrifie and decreasing total chlorine residual. To correct this problem mixing improvements are needed in the largest treated water reservoirs to reduce the occurence of nitrification, maintain total chorine residual levels at acceptable levels by decreasing detention time.	400,000	31,312	107,490 06	Ventura	IV	2009
3114 5610017	5610017-010	VENTURA WATER DEPARTMENT		Design and construct, new Saticoy well #3, connect M pipelines, upgrade and expand existing Saticoy Fe & Mn TP from 4 MGD to 8 MGD.	I	0	с	Eastside of city has insufficient water supply,treatment reliability & redundant capabilities. Water Outages caused by operational difficulties and/or limited fire supply could occur resulting in Total Coliform Rule violations.	4,735,000	31,312	107,490 06	Ventura	IV	2002
3115 5610017	5610017-012	VENTURA WATER DEPARTMENT	Waterline Replacement - Lincoln Drive Neighborhood	The project includes the replacement of about 19,000 M feet of 4-inch and 6-inch cast iron pipelines with 8-inch AWWA C900 PVC pipelines in the Lincoln Drive Neighborhood area. This project also includes the replacement of a dedicated 12-inch trasmission main to the Mariano Tank site, upgrade a pressure regulating station, 34 new and/or replaced fire hydrants, 40 additional and/or replaced fire hydrants, 40 additional and/or replaced fire hydrants, 40 and install 8 air release valves.		0	С	The 2009 Water Master Plan recommends replacement of 19,000 feet of undersized and deteriorating 4-inch and 6-inch cast iron waterlines in the Lincoln Drive neighborhood area that are over 50 years old, have fireflow defeciences, are experiencing numerous breaks, require significant repairs and increases the operating budget. The lack of isolation valves and the poor closure conditon cause larger then needed areas to be out of water during the repair. Water quality is negatively impacted by entrained air, brownish color and sediment from tuberculated pipes due to the numerous shutdowns needed to make the repairs. The replacement of an aging transmission mainline that fills a water storage tank is in the Project. When a mainline break occurs and is isolated for repair; the tank fill mode is interupted and the tank level can drop to low level that is still feeding other areas of the neighborhood.There are very few air release valves in the hillside community to effectively purge air from the pipelines. Additional hydrants are needed to improve fire protection coverage in the narrow streets. A pressure regulating station needs to be upgraded due to age, which has the potantial to fail and overpresurrize the pipelines at lower elevations.	4,800,000	31,312	107,490 06	Ventura	IV	2009
3116 5610017	5610017-011	VENTURA WATER DEPARTMENT		Design and Construct 8,400 linear feet of 18-inch M diameter water transmission pipeline from Main/Callens Road to Telephone/Victoria Ave. Connect existing 18-inch 330 pipeline to existing 30-inch 330 mainline.	I	0	С	City's primary source, Ventura River water supply needs to be better utilized on the eastside of city. Large transmission mains do not exist to move water east to west and is operating vary inefficiently.	1,818,000	31,312	107,490 06	Ventura	IV	2002

3117 1910213	1910213-006	TORRANCE-CITY, WATER DEPT.	Walteria and Ben Haggott Reservoirs nitrification and rehabilitation project	This project is to install piping and valves on transmission mains and inside the reservoirs:) to convert the Ben Haggott and the Walteria reservoirs from end-of-pipe reservoirs to in-line reservoirsi) to allow water to circulate in the reservoirs thus preventing stagnation of wateriii) to improve water quality and stop nitrification inside the reservoirs and distribution system.	Μ	0	С	This project is to prevent nitrification in the two City reservoirs, the Ben Haggott Reservoir (10 mil gal) and the Walteria Reservoir (18 mil gal). If water is allowed to to accumulate in the reservoirs, nitrification occurs in the reservoirs and the distribution system due to the age of the water.Nitrification is highest during the summer months. Last year approximately 1.5 million gallons of water had to be flushed to waste due to nitrification in the reservoirs and the distribution system.	2,500,000	26,432	113,136 22	Los Angeles	IV	2009
3118 1910213	1910213-004	TORRANCE-CITY, WATER DEPT.		Institute a phased pipeline improvement program to replace pipelines having a history of frequent breaks, are beyond their useful life or are failing due to other external factors such as ccorrosive soils. Project involves: Design, and Construction	М	0	с	WW standards defect. Old water mains are in need of replacement.	13,208,000	26,432	113,136 22	Los Angeles	IV	2006
3119 4810007	4810007-005	City of Vallejo	Hollywood Street 400 & 292 Zones Pump Station	The project involves the construction of a new pump station at Hollywood Street near Magazine Street near the existing old pump Magazine Street Pump Station. The project will consist of three (3) 60 Horse Power vertical pumps that pump to the Glen Cove 400 Pressure Zone and two (2) 20 Horse Power vertical booster pumps that pump into the Glen Cove 292 Pressure Zone. The project includes the construction of the building, electrical and mechanical work, power transformer and metering facility, pipelines and appurtances, and telemetry.Pipeline work includes the construction of 600 feet of 18" suction pipeline from the 24" South Trans-Vallejo Pipeline and approximately 2000 feet of 12" and 14" discharge pipelines.Upon completion, the City can elect to reconstruct, and/or isolate and demolish Swanzy Reservoir.	M	0	с	The old pump station the project intends to replace currently draws its suction from the Swanzy Reservoir, a water reservoir in South Vallejo. The reservoir has wooden walls and an old roof that needs replacement. The frame supporting the roof structure also needs seismic retrofit. The cost of the seismic retrofit and reconstruction of is extremely expensive that the City cannot afford to undertake these fixes within the foreseeable future. Because of the above, this reservoir is being considered for abandonment due to the consistent water quality issues (total and fecal coliform and trouble meeting new disinfection by product rules) associated with it. Moreover, it also has major security and vulnerability concerns. This project aims to move the pumping facility to a site that will allow the City the ability from the City's water system. Also, the project intends to move the existing underground Fulton Street Booster Station that has confined space issues into this new facility making it more efficient and a safe working environment.	1,400,000	36,663	125,000 04	Solano	Ι	2009
3120 4810007	4810007-004	City of Vallejo	Fleming Hill Grid Pump Station Renovation and Bypass Project	This project will allow the City to more consistently supply adequate pressure to one-half of the City and provide opportunities for the water system to reduce energy consumption at the Fleming Hill Pump Station by elimination of the pressure regulators, installation of highly efficient low head high volume pumps in the grid pumps bay, and by retrofitting the existing gas engine driven pumps. It will also allow the City to feed the Grid Zone by gravity during periods of low demand particularly in the winter time.	M	0	с	This project will address issues with reduced water pressure which could result in potential backflow within the system. In addition, the Grid Pump Station is composed of seven large natural gas engines which are old and inefficient. These gas engines are contributers to the greenhouse gases. By retrofitting the gas engines, this will provide stability and reliability to the water system and provide less of a carbon footprint.	1,400,000	36,663	125,000 04	Solano	II	2009
3121 4310014	4310014-006	City of Sunnyvale	Equipment Replacement at Hetch-Hetchy Connections	t This project provides for the replacement of pressure reducing valves, gate valves, control valves and vaults, and for the installation of magnetic meters at six connections to the Hetch-Hetchy water supply pipeline. Most valves to be replaced are 8" to 116" in diameter. The SFPUC (Hetch-Hetchy) connections are located at Lawrence, Fair Oaks, Borregas, Lockheed, Palomar, and Mary.	Μ	0	с	The project replaces old components and updates them so that they can be remote-controlled by the City's SCADA system. This will increase system efficiency and help during emergencies, by allowing staff to react more quickly to isolate possible problem points from the potable water system as a whole. The equipment is being replaced because of age (40 to 50 years old) and to provide upgrades allowing each facility to be connected to the City's Supervisory Control and Data Acquisition (SCADA) system.	527,645	29,324	133,751 17	Santa Clara	II	2009

3122 4310014	4310014-005	City of Sunnyvale	Wolfe/Evelyn Water Plant Mechanical Reconstructio	t The project will upgrade the mechanical and electrical n systems at the Wolfe/Evelyn water plant in order to better serve the City's needs. This project involves replacing booster pumps and regulating valves, motors, motor control center, and booster room underground piping at the Wolfe/Evelyn water plant. It will also replace an existing motor and pump with a propane generator and transfer switch and install a magnetic flow meter.	Μ	0	c	The Wolfe/Evelyn water plant was built in 1959, and all the current equipment is original. Replacement of parts is currently very costly due to obsolescence of the pump. The electrical panels are sub-standard and in need of replacement. The Wolfe/Evelyn plant is an integral part of maintaining the municipal water system, providing supply, emergency storage, and fire suppression capacity to the City. It has exceeded its useful life and is in need of replacement. The current equipment is not reliable due to the age of the system.	1,066,505	29,324	133,751 17	Santa Clara	II	2009
3123 4310014	4310014-008	City of Sunnyvale	Cleaning of Water Tanks	This portion of the project provides for the interior cleaning of large water tanks at the Wright and San Lucar plants and 5 small tanks at the Central and Hamilton plants.	м	0	С	This project involves cleaning the inside of all City- owned water tanks and effecting minor repairs, as needed. There are six large tanks and the tanks have been must be placed on a cleaning schedule, per Department of Public Health recommendation to maintain water quality standards. The City's water tanks are critical to the storage and delivery of safe drinking water. Additionally, this infrastructure provides fire suppression capacity, and emergency storage capacity. The project will preserve the City's investment in its infrastructure and will help maintain water availability and quality.	84,000	29,324	133,751 17	Santa Clara	Π	2009
3124 4310014	4310014-004	City of Sunnyvale	Air Flotation Tanks Rehabilitation	This project includes repair/replacement of the steel and mechanical portion of this structure, repair and/or replacement of the influent gates and coating of the concrete walls, extending their useful life for approximately 15-20 years. Condition assessment of the tanks is complete. Design is currently underway with construction of the tanks ready to begin in 2009.	Μ	0	с	The City of Sunnyvale needs funds to rehabilitate and provide corrosion protection for four Air Floatation Tanks at the Water Pollution Control Plant (WPCP) which are steel and concrete structures. Air floatation tanks are used to remove the algae that grows during secondary treatment in the oxidation ponds. Three of these structures were built in 1975 and the 4th one in 1982, and all are in need of significant rehabilitation.	2,923,000	29,324	133,751 17	Santa Clara	Ι	2009
3125 4310014	4310014-003	City of Sunnyvale	Replacement of Supervisory Control and Data Acquisition System	This project involves replacing the (SCADA) system hardware and software at 37 sites. Staff estimates that SCADA's life expectancy is around 15 years. After that time, the software system only will need to be upgraded.	Μ	0	C	The Supervisory Control and Data Acquisition (SCADA) system provides operators with remote control and monitoring of the water, sewer and storm stations, and it also provides information on water pressure, flow and tank levels. A Vulnerability Assessment conducted several years ago recognized the need for immediate remote-control of valves in the event of an attack on the system. This system will provide operators will have crucial information on water pressure and instantaneous indication of flow and position of pressure regulating valves (PRVs).Implementation of the project will give the City refined control of the water system through PRVs. Upon completion of work, each location will provide operators with crucial information on water pressure and instantaneous indication of flow and position of flow and position of Flows. PRVs will be outfitted with a solenoid for remote operation. This will allow staff to:(1) track water flow to minimize source blending and provide customers more precise water quality information; (2) prevent costly water main breakages through early detection of valve malfunction; (3) further integrate system with a hydraulic water model for more precise water demand and fire flow planning; (4) allow for quick response and stabilization of water system in regional emergencies.	770,000	29,324	133,751 17	Santa Clara	Ι	2009

3126 4310014	4310014-007	City of Sunnyvale	City-Wide Water Line Replacement	This project replaces aged and damaged water lines. There is over 300 miles of underground water transmission and distribution lines in the City, varying from 4" to 30" in diameter, with many different material compositions (Asbestos Concrete, Cast Iron, Ductile Iron, Steel Pipe and PVC). The project upgrades the water system by standardizing materials used PVC (C-900) with tracer line, new valves and fire hydrants. The project also upgrades pipes and fittings for seismic stability, thus minimizing the need for costly emergency response activities caused by pipe breaks.	M /	0	c	The integrity of the City's water supply system is critical to protect public health, enhance sanitation, prevent environmental pollution and provide fire suppression. The success of these goals is dependent on the maintenance and eventual replacement of aged and worn infrastructure. Currently, many portions of the water system have exceeded their estimated life expectancy or deteriorated over time because of chemical reaction with certain soils. Failure of a line due to structural failure of the ended pipe material can result in failure of the pipe to deliver water, subsequently endangering a neighborhood or degrading the pressure and supply of the entire system, depending on the pipe size and location.	2,003,466	29,324	133,751 17	Santa Clara	Π	2009
3127 4310014	4310014-002	City of Sunnyvale	City of Sunnyvale Well Connections to Transmission Mains	The City of Sunnyvale Well Connections to Transmission Mains Project will provide funding to connect the Raynor and Ortega Wells to the transmission water main that is connected to the Santa Clara Valley Water District's (SCVWD) water system. This will give the City the ability to supply the transmission main with well water in the event that the SCVWD cannot provide the City with treated water because of intentional or accidental contamination, large earthquake or equipment failure. Both connections will include the installation of isolation valves and pressure reducing control valves with pressure transmitters to monitor and control the transmission and distribution systems.	M	0	с	Reliability of the City of Sunnyvale's water distribution system depends upon the City's wells as alternate sources of supply if disruption of water delivery occurs from the two wholesale suppliers (Santa Clara Valley Water District and San Francisco Public Utilities Commision) due to intentional or accidental contamination, a large earthquake, or equipment failure. The use of Raynor and Ortega wells will also help to maintain adequate system pressure during peak demand periods such as during the summer months or in the event of a major fire.	1,130,000	29,324	133,751 17	Santa Clara	Ι	2009
3128 3310038	3310038-002	Rancho California Water District	Natural Gas Clean Engine Conversion	The Natural Gas Clean Engine Conversion Project will replace six existing natural gas engines at the Ace Bowen Pump Station and six existing natural gas engines at the East Bluff Pump Station with AQMD Rule 1110.2 will require the engines at these pump stations to be permanently removed from service on July 1, 2010 at the Ace Bowen Pump Station (engines greater than 500 horsepower) and July 1, 2011 at the East Bluff Pump Station (engines less than 500 horsepower) as these engines cannot meet the VOC requirements of 30 ppm.At the Ace Bowen Pump Station six, twenty-five year old, Waukesha L5108G, 624 horsepower, rich burn natural gas engines are proposed for replacement with AQMD compliant natural gas engines to drive the water pumps. In addition to turn-key installation of the compliant engines, a state-of-the-art Continuous Engine Monitoring Systems (CEMS) will be installed. Benefits of the CEMS system include improved efficiency and lower emissions. Six engines used to power water pumps are proposed for replacement at the East Bluff Pump Station: two thrty-eight year old, Waukesha L1197G, 137 horsepower, rich burn engines and four thirty-eight year old, Waukesha L11905G, 208 horsepower, rich burn, natural gas engines. The project scope includes replacement of the six engines with three larger and more efficient engines. In addition, to turn-key	M ) ) , r e f r	0	c	RCWD cannot meet Air Quality Management District Rule 1110.2 engine emission requirements at two of its pumping facilities, Ace Bowen Pump Station and East Bluff Pump Station. Concentration limits effective July 1, 2010 apply to the engines at the Ace Bowen Pump Station. RCWD cannot meet the VOC emission requirements of 30 ppm. Thus, under the Rule, RCWD must remove the engine from service or replace the engine with an electric motor. Concentration limits effective July 1, 2011 apply to the engines at the East Bluff Pump Station. Similar to the engines at the Ace Bowen Pump Station, RCWD cannot meet the VOC emission requirments of 30 ppm and RCWD must remove the engines from service or replace the engines with electric motors.	10,000,000	41,604	133,859 20	Riverside	V	2009
3129 1910205	1910205-006	SUBURBAN WATER SYSTEMS-SAN JOSE		PHASE 1 OF 2: DEMOLITION AND GRADING	Μ	0	с	PHASE 1 OF 2: RESERVOIR 130 AND 141 ARE AT THE END OF THEIR USEFUL LIFE AND HAVE STRUCTURAL AND SANITARY CONCERNS.	700,000	42,898	134,996 07	Los Angeles	IV	1998
3130 1910205	1910205-001	SUBURBAN WATER SYSTEMS-SAN JOSE		DRILL A 2000 GPM REPLACEMENT WELL	М	0	С	WELL 105 W-1 HAD RE-OCCURING COLIFORM PROBLEM AND WAS SHUT DOWN FOR TREATMENT. DURING TREATMENT, THE NITRATE LEVEL HAD DEVELOPED TO THE MCI, IEVEI	975,000	42,898	134,996 07	Los Angeles	IV	1998

3131 1910205	1910205-007	SUBURBAN WATER SYSTEMS-SAN JOSE		PHASE 2 OF 2: CONSTRUCTION AND SITE WORK	М	0	С	PHASE 2 OF 2: RESERVOIR 130 AND 141 ARE AT THE END OF THEIR USEFUL LIFE AND HAVE STRUCTURAL	900,000	42,898	134,996 07	Los Angeles	IV	1998
3132 1910205	1910205-002	SUBURBAN WATER SYSTEMS-SAN JOSE		DRILL A 3500 GPM WELL TO REPLACE LOST CAPACITY	М	0	С	2 OUT OF 3 WELLS IN 660 ZONE ARE SHUT DOWN DUE TO WATER QUALITY CONCERNS. REPLACEMENT WELL IS NEEDED TO PREVENT WATER SHORTAGES.	990,000	42,898	134,996 07	Los Angeles	IV	1998
3133 3010027	3010027-006	City of Orange	Reservoir Seismic Retroffing	Up to this year, 5 of the 16 reservoirs had been seismically retrofitted to enhance the ability to absorb seismic forces and movements. The City of Orange Water Division's goal is to upgrade the remaining 11 reservoirs in the next 2-3 years. By complete retrofitting the inlet/outlet pipes, it will enhance the pipes' ability to sustain seismic forces and movements and minimize time, labor and costs to repair damages to the reservoirs, pipes, sites and avoid having the reservoirs out of service for extent period of time.	м о	0	с	The City of Orange water system currently consists of 16 reservoirs ranging from 0.5 MG to 5.0 MG (million gallons) in capacity. Most of these reservoirs were constructed in the 1970's and were not seismically met the current UBC. As a result, the Water Division had continued to by replacing the rigid connection in the inlet and outlet pipes with flex-coupling joints which had been proved to withstanding seismic forces and movements better.	400,000	35,645	138,640 08	Orange	V	2008
3134 1910070	1910070-055	LOS ANGELES CO WW DIST 4 & 34-LANCASTI	Avenue M/62nd Street West Reservoir Nos. 2, 3, and 4	The proposed project consists of constructing three 3.2 MG water storage tanks and appurtenances at a District owned site located southeast of the intersection of 62nd Street West and Avenue M in the City of Palmdale The additional storage will help reduce the deficit storage capacity for the system and reduce the large pressure fluctuations. The tank site will be enclosed by block walls and landscaped with trees and shrubs to mitigate any visual or aesthetic effects. The proposed tanks will connect to a 36-inch water main located along Avenue M to 60th Street West to feed the west side of the 2555 pressure zone.	M t- 2.	0	с	The 2555 pressure zone of District No. 40 Region No. 4 in the City of Lancaster encompasses approximately 25 square miles. This zone currently has a storage need of 38.8 million gallons (MG) to satisfy fire flow storage requirements and the District's one-day storage of drinking water under maximum day demand. However, there are only two gravity storage tank sites in the 2555 zone: Avenue M and 7th Street West with 7.6 MG of storage and Avenue M and 5th Street East with 12 MG of storage.	8,000,000	46,878	144,215 16	Los Angeles	IV	2011
3135 0110006	0110006-041	CITY OF HAYWARD		Make miscellaneous seismic improvements on the existing water system.	М	0	С	Vulnerability to damage from seismic events	500,000	31,678	146,398 04	Alameda	II	2004
3136 0110006	0110006-045	CITY OF HAYWARD		Install 5,200 LF of new 12" water lines and a new Pressure Regulating Station	М	0	С	improve fire suppression capacity in 330 pressure zone	1,205,000	31,678	146,398 04	Alameda	Ш	2004
3137 3310037	3310037-006	Corona, City of	R-3 Reservoir Construction	The proposed R-3 Reservoir project site is about 400 feet north of Ontario Avenue, immediately east of the Main Street Storm Channel and about 600 feet west of Garretson Avenue in the City of Corona, Riverside County. The proposed R-3 Reservoir is to be located on the same property as the abandoned reservoir. The existing reservoir will be demolished with the new reservoir being constructed in its place. The proposed replacement will be approximately 135 feet in diameter compared to the 180 feet of the existing reservoir. The roof elevation of the proposed reservoir will be approximately 18 inches taller than the existing reservoir s' roof elevation. Moreover, the proposed reservoir will be constructed from concrete and the existing reservoir is constructed with wood framing corrugated steel sheeting above grade. The proposed project will meet all AVWA design requirements and satisfy the necessary storage needed in Zone 2 to accommodate the fire flow storage.	M r	0	c	The City of Corona owns and operates 17 reservoirs. Due to the age and structural integrity of R-3 Reservoir, it was abandoned in the early 1990's. The construction features and current condition of the existing reservoir do not conform to pertinent health criteria per the California Department of Public Health (CDPH). Further, it is not practicable to rehabilitate the existing reservoir. Therefore, it is proposed to replace the existing reservoir with a new reservoir of the same storage capacity. Replacement of the existing 2.5 MG reservoir is needed to meet the water storage, fire flow, and emergency storage requirements within the City's Zone 2 service area in accordance with the recommendations contained in the City's Water Master Plan (September 2005). As identified in the Water Master Plan, the City is required to have adequate storage for 50% maximum day demand by the greatest anticipated fire flow. A complete analysis of the City's storage capacity was conducted within the Master Plan and determined that an additional reservoir is required within Zone 2.	2,560,000	41,861	150,253 20	Riverside	V	2009

## 3138 3310037 3310037-002 Corona, City of

# with WM Desalter

**Regional Drought** This interconnection consists of connecting a portion of M Mitigation Interconnection the City of Corona (Corona) water system with a portion with WMWD's Arlington Western Municipal Water District (WMWD's) water system. The main purpose of the project is to allow both water agencies to supply water to one another during times of need and fully utilize groundwater resources. More specifically this project will consist of constructing a 16-inch waterline from WMWD's 30-inch Arlington Desalter (Desalter) pipeline to Corona's 30inch Zone 2 water distribution system. This will allow WMWD to supply water to Corona in times of need. Additionally, a connection will be made from Corona's 16-inch Zone 3 water distribution system to WMWD's 30-inch Desalter system to allow Corona to supply water to WMWD in times of need. The project will consist of constructing a water meter to monitor flow, control valves, Supervisory Control and Data Acquisition (SCADA) system, electronic and electrical gear, 500 gallon ammonia storage tank, 25' x 35' concrete masonry unit building, approximately 200 feet of 12inch ductile iron piping and appurtenances.

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Due to expecting state cutbacks on water supply from Metropolitan Water District, the City of Corona Department of Water and Power (Corona) and Western Municipal Water District (WMWD) are working together to utilize local groundwater resources. In order to add additional water supply and improve the reliability of their individual water supply systems, Corona and WMWD intend to construct and operate an interconnection between the two existing systems within Promenade Avenue in the City of Corona. The interconnection will be between Corona's Zone 2 and 3 systems and WMWD's Arlington Desalter system.

520,000 41,861 150,253 20	Riverside	v	2009
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3139 3310037 3310037-004 Corona, City of

Local Groundwater Resource Rehabilitation Project – Well 11A

The proposed Well has been sited in an area that has adequate groundwater to supply an additional 1.72 million gallons per day (MGD) to the water distribution system. The well would be designated as Well No. 11A and will be located at 1865 Pomona Road. The well would be drilled to a minimum depth of approximately 300 feet below ground surface and would be 28-inches in diameter to accommodate a 16-inch diameter casing. It is estimated that the pump will be driven by a 200 Horsepower (hp) motor and would have a pumping rate of 1200 gallons per minute (gpm). In response to expected state water supply cuts due to drought and environmental law conditions by Metropolitan Water District and the State of California, the City of Corona Department of Water and Power (Corona) is proposing to replace Well 11 with Well 11A. Due to the fact that Well 11 was constructed in 1953 and has come to the end of its life cycle, its supply capacity has declined to a point that requires significant retrofits. Corona is proposing to construct Well 11A which is estimated to supply 1.72 million gallons per day (MGD) of water verses the existing 0.57 MGD supplied by Well 11. The supply from Well 11A will be pumped to the Mangular Blend Station and combined with other water sources to increase the Corona's water quality. The additional water supply from Well 11A will also provide greater reliability and redundancy to the Corona water system.

850,000	41,861	150,253 20	Riverside	V	2009

3140 3310037	3310037-003	Corona, City of	Develop Local Groundwater Resource fo Water Quality – Well 31	The proposed well has been sited in an area that has M r adequate groundwater to supply an additional 2 million gallons per day (mgd) to the Desalter. The well would be designated as Well 31 and is to be constructed on Assessor's Parcel Number (APN) 118-302-011 at 211 North Buena Vista Avenue, currently a vacant lot on the east side of Buena Vista Avenue, approximately 280 feet south of State Route 91 (SR-91). The underlying land use designation for the proposed Well 31 site is High Density Multi-Family Residential and it is zoned R3.The well would be drilled to a minimum depth of approximately 500 feet below ground surface and would be 36 inches in diameter to accommodate a 24- inch diameter casing. It is estimated that the pump will be driven by a 250 Horsepower (hp) motor and would have a pumping rate of 1200 gallons per minute (gpm). The pump will be enclosed in a decorative masonry building approximately 390 square feet and 14 feet high.	0	C	The proposed project is to construct a 2.0 million gallon per day (MDG) municipal water well and associated collection pipeline. The main objectives of this project are to 1) enhance the reliability and capacity of the groundwater collection system for the existing Temescal Desalter Water Treatment Facility (Desalter), 2) meet the Total Dissolved Solids (TDS) discharge limits of 700 milligrams per liter (mg/L) in wastewater effluent discharge from the City's Water Reclamation Facilities, 3) decrease the City's dependence on imported water, 4) decrease the amount of imported water treated by the City of Corona (Corona) and thereby assisting in drought management policy's for local area and 5) improve the quality of water supplied to our customers by meeting a drinking water goal for nitrates of less then 38 gm/L.The Desalter is currently supplied an average of 10 MGD of water from five dedicated wells. The addition of this well will increase the average daily supply to approximately 12 MGD, thereby enhancing the reliability and capacity of supply to the Desalter. The proposed project will assist the Corona in meeting a mandatory Total Dissolved Solids (TDS) discharge limit of 700 mg/L from the City's Water Reclamation Facilities into the Temescal Creek by lowering the overall TDS in the City's distribution system. The discharge limit is mandated by the Santa Ana Regional Water Quality Control Board in order to comply with the National	1,250,000	41,861	150,253 20	Riverside	v	2009
3141 4910009	4910009-002	Santa Rosa, City of	Steele Lane Water System Improvements	This project replaces approximately 2200 feet of M existing 6 inch water main with 12 inch water main. Upsizing the water main will bring the area up to current fire flow requirements and reduce maintenance costs.Replace 270 lf of 6-inch pipeline with 270 lf of 8- inch pipeline along Steele Lane east of County Center Dr. Replace 270 lf of 6-inch pipeline with 270 lf of 8- inch pipeline along Steele Lane east of Nordyke Ave. Replace 410 lf of 6-inch pipeline with 410 lf of 8-inch pipeline along Steele Lane east of Myers Dr.	0	с	This project replaces undersized watermains to will bring the area up to current fire flow requirements and reduce maintenance costs.	1,532,000	54,603	157,985 18	Sonoma	Ι	2009
3142 4910009	4910009-001	Santa Rosa, City of	7th Street Water System Upgrade	This project will replace approximately 3650 If of M undersized (4 inch and 6 inch) CI and ACP water main with 8 inch and 12 inch water main in conjunction with a sewer main replacement project in the same area. The increase in size will bring the existing water main up to design standards to provide the required fire flows.	0	с	This project will replace approximately 3650 If of undersized (4 inch and 6 inch) Cl and ACP water main with 8 inch and 12 inch water main in conjunction with a sewer main replacement project in the same area. The increase in size will bring the existing water main up to design standards to provide the required fire flows.	1,635,000	54,603	157,985 18	Sonoma	II	2009
3143 4910009	4910009-004	Santa Rosa, City of	Montgomery Drive Water System Improvements	This project will replace the existing 4" water main in M Parker Dr from Doyle Park Dr to Talbot Ave. Upsizing the old undersized water mains increases available fire flow and reduces maintenance costs.	0	С	This project will replace the existing 4" water main in Parker Dr from Doyle Park Dr to Talbot Ave. Upsizing the old undersized water mains increases available fire flow and reduces maintenance costs.	1,242,000	54,603	157,985 18	Sonoma	II	2009
3144 4910009	4910009-003	Santa Rosa, City of	Seismic Upgrades to Wate Storage Facilities - R2A, R2B R14	rr Planned improvements include features to enhance the M reservoirs' abilities to withstand seismic events and modifications related to worker safety. All three tanks will have new foundations installed and will have interior and exterior coatings removed and replaced.R2A: 1,000,000 Gallons, Built in 1975R4A: 500,000 Gallons, Built in 1958R14: 100,000 Gallons, Built in 1979	0	С	The City owns and operates 22 water storage tanks. Most were constructed prior to 1980. Since that time, new seismic codes and construction methods have been established for storage reservoirs. This project is the 2nd phase of a multi phase project to retrofit the City's tanks to withstand seismic forces as a result of an earthquake. The protection of City water supply (quality and quantity) during natural disasters is a critical component to our operation.	2,250,000	54,603	157,985 18	Sonoma	Ι	2009
3145 3010073	3010073-006	Moulton Niguel Water District		Construction of a new 16-inch parallel pipeline in Crown M Valley Parkway.	0	С	Reliability of 14" main, experiencing aggressive corrosion.	4,000,000	53,733	166,661 08	Orange	v	1998
3146 3010073	3010073-002	Moulton Niguel Water District		Replace easement pipelines with ductile iron pipe with M restraint joints, increasing reliability.	0	С	Reliability of aging pjpes(used in looping the system in erroding slopes).	3,000,000	53,733	166,661 08	Orange	v	1998

3147 3010073	3010073-008	Moulton Niguel Water District	Drill two wells to provide up to 2 and safety demands during a lor	2 cfs of water for health M ng term outage.	0	С	Reliability of local water supply. Must import 100% currently.	2,300,000	53,733	166,661 08	Orange	v	1998
3148 3010073	3010073-005	Moulton Niguel Water District	Water works standard defects	М	0	с	Water works standard defects.Proximity of undersized sewers in Crown Valley Pkwy.	10,000	53,733	166,661 08	Orange	v	1998
3149 3010073	3010073-007	Moulton Niguel Water District	Relocation of the Aliso Creek sev creek which is protected by a ro	wer to the other side of Mad.	0	С	Significant sanitary sewer defect involving line crossing creek that continually erodes. Waterline in near vicinity crossing creek also.	2,500,000	53,733	166,661 08	Orange	V	1998
3150 3010073	3010073-003	Moulton Niguel Water District	Construction of a new 24" forcer location.	main in a new safe M	0	C	Water works standard defects. Proximity of sewer forcemain from Joint Regional Wastewater Treatment Plant.	3,000,000	53,733	166,661 08	Orange	V	1998
3151 3010073	3010073-004	Moulton Niguel Water District	Constructing a new parallel sewe Valley Parkway.	er forceman in Crown M	0	C	Water works standard defects. Proximity of undersized sewer force main (Crown Valley Pkwy & lower salada)	2,000,000	53,733	166,661 08	Orange	v	1998
3152 1910124	1910124-001	PASADENA-CITY, WATER DEPT.	REPLACE WITH A NEW, BURIED, MG CONCRETE RESERVOIR AND CHANGES TO THE DISTRIBUTION RESERVOIR SITE.	POST-TENSIONED 7.5 M MAKE NECESSARY N SYSTEM AT THE	0	С	THE PARTIALLY BURIED, CONCRETE LINED, PRE-1920 SUNSET 1 RESERVOIR IS STRUCTURALLY UNSOUND, UNRELIABLE AND IN GENERALLY POOR CONDITION. IT NEEDS ROOF REPLACEMENT AND SEISMIC AND GENERAL STRUCTURAL UPGRADES.	5,500,000	36,830	168,700 15	Los Angeles	IV	1998
3153 3010062	3010062-006	City of Garden Grove	Water Main Improvements The City of Garden Grove is seek Projects No. FF010, FF01 and FF017 Department of Public Health Ecc Drinking Water State Revolving I Improvements Projects: FF010, f (PROJECT). The Project will enco areas: West Street from Chapma Avenue; Daniel Avenue from West St Holyoak Lane from Candy Lane t Loara Street from Chapma Ave Jerry Lane form Elmwood Street some other locations crossing th Avenue/West Street and Chapma intersections. The PROJECT is sci August 2012 and will be complet The PROJECT consists of constru water mains in West Street, and Lery Lane. Th comprise approximately 10,600 Chloride (PVC) pipe with new va hydrants. The project also incluu approximately hundred (100) mil fire-water service lines.Projects will be approv agencies prior to implementatio	king grant funds in the M com the California nomic Recovery Fund to subsidize Water FF014 and FF017 ompass the following an Avenue to Daniel est Street to Smallul reet to Holyoak Lane; to Simmons Avenue; nue to Patricia Drive; to Oakwood Street and the Chapman an Avenue/Laora Street heduled to begin in ted in January 2013. Icting new replacement heduled to begin in ted in January 2013. Icting new replacement iel Avenue, Candy Lane, we water improvements feet of 12-inch Polyvinyl lives and wet barrel fire des the replacement of ixed sized domestic and Plans and Specifications pased on City Ordinance wed by regulatory in. The Site Specific	0	C	With the recently completed City of Garden Grove's Water Master Plan based on field measurements and hydraulic modeling came the conclusion that the Water Improvements Projects No. FF010, FF014 and FF017 were the highest priority replacement projects to rectify fire flow deficiencies. The mixed Residential - commercial areas are severely limited in terms of pressure and fire flow availability and were determined to be grossly out of compliance with the California Fire Code Appendix B, Section B105 (2007). These priorities have been recognized due to undersized 4-inch and 6- inch mains, aging gate valves up to fifty years old, as well as having a number of partially functioning dry barrel fire hydrants within these priority areas. These projects will provide an upgraded water main system that will better serve various sectors of the community, such as a local elementary school, commercial and residential properties, and it will ensure public safety by meeting California Fire Code requirements.	2,620,000	34,077	172,781 08	Orange	v	2011
3154 3610039	3610039-049	SAN BERNARDINO CITY	San Bernardino Mountain Construct 5 MG Mountain Reser Reservoir No. 2 (5 MG)	rvoir No. 2. M	0	с	Additional storage needed.	5,000,000	42,301	173,359 13	San Bernardino	v	2012

3155 3610039	3610039-045	SAN BERNARDINO CITY	City of San Bernardino - Interstate-210 Main Replacement	Includes replacement of the following ten (10) pipeline segments:1) Leroy Street from 29th Street to end of cu de-sac at 1-210 – approximately 235 lineal feet of 6" pipe2) Wall Avenue from 28th Street to end of cul-de- sac at 1-210 – approximately 270 lineal feet of 6" pipe and 620 lineal feet of 8" pipe3) Lugo Avenue from 28th Street to end of cul-de-sac at 1-210 – approximately 300 lineal feet of 6" pipe and 650 lineal feet of 8" pipe4) Sepulveda Avenue from 28th Street to end of cul-de-sa at 1-210 – approximately 280 lineal feet of 6" pipe and 650 lineal feet of 8" pipe5) Belle Street from 28th Stree to end of cul-de-sac at 1-210 – approximately 200 lineal feet of 6" pipe and 630 lineal feet of 8" pipe6) Broadmoor Place from 29th Street to 1-210 – approximately 200 lineal feet of 6" pipe7) Parkside Place from 29th Street to 1-210 – approximately 200 lineal feet of 6" pipe8) Kenwood Avenue from 29th Street to 1-210 – approximately 200 lineal feet of 6" pipe9) Pepper Tree Lane from 29th Street to 1-210 – approximately 200 Lineal feet of 6" pipe10) "G" Street from 27th Street to 1-210 – approximately 200 lineal feet of 6" pipe and 1,050 lineal feet of 12" pipe	: M  - 0 oc et	0	c	The San Bernardino Municipal Water Department's 2007 Water Master Plan identified certain pipe segments in the water distribution network that are undersized to meet the increasing current and future water demands. The Master Plan recommends that these undersized pipes be improved in accordance with a priority schedule. Priority 1 projects are those that need to be implemented within 5 years from the date of the Master Plan (2007).	1,000,000	42,301	173,359 13	San Bernardino	v	2012
3156 3610039	3610039-051	SAN BERNARDINO CITY	San Bernardino Upper Zone Replacement-Mallo Area, Magnolia 8"& 12"	Replace existing pipeline with larger size pipe. Y	Μ	0	с	The San Bernardino Municipal Water Department's 2007 Water Master Plan identified certain pipe segments in the water distribution network that are undersized to meet the increasing current and future water demands. The Master Plan recommends that these undersized pipes be improved in accordance with a priority schedule. Priority 1 projects are those that need to be implemented within 5 years from the date of the Master Plan (2007).	1,150,000	42,301	173,359 13	San Bernardino	v	2012
3157 3610039	3610039-048	SAN BERNARDINO CITY	Devore/Meyers Pressure Zone Line Restriction Mitigation	Jack and bore below Interstate-210 to replace section o undersized pipe.	of M	0	С	Prior decision to slip line 8" pipe within an existing 12" pipe under the freeway initially saved construction costs but has now created a supply bottleneck as demands have increased	1,250,000	42,301	173,359 13	San Bernardino	V	2012
3158 3610039	3610039-050	SAN BERNARDINO CITY	San Bernardino 1720 Zon East Reservoir (1 MG)	e Construct 1 MG 1720 Zone East Reservoir.	М	0	С	Additional storage needed.	1,200,000	42,301	173,359 13	San Bernardino	V	2012
3159 3610039	3610039-044	SAN BERNARDINO CITY	Reservoir Seismic Upgrades	Based on consultant's analysis of the 24 reservoirs in the San Bernardino Water Department's system, 13 reservoirs require upgrades to address seismic deficiencies. The total estimated cost to upgrade the deficient reservoirs is \$21,150,000.	М	0	С	In the event of a significant seismic event, there is a potential that a number of reservoirs may fail and create a significant impact to the water supply of the City of San Bernardino.	21,150,000	42,301	173,359 13	San Bernardino	V	2012
3160 3610039	3610039-043	SAN BERNARDINO CITY	Lower Pressure Zone I Street Transmission Pipeline (Jefferson to 2nd St.)	Project is one of the identified lines in the 2007 Water Master Plan. It will be replacing existing 16" and 20" transmission pipelines in "I" Street from Jefferson to 2nd Street.	м	0	с	The San Bernardino Municipal Water Department's 2007 Water Master Plan identified certain pipe segments in the water distribution network that are undersized to meet the increasing current and future water demands. The Master Plan recommends that these undersized pipes be improved in accordance with a priority schedule. Priority 1 projects are those that need to be implemented within 5 years from the date of the Master Plan. (2007).	2,143,000	42,301	173,359 13	San Bernardino	V	2012
3161 3610039	3610039-046	SAN BERNARDINO CITY	San Bernardino Lower Zone 2012 Pipeline Replacement	Includes replacement of the following three (3) pipeline M segments:1) Rialto Avenue from "I" Street to Mt. Vernon Avenue – approximately 3,200 lineal feet of 12" pipe2) "K" Street from Rialto Avenue to 3rd Street – approximately 1,200 lineal feet of 12" pipe3) Baseline Street from "H" Street to "E" Street – approximately 2,065 lineal feet of 12" pipe	0	c	The San Bernardino Municipal Water Department's 2007 Water Master Plan identified certain pipe segments in the water distribution network that are undersized to meet the increasing current and future water demands. The Master Plan recommends that these undersized pipes be improved in accordance with a priority schedule. Priority 1 projects are those that need to be implemented within 5 years from the date of the Master Plan (2007).	1,295,000	42,301	173,359 13	San Bernardino	V	2012	
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3162 3410001	3410001-015	Sacramento Suburban Water District	SSWD - Crestview Pipeline	Since the early 1990's, the District has made M improvements to mitigate the problems in the Arvin system. One such improvement was to construct and install new transmission mains to assist in circulating water from north to south and west to east in the Arvin service area. To provide the necessary facilities, the District developed a six-phase project to construct transmission mains capable of providing sufficient flows through out the Arvin area. Since the 1990's the District has constructed five of the six-phases. The remaining phase is the design and construction of approximately 9,200 linear feet of 10-inch transmission pipeline. The new proposed pipeline is distributed into the following lengths and sizes: 5,300 linear feet of 12-inch pipeline and 1,200 linear feet of 16-inch transmission pipeline, 2,700 linear feet of 12-inch pipeline. Included with the project are miscellaneous tie-ins to the existing distribution system and fire hydrants spaced to meet local fire agency guideline standards. The new pipeline vould also connect to the existing phase 5 pipeline, then proceed south through residential streets to the south end of the Arvin area connecting into an existing pipeline of adequate size. Along the pipeline route, the new pipeline would be connected to the existing distribution system to provide flows, pressure and circulation throughout the Arvin system. The installation of this new pipeline will	0	c	In 1986, the Sacramento Suburban Water District (District) purchased the former Arvin Water Company (Arvin). Arvin was a privately owned water company consisting of approximately 3,800 accounts made up of single-family residential, multi-family residential and light commercial retail/medical development. The area is basically built out with no future growth. The location of Arvin is in Sacramento, California bounded by the following streets: Auburn Boulevard to the north, Winding Way to the south, Manzanita Avenue to the west and Dewey Drive on the east. The existing water system was constructed in the late 1940's and consists of small sized water mains ranging from 2-inch to 10- inch. The pipeline material is predominately asbestos cement pipe and is of adequate quality but lacks size for circulation and transmission. Five groundwater wells constructed in the 1940's originally provided the water source to the area. Through the years the wells have developed bacteriological water quality issue. Although the issues are secondary, the quality problems have caused nuisance problems such as taste and odor. Due to an uncorrectable water quality issue in one of the wells, only four active wells currently exist. The main water supply problem that currently exists is a circulation problem within the Arvin system. This is due to the small diameter water mains, lack of transmission mains and water quality issues.	4,100,000	44,744	177,000 09	Sacramento	1	2008	
3163 3410001	3410001-018	Sacramento Suburban Water District	SSWD Security - Well Site Surveillance	The District has a number of key well sites where site security could be greatly improved. The District proposes to install up to two 20' tall light standards with security cameras at these key well sites. The lights and security cameras would be wired to motion sensor(s) and would activate upon an unauthorized intruder entering the site. There are a total of ten (10) well sites where the site security work described above is proposed. The work at each site would consist of the following:- Purchase and install one or two 20' light poles with flood lights, day/night cameras and motion sensors New electrical enclosure to house Digital Video Recorder (DVD), keyboard, LCD monitor, and other related equipment Install electrical conduit and conductors between the light poles and the electrical enclosure Install and wire up door sensors installed on the well pump enclosure, chlorination enclosure and/or fluoridation enclosure Engineering, programming, and field services. If a fiber optic connection can be obtained to each of these key sites, District operations staff would receive an alarm through the existing radio telemetry system and would be able to view the camera image in real time. The estimated total cost per site is \$50,000 for the above described work. [Note: A budgetary cost quote has been obtained from a District contractor (Tesco Controls) and is available	0	c	Water security improvements needed.	250,000	44,744	177,000 09	Sacramento	I	2008	

3164 3410001	3410001-016	Sacramento Suburban Water District	SSWD - Flaming Arrow Pipeline	A pre-design study prepared by a local engineering M consultant has recommended two new transmission pipelines to connect with a tee to an existing 30-inch pipeline at the intersection of Verner Avenue and Flaming Arrow Drive. One branch is a 16-inch diameter pipeline (approx. 2,070 feet in length) that heads southeast, parallel to and west of an existing 12-inch water line in Flaming Arrow Drive. It then turns south and parallels the exsiting 12-inch pipeline and fies in at the 14-inch water line in Indian River Drive at the southerly intersection with Flaming Arrow Drive. The other branch is a proposed 24-inch diameter pipeline (approx. 3,825 feet in length) which heads southwest on the west side of Verner Avenue parallel to an existing 16-inch water line. It then tiss in to that 16-inch line as it crosses Verner Avenue north of the Verner Avenue Mini Storage.	1	0	C	The Greenback Woods subdivision is located in the northeast portion of the District's North Service Area. Currently, during periods of sustained and extreme hot weather conditions over multiple years, this neighborhood experiences pressure below 35 psi, which is the District's minimum for maximum-day demand conditions. A new transmission main would would improve water pressures in this area and would allow for better distribution of surface water from the Cooperative Transmission Pipeline (CTP) into the North Service Area. Such a pipeline will also solve the low- pressure and circulation problems which exist in this area. More surface water could be taken via the CTP which would further conjunctive use and lessen the use of groundwater when surface water is available. Therefore, this pipeline will improve water distribution and system pressures, improve the flow and distribution of surface water into the system and minimize groundwater overdraft on the basin.	1,500,000	44,744	177,000 09	Sacramento	I	2008
3165 3410001	3410001-012	Sacramento Suburban Water District	SSWD - Storage Reservoir at McClellan Park	The proposed project consists of a 3 million gallon (MG) M above-ground steel storage tank/reservoir, a booster pump station, a backup emergency generator, chemical feed facilities, paved surfaces within the site, and fencing and landscaping around the site. The reservoir tank would be used to store both surface water and groundwater during low demand periods for use during peak demand periods or in the event of a fire. The proposed storage tank would be approximately 100 feet in diameter and 40 feet in height. The finished height of the tank would be determined during final design and will depend in part on the depth of excavation needed beneath the tank. The proposed facility would also contain a pump station structure, approximately 50 feet x 20 feet in area and 20 feet in height, to fully enclose pumps and related equipment to be used to pump water from the tank into a nearby pipeline. The structure will also house chemical treatment facility will contain a backup emergency generator to provide power to the pumps in the event of a power outage. The generator will run propane or diesel and be fully enclosed for noise attenuation.An 8-foot high concrete block wall will enclose the site. "Razor wire" will be installed along the top of the wall to ensure adequate security at the site. Landscaping will be installed around	1	0	C	In 1998, Sacramento Suburban Water District took over operation of the water system within McClellan Air Force Base (AFB). McClellan AFB officially closed on July 13, 2001, and is now within the control of the County of Sacramento. The former air force base, which encloses 2,856 acres of land, has now been transformed into a master planned community called McClellan Park. The County of Sacramento hired a development equity partner, McClellan Business Park, LLC, to market and redevelop the base. Of the approximately 11 million square feet of buildings on the base, McClellan Park has already leased well over 2 million square feet with many additional leases pending. In addition, McClellan Airport's 1.5 million square feet of aviation related facilities provide for hanger storage, repair/maintenance and painting capabilities for both corporate and personal aircraft. With the considerable amount of planned future development, water supply and supply for fire protection are critical for McClellan Park.A reservoir tank is proposed to improve the reliability of water supply and provide improved fire protection for McClellan Park.	5,000,000	44,744	177,000 09	Sacramento	1	2008

the site for screening purposes. Property for the

3166 3410001	3410001-010	Sacramento Suburban Water District	SSWD - Verner Storage	The proposed project consists of a 3 million gallon (MG) M	0	С	The proposed project is located in the northeast portion	5,000,000	44,744	177,000 09	Sacramento	I	2008
			Reservoir	above-ground steel storage tank/reservoir, a booster			of the District's North Service Area. This area is higher						
				pump station, a backup emergency generator, chemical			in altitude than the surrounding area and there is no						
				feed facilities, payed surfaces within the site, and			well source. Surface water is available to the District's						
				fencing and landscaping around the site. The reservoir			North Service Area through a contract with Placer						
				tank would be used to store both surface water and			County Water Agency (PCWA) but this water is not						
				groundwater during low demand periods for use during			always available. When surface water is not available.						
				neak demand periods or in the event of a fire. The			this area can experience lower water pressure. In						
				District already owns a 2.5 acre site for the proposed			addition there is noor water circulation in this area						
				reservoir tank and related facilities. This site is located			which can lead to secondary taste and odor problems						
				within the urban setting of the City of Citrus Heights			The proposed project will improve water proseure and						
				The site is bounded by Verner Avenue and U.S.			the reliability of water supply to sustempts located in						
				Interstate 80 (L80) to the west Elaming Arrow Drive			the parthaact corpor of the Dictrict's North Service						
				and the Easthill Calf Contar to the parth and parthwart			Area A receptoir tank is proposed that will provide						
				and the Poolnin Gon Center to the north and northwest,			Area. A reservoir tank is proposed that will provide						
				a partially developed city park to the east, and a			additional water supply storage capacity and increase						
				residential neighborhood to the south and southeast.			water supply availability for fire protection. The						
				The proposed storage tank would be approximately 100			proposed reservoir tank will provide water to customers						
				feet in diameter and 40 feet in height. The finished			during peak demand, fire-related flow periods and						
				height of the tank would be determined during final			during power outages. By providing storage, the						
				design and will depend in part on the depth of			proposed reservoir will also enhance conjunctive use						
				excavation needed beneath the tank. It may be			capabilities in the North Service Area. When it is						
				determined during final design that a wider and lower			available, surface water can be stored in the reservoir						
				tank design is preferable to avoid significant impacts to			and used in lieu of groundwater resources. An						
				existing trees on the site and to not exceed a City height			opportunity also exists for the District to partner with a						
				variance. The proposed facility would also contain a			local park and recreation district to provide for multiple						
				pump station structure, approximately 50 feet x 20 feet			uses of the existing site.						
				in area and 20 feet in height, to fully enclose pumps and									
3167 3410001	3410001-008	Sacramento Suburban Water District	SSWD - Water Main	The District proposes to design and construct new M	0	С	In the late 1990's, The Sacramento Suburban Water	15,200,000	44,744	177,000 09	Sacramento	I.	2008
			Installation in Sierra Oaks	pipeline facilities within the streets of the Sierra Oaks			District (District) increased its service area by acquiring						
			Vista Subdivision	Vista area. The proposed design includes valves,			a small service area along the south boundary of its						
				properly spaced fire hydrants as set forth under			South Service Area in Sacramento, California. The area						
				guidelines of the local fire department, new metered			is bounded by Northrop Avenue on the north, Fair Oaks						
				water services to each and every lot and backflow			Boulevard on the south, Fulton Avenue to the west and						
				protection should the homeowners wish to keep their			Watt Avenue to the east. The area consists of						
				existing water wells for irrigation and connection into			commercial type retail and single-family residential						
				the District's existing transmission and distribution			housing. Included in the area are on two small						
				systems. The proposed project calls for the installation			production wells and a partial distribution system. The						
				of approximately 17,000 linear feet (LF) of 12-inch			existing distribution system mainly exists in the						
				water pipeline, 18,000 LF of 8-inch water pipeline, 75			commercial area. The residential area (called Sierra						
				new fire hydrants, 310 new metered water services			Oaks Vista) consists of the two wells and a small						
				with backflows and tie-in connections to the existing			amount of distribution pipeline. A major portion of the						
				transmission and distribution system. The project			Sierra Oaks Vista residential area does not have a						
				would follow the District's specifications for placement			potable distribution system that provides domestic or						
				of the 12-inch mains on a 1,300 foot grid with the 8-inch			fire protection. The majority of the existing residential						
				mains interconnected to the 12-inch mains. Fire			units are all on private groundwater wells producing						
				hydrants would be installed on a 500 foot radius to			sufficient flows for domestic and irrigation use. Current						
				provide ample fire protection for the area. The			fire fighting procedures have the fire department						
				proposed new distribution system would be connected			connecting to the nearest fire hydrant around the site						
				to the District's existing distribution and transmission			and extending fire hose around and through the						
				systems on Fulton. Watt and Northrop Avenues. New			neighborhood to suppress fires. Existing swimming						
				metered water services would be installed to each lot			nools are also used to assist in the fire fighting The						
				and connected to the house. Backflow devices would			District has a major concern for the area due to the lack						
				he provided and installed should the homeowner wish			of fire protection the potential deterioration of the						
				to keen the private well for irrigation purposes			ground water table the age of the wells and the water						
				to keep the private wentor inigation purposes.			stoand water table, the age of the wend and the water						

3168 2110002	2110002-010	Marin Municipal Water District	MMWD Pipeline Replacement Project	This project is "shovel ready" and includes replacing         M           11,000 feet of pipe from the list below, at a total cost of         52,200,000. STREET         CITY FT SIZE TYPE YR           INSTALLEDCORTE ELENG GB 130. 2 GT 1949 HAMILITON         CT SR 200. 4 Cl 1950 REDWOOD AV CM 260. 4 GT 1906           MATILDA AV MV 310. 2 GT 1942 CORTE DE SABLA GB         180. 2 GT 1952 NYE ST         SR 250. 4 Cl 1923 PATH           - RACOON LIN TB 120. 2 GT 1941 BAVYIEW RD KF 470. 2         GT 1923 VISTAZO EAST ST TB 200. 4 Cl 1946 KNOLL RD         SR 150. 2 GT 1949 PINE CT         KF 200. 2 GT 1932           SUMMIT AV MV 900. 2 GT 1902,41GARDEN AV SR 330         6 Cl 1950,62MISSION AV SR 350. 6 Cl 1944 SURREY AV         MV 270. 4 Cl 1945 BEACH RD         BV 350. 2 GT           1906 ELM AV         WA 700. 2 GT 1914,28DIANE LN         KZ 404. 4 Cl 1940 CORTE CAVUGA GB 120. 2 GT 1953         STEWART DR SR 130. 2 GT 1932 FTHEL/MIRABEL AV MV           320. 6 OD/WSP 1954,73SUSSEX CT SR 225. 4 Cl 1960         R/W OFF HILARY DR TB 180. 6 Cl 1974 HDALIA RD         SA 200. 4 CL 1938 NOVA ALBION WY SR 200. 8 CL 1960           KND GF HILARY DR TB 180. 6 CL 1974 KURST DN MV         430. 2 GT 1902,ALTA AV         LG 550. 2 GT           320. 6 OLJ/WSP 1954, 735USSEX CT SR 225. 4 CL 1950         KENTDALE LN KF 400. 4 CL 1946 R/W OFF RALSTON MV           320. 2 GT 1902,ALTA AV         LG 550. 2 GT         1920,2SMARINA WY SR 205. 4 CL 1958 OAK CREST RD           SA 500. 6 C 1952 CLARK ST         SR 330. 3 GT 1929	0	c	This project meets Safe Drinking Water SRF Project Ranking Criteria for Category E: Water systems with water outages or significant water quantity problems caused by source water capacity or water delivery capability. This project will partially address system deficiencies presented by very old distribution pipelines with significant leak or break potential. Marin Municipal Water District (MMWD) was established in 1912, and is the oldest water district in California. MMWD's water system includes 900 miles (4.8 million feet) of operating distribution and transmission piping. Much of this piping is close to 100 years old. The average anticipated service life of all of the piping is in excess of 100 years, though the older pipe in the system had an anticipated service life, when new, of 75 years or less. The piping system is composed of, approximately: 243% cast or ductile iron pipe, with an average age of less than a service life of 75 years; 25% welded joint steel pipe, the current District standard, with an average age of less than 40 years and a 200 year service life; 86% asbestos cement pipe with an average age of less than 40 years and a service life of 50 years; and, 26% PVC pipe with an average age of less than 50 years; and a normal service life of less than 15 years; and, 26% PVC pipe with an average age of less than 15 years and a service life of news of 200 years. Of the above	2,500,000	60,599	190,800 18	Marin	Π	2009
				WY KE 225, 2, GT 1945 R/W OFF COLEMAN, SR 350, 4, CL			listed nining, about 80,000 feet (2% of the total footage)						
2100 2110002	2110002 002	Marin Municipal Mater District		Perless floating sever and configuration	0	c	Flasting assure does not most existing standards	1 000 000	CO 500	100 800 18	Maria		1000
3170 2110002	2110002-002	Marin Municipal Water District		replace any average two tanks a year. With other types M of storage.	0	c	Older redwood tanks do not meet seismic standards.	3,000,000	60,599	190,800 18	Marin	II	1998 1998
3171 2110002	2110002-009	Marin Municipal Water District	MMWD Fire Flow Pipeline Replacement Project	MMWD initiated a Fire Flow Master Plan (FFMP), as M described in Section J - Problem Description, in order to increase the water distribution system's ability to provide water for fire protection and to strengthen the system to increase its survivability during a seismic event. The District is currently in the 12th year of this 15 year improvement program. The work completed on the Fire Flow Master Plan through June 30, 2008 includes approximately 271,000 feet of pipeline replacements as well as seismic retrofits of the treatment plants and the critical transmission tanks and pump stations. This project includes \$2,500,000 in pipeline replacement work remaining on the FFMP project list. This work is "shovel ready".	0	c	This project will improve Marin Municipal Water District's ability to provide water for fire protection and suppression in MMWD's service area in Marin County, which is located within the seismically active San Francisco Bay Area. MMWD's water system is in need of strengthening in order to increase its survivability during a seismic event. This project meets Safe Drinking Water SRF Project Ranking Criteria for Category E: Water systems with water outages or significant water quantity problems caused by source water capacity or water delivery capability. In addition to being located within a seismically active geographic area, MMWD's service area is characterized by suburban neighborhoods, many in or near wooded and open space lands, with homes that are surrounded by highly flammable, overgrown vegetation. Property development with fire-prone landscaping has also increased fire danger. It has been more than 70 years since the last major fire (Mill Valley Fire 1929) touched this area. If the same fire were to burn within a similar footprint, nearly 850 homes and inhabitant lives would be affected, and that area is just one of many vulnerable neighborhoods within MMWD's service area. Wildland fire hazards in these communities are ranked as "high" in Marin County's Fire Plan. A major	2,500,000	60,599	190,800 18	Marin	Π	2009

fire such as the Oakland Fire of 1991 could also have a devastating affect on MMWD's watershed lands,

3172 2110002	2110002-008	Marin Municipal Water District	MMWD Redwood Tank Replacement Project	As described in Section J - Problem Description, MMWD's water system includes 26 aging redwood tanks which must be replaced. This project involves replacing two of these redwood tanks with steel tanks. The total cost for replacing all 26 of the redwood tanks is \$28,600,000. This project seeks funding to replace two of those tanks, projects which are in "shovel ready" status, at a total cost of \$2,200,000.	Μ	0	c	This project will partially address system deficiencies caused by aging redwood water supply tanks that have significant structural, water quality and security issues. This project meets Safe Drinking Water SRF Project Ranking Criteria for Category E: Water systems with water outages or significant water quantity problems caused by source water capacity or water delivery capability. Marin Municipal Water District (MMWD) has 140 water storage tanks in service at 117 tank sites. The tank system is used to regulate pressures in the system and is the primary' source of water used for meeting water demand peaks, for fighting fires and for emergency situations. The problem is that of these 140 water storage tanks, 26 are made of redwood and have exceeded or are close to exceeding their service life. The redwood tanks present the District with significant structural, water quality and security issues. The average age of the redwood tanks is 37 years; which is approaching the estimated average useful life of about 40 years. Recent surveys have indicated that the physical decline of these structures is accelerating, posing a health and safety concern.	2,200,000	60,599	190,800 18	Marin	u	2009
3173 3710034	3710034-004	Otay Water District	Otay Water 1485 Pump Station	The new station will be constructed on the southern portion of the existing 1485-1 Pump Station property owned by the District. The station will include three electrical driven pumps, a diesel emergency generator, a perimeter fence, and landscaping. The Station will be enclosed to protect the pumps and electrical equipment from the environment. There will also be a bridge crane for service and maintenance and onsite parking for utility vehicles. It is intended to improve the transmission of potable water in the 1485 pressure zone and to convey flow to the new 1485-2 Reservoir.		0	с	This project addresses a critical reliability issue. The current pump station which has been exposed to the elements (heat, cold, moisture and sunlight) is at the end of its useful life.	2,375,000	45,446	191,500 14	San Diego	v	2009
3174 3710034	3710034-003	Otay Water District	East County Regional Treated Water Improvement Program 36- Inch Pipeline	The ECRTWIP Otay WD project will connect the Helix WD system Levy WTP to the existing Otay WD system. The project infrastructure will consist of construction of approximately 27,000 feet of 36-inch steel pipe and construction of a flow control facility to convey 16 million gallons per day (mgd) of treated water.The ECRTWIP project will address the following primary objectives of the Otay WD: • Acquire local water system capacity to access the regions raw water supply, transmission, storage, and treatment systems. • Acquire an alternative supply source to sustain a minimum of ten (10) continuous day's outage.The primary benefits to Otay WD as an outcome of this project are as follows.• Local water treatment plant and transmission capacity of up to 16 mgd.• Enhanced reliability, flexibility, and security via access to raw water supply sources (i.e. water supply source diversification).• Local treatment and transportation capacity allowing for the potential treatment of Otay WD acquisition of future raw water supply.• Maximize local production sources. A level of independence from the regions treated water system.	M	0	c	The East County Regional Treated Water Improvement Program (ECRTWIP) Otay Water District (WD) project addresses issues of water system reliability to resolve water outages caused by source water delivery capability that is insufficient to supply current demand. In May 2004, the San Diego County Water Authority (Water Authority) adopted its Regional Water Facilities Master Plan (Master Plan) identifying infrastructure needs to the year 2030. In addition, in August 2004, the Water Authority approved their Long Range Financing Plan. These two plans set the framework for major regional water improvements for many years to come.One element of the Water Authority Master Plan includes the expanded utilization of local water treatment plants owned and operated by their member agencies along with related raw water supply, pipelines, pump stations, and interconnections. The Master Plan earmarked \$150 million for cost effective local projects to better utilize the regional raw water supply and local treatment system. The Board of Directors of the Water Authority, Helix WD, Otay WD, Padre Dam Municipal WD, and Lakeside WD all approved binding ECRTWIP Agreements, which outlines an integrated plan, in which each agency commits to certain capital improvements and/or guaranteed usage levels. The Helix WD agreement is essentially a Water Authority capacity purchase of the Helix WD system and	20,000,000	45,446	191,500 14	San Diego	v	2009

3175 0710003	0710003-015	Contra Costa Water District	Contra Costa Water District	Replace existing pipes which experience significant leaf repair incidents; or undersized fire flow and distribution capacity; relocation of existing pipelines as legally required.	c M n	0	C	Significant leakage history. Undersized fire service capacity; corrosion problems.	9,844,000	60,476	200,000 04	Contra Costa	П	1999
3176 0710003	0710003-008	Contra Costa Water District		Replace mains on a prioritized basis.	М	0	с	Repair aging water mains that are causing distribution leak and pressure problems.	2,000,000	60,476	200,000 04	Contra Costa	Ш	1998
3177 0710003	0710003-007	Contra Costa Water District		Nineteen storage projects will be implemented over a ten year period to severe existing customers.	М	0	С	Repair water storage facilities that are causing distribution pressure and reliability problems.	40,600,000	60,476	200,000 04	Contra Costa	II	1998
3178 3010053	3010053-001	City of Huntington Beach		Water main replacement projects to replace old and deficient pipelines at various locations throughout the City.	М	0	С	Aged and defected main distribution lines.	2,000,000	52,314	201,000 08	Orange	V	1998
3179 3010053	3010053-003	City of Huntington Beach		Installation of water treatment facilities at these well sites (possibly ozone or RO systems) should reduce or eliminate these problems.	М	0	С	Lack of cathodic protection to metallic pipelines.	5,000,000	52,314	201,000 08	Orange	V	1998
3180 1910048	1910048-008	CASTAIC LAKE WATER AGENCY	Honby Parallel Pipeline	Project will consist of construction 6,500 linear feet of 60-inch diameter steel pipeline to replace the existing 33-inch pipeline from the end of the Phase 1 pipeline to the inlet of the Sand Canyon Pump Station. It will provide facilities for Agencyto convey imported water to the eastern portion of the service area.	M	0	С	The existing pipeline to the eastern portion of the Agency's service area is undersized. A new larger diameter pipeline will allow for larger flows to meet increasing demand. Additionally, the existing pipeline would be freed up to convey recycled water for non- potable purposes.	15,000,000	25	230,000 22	Los Angeles	IV	2009
3181 0110001	0110001-006	Alameda County Water District	Upgrade Patterson Reservoir inlet/outlet	Upgrade inlet/outlet to improve mixing and turnover rate to reduce nitrification & improve water quality	М	0	с	Patterson Reservoir facilities are old and does not meet the current user demands	830,000	79,088	324,796 04	Alameda	II	2003
3182 0110001	0110001-001	Alameda County Water District	Replace the existing aging infrastructure by upgrading the Niles Alley Pipeline	Replace the existing aging infrastructure by upgrading the Niles Alley Pipeline	Μ	0	С	Replace the existing aging infrastructure by upgrading the Niles Alley Pipeline	1,000,000	79,088	324,796 04	Alameda	II	2003
3183 0110001	0110001-005	Alameda County Water District	Construction of a new storage tank	Construction of a new storage tank	Μ	0	С	The Tamarack zone is an upper zone without a storage tank	1,750,000	79,088	324,796 04	Alameda	Ш	2003
3184 3310009	3310009-054	Eastern Municipal WD	Supporting Infrastructure for Perris II Desalter	The Perris II Desalter will provide up to 5 MGD of water from seven wells feeding into a reverse osmosis (RO) desalination plant. This new water supply will supply u to 11,000 homes in the disadvantaged community of Perris, California, and reduce imported water demands at a rate of 1 to 1. The supporting infrastructure includes: seven new wells and associated equipment; 60,000 feet of pipeline (12,000 feet of potable water, 45,000 feet of well-water transmission, and 3,500 feet of brine line); inline water pumping and storage facilities; and well head treatment, monitoring, and other equipment as determined by final project desalter through a combination of local, federal, and state funding sources. This application covers the SUPPORTING INFRASTRUCTURE costs related to the Perris II Desalter.The goals of this project are to:- Reduce demand on imported water • Protect drinking water sources • Provide and enhance water security Supplement water, additional local water supplies are being identified and infrastructure developed to provid sustainable potable water to the surrounding community.EMWD has successfully constructed two groundwater desalination plants and implemented a desalination program within the last 5 years. Currently	n le	0	c	The goals of this project are to:• Reduce demand on imported water sources;• Protect drinking water sources;• Provide and enhance water security; and• Supplement water supplies for disadvantaged communities.Eastern Municipal Water District (EMWD) provides water to a 555-square mile area in western Riverside County, serving approximately 660,000 people. Of EMWD's total potable water demand of 134,000 acre feet per year (AFY), 82% is met with imported water from the State Water Project Water (SWP) and Colorado River Aqueduct (CRA) while the remainder is provided by local groundwater. To reduce dependence on imported water, additional local water supplies are being identified and infrastructure developed to provide sustainable potable water to EMWD's service area.EMWD has successfully constructed two groundwater desalination plants and implemented a desalination program within the last 5 years. Currently, up to 8 million gallons per day (MGD) of locally-derived potable water, decreasing dependence on inported water;• Increase reliance on local areuro resources in the event of an emergency (such as an earthquake) that cuts off imported water supplies;• Increase local drought preparedness and mitigation responsiveness; • Supplement water supplies; to	20,000,000	141,243	414,710 20	Riverside	v	2008

3185 3310009	3310009-061	Eastern Municipal WD	Cactus Feeder Phase IIA Transmission Main- Moreno Beach Dr.	The Cactus Pump Station (CPS) and Transmission Pipeline Phase I and Phase II will provide a regional transmission and storage supply of treated water from the Henry J. Mills Water Filtration Plant (Mills) of the Metropolitan Water District of Southern California (MWD). The MWD will deliver up to a maximum flow of 70 cubic feet per second (Cfs.) at the designated EM-23 connection located near the boundary of the Eastern Municipal Water District (EMWD). The District is nearing completion of the Cactus Pump Station (CPS) and Phase I Transmission Main. The Phase I Transmission Main extends easterly from the CPS at the Interstate 215 Freeway to the intersection of Cactus Avenue and Heacock Street. The Phase II Transmission Main will be extended easterly from the intersection of Cactus Avenue and Heacock Street for 5.5 miles in Cactus Avenue and Nains ElA Cactus Feeder Main will complete connection between two existing transmission mains in the east Moreno Valley Service Area of the 1764 Pressure Zone. With completion of the Phase II and Phase IIA Transmission Mains ElWD anticipates being able to serve existing and future customers through planning year 2030. The Phase IIA Transmission Main tc	M f	0	C	Eastern Municipal Water District (EMWD) provides water to a 555-square mile area in western Riverside County, serving approximately 675,000 people. EMWD's total potable water demand of 134,000 acre feet per year (AFY) includes 82% of imported water from the State Water Project and Colorado River Aqueduct and the remainder is provided by local groundwater.EMWD has recently completed an updated Water Facilities Master Plan (WFMP). The WFMP has identified supply and demand scenarios, deficiencies and required infrastructure improvements through ultimate build-out. The required infrastructure improvements include major supply, conveyance and storage facilities within the District's four major service areas, Moreno Valley, Perris Valley, East Valley and South Valley. The second largest service area is the Moreno Valley Service Area and due to the pace of growth in recent years will require a large investment for supply, conveyance and storage facilities to meet existing and ultimate demands. EMWD in conjunction with the Metropolitan Water District of Southern California (MWD) and Western Municipal Water District (WMWD) have embarked upon a regional water supply project, the Perris Valley Pipeline (PVPL), to deliver additional potable water supplies to Southwest Riverside County. The Perris Valley Pipeline, owned and maintained by the MWD, is a 96-inch water	3,600,000	141,243	414,710 20	Riverside	v	2009
3186 1010007	1010007-020	FRESNO, CITY OF	T-3 Water Storage and Pumping Facilities	In meeting California Water Works Standards and Fire Codes related to peak water demand periods, fire suppression, and system pressure requirements for current and future developments within the City of Fresno's (City's) southeast service area, the City has procured property (~3.39 acres) within this area for the installation of a permanent three-million gallon water storage tank and pumping station (T-3 Faclility). The property is located at 6736 E. Dakota Avenue (APN 310- 20-1437; T135/R21E). Permanent project improvements will include grading and paving, installation of storm drain and site utilities, a six-foot (6ft) perimeter block wall fence, automatic entry gates, and other remote and site security measures. For additional information, and as non-inclusive to this funding request, this particular area presents unique service challenges, due to nitrate and other groundwater contaminants such as pesticides from agricultural applications. As such, an interim package treatment plant will also be used at this facility. Treatment plant facilities are anticipated to be operated May through October of each year, and will be staged in 2 million gallon a day (2 MGD) increments to an ultimate build-out of 8 MGD as needed in meeting rapid local development until the larger regional plant as described in the Problem Description can be brought online. The new three-million gallon tank will be filled in off-peak periods and then discharged for distribution	M	0	c	The 1996 Fresno Metropolitan Water Resources Management Plan identified the need to construct a water storage and pumping facility within the City of Fresno's (City's) southeast service area. Soil lithologies and low yields of existing wells indicate that groundwater wells alone are not capable of supplying sufficient water to meet peak period pressure, demand, and fire suppression requirements for the build-out and current tempo of development within this area. In meeting California Water Works Standards, Fire Codes, and current area growth demand, The City has procured property within this service area for the installation of a permanent three-million gallon water storage tank and pumping station to aid water supply requirements for developments within the vicinity of the proposed storage tank property. Although a regional surface water treatment plant within the southeast area is being proposed and targeted for operation in 2015, build-out of current development areas near the project are anticipated to significantly out-pace proposed treatment plant is brought online, the water storage tank and pumping facilities will permanently remain in meeting and maintaining vicinity peak demand periods, system pressures, fire suppression, and emergency storage. Proposed storage tank facilities will also provide interim and future benefits to area	4,000,000	219.571	998.000.17	Fresno Santa Clara		2008
318/ 4310011	4310011-003	San Jose Water Company		replace 20 miles of aging water mains.	IVI	U	L	weed to accelerate pipeline replacement rate.	20,000,000	219,571	339,000 17	Santa Clara	н	1998

## 3188 4310011 4310011-046 San Jose Water Company

Water Main Replacement, Category O Project - Replace 1,380-ft of 6" water main M Sweetbriar Dr, San Jose on Sweetbriar Dr, San Jose, CA between Booksin Ave & Briarwood Dr.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

# Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an at about 25 miles in 2011 and beyond. SJWC total

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374,100 219,571 998,000 17 Santa Clara Ш 2009

developed infrastructure studies, as well as publications SJWC's water main replacement performance over the annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

446,000

## 3189 4310011 4310011-036 San Jose Water Company

PIPELINE REPLACEMENT Replacement of 1,460 of steel pipe with 8-inch Ductile M ON HIGH STREET (QUARRY Iron Pipe on High Street from Quarry Rd. to High St. RD TO HIGH ST STATION) Station. The pipeline will provide improvements to water quality, fire protection, and system transmission and distribution reliability in response to earthquakes in the vicinity of the project.

A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

219,571 998,000 17 Santa Clara Ш 2009

## 3190 4310011 4310011-052 San Jose Water Company

Water Main Replacement, Category O Project - Replace 3,120-ft of 12" water main M Greenwood Ln, Monte on Greenwood Ln, Monte Sereno, CA, between Lucky Dr & Withey Rd.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

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Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

778,500 219.571 998,000 17 Santa Clara Ш 2009

## 3191 4310011 4310011-056 San Jose Water Company

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Water Main Replacement, Category O Project - Replace 1090-ft of 6" water main M Monte Cresta Way, San on Monte Cresta Way, in San Jose, CA between Caliente Way & Lucena Drive.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

295,200 219,571 998,000 17 Santa Clara Ш

## 3192 4310011 4310011-013 San Jose Water Company

3193 4310011

4310011-038 San Jose Water Company

GRAYSTONE LANE TANK A new tank will ensure consumers benefit from many M decades of a high quality and reliable water supply. Key consumer benefits of this alternative include improved system reliability, minimal disruption of water service, and improved water quality. The estimated cost for replacing the existing concrete block tank at the Graystone Lane Station is \$600,700. These costs include all labor, materials and permits needed to build a new tank at this facility. Major components of this cost estimate are shown on Table 1 (see attached). SJWC recommends the replacement of the existing concrete cinder block tank at the Graystone Lane Station. This alternative is superior to the do nothing or the interim repair alternatives because it will allow SJWC to provide consumers a high quality and reliable water system. The consumer benefits from improved system reliability, minimal disruption of water service, and improved water quality for many decades to come.

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## Scotland)

REPLACEMENT

Pipeline replacement Replacement of 1,890 of steel pipe with 24-inch Ductile M Saratoga Ave (Dagmar to Iron Pipe on Saratoga Ave from Dagmar to Scotland. The pipeline will provide improvements to water quality, fire protection, and system transmission and distribution reliability in response to earthquakes in the vicinity of the project.

varying sizes (from 20,000-gallon to almost 20MG) and types within the distribution system. The majority of the tanks are either welded or bolted steel, and only a few redwood and concrete tanks are remaining in the system, SJWC replaced most of its redwood and concrete tanks with steel tanks in the 1980's and 1990's. Tanks that require replacement do so for a variety of reasons, including but not limited to its age, size, and condition. On an average year, SJWC completes two (2) tank replacement projects.Graystone Lane Tank is proposed for replacement due to its age and condition. This tank is currently 53 years of age. According to the SJWC asset ledger, the useful asset life ranges from 35 to 50 years suggesting the tank is already beyond its useful life. Tanks that are 50 years of age or older usually cannot provide the desired level of service and will eventually fail. In addition, this concrete block tank was unlikely constructed to an industry standard and is unlikely to survive a significant seismic event. The latest inspection reveals that the tank is in poor condition. Due to its age, the roof system has failed beyond repair and is a water quality risk. In addition, aging and deteriorating concrete blocks will greatly increase risks of not only potential tank failure but also water quality problems. These problems over the long-term will result in a lower level of service A critical need for replacement of potable water

SJWC has 96 distribution storage tanks or reservoirs of

transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2.400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

600.700 219,571 998,000 17 Santa Clara Ш 2009

1,353,000 219,571 998,000 17 Santa Clara 2009 11

3194 4310011	4310011-035	San Jose Water Company	Replace Water Main on Richland Ave, San Jose	Category O Project – Replace 1,180-ft of 6" water main M on Richland Ave in San Jose, CA, between Mayette Ave & Curtner Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	0	c	Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SIWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SIWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	319,400	219,571	998,000 17	Santa Clara	I	2009
3195 4310011	4310011-055	San Jose Water Company	Install Well Sample Taps for Ground Water Rule	This project will install a water quality sampling tap at M each of SJWC's wells. These dedicated sampling taps will be un-threaded and protected from the elements to minimize the chance of sample contamination.	0	с	Compliance with the Ground Water Rule via a Triggered Source Monitoring Plan will require bacteriological sampling at individual wells following a TCR positive in the distribution system. The Rule will be effective on December 1, 2009. SJWC plans to comply with the Ground Water Rule via Triggered Source Monitoring, and SJWC's wells do not have water quality sampling taps.	78,400	219,571	998,000 17	Santa Clara	Ι	2009
3196 4310011	4310011-034	San Jose Water Company	Pipeline Replacement on SENTER RD (LEWIS RD TO CAPITOL EXPWY)	Replacement of 1,800 of steel pipe with 18-inch Ductile M Iron Pipe on Senter Rd. from Lewis Rd. to Capital Expressway. The pipeline will provide improvements to water quality, fire protection, and system transmission and distribution reliability in response to earthquakes in the vicinity of the project.	0	c	A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per	857,000	219,571	998,000 17	Santa Clara	II	2009

of about 25 miles per year is in line to a year recommended replacement rate.

3197 4310011	4310011-051	San Jose Water Company	Pipeline replacement on OVERLOOK RD AND RIGHT OF WAY (OVERLOOK STATION TO OVERLOOK RD) RD RD RD RD RD RD RD RD RD RD RD RD RD	ch Ductile M from ne will protection, iability in e project.	0	c	A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	650,000	219,571	998,000 17	Santa Clara	Ι	2009
3198 4310011	4310011-049	San Jose Water Company	Water Main Replacement, Category O Project – Replace 1460-ft of 6" w Pinehurst Dr, Los Gatos, CA from Blossom Dr/Blossom Villa Dr/Sycamore Ct. Water Main Replacement: A critical need for replacement potable water transmission and distribution : infrastructure has been identified by SJWC d changes in demography in the 1950's and 60 on past San Jose Water Company developed infrastructure studies, as well as publications reports from American Society of Civil Engine and federal agencies such as EPA and GAO, S water main replacement performance over t decade has averaged approximately 9 miles p The latest revised program to normalize repl pipeline infrastructure describes an annual le pipeline replacement increase to about 17 m 2009, about 21 miles in 2010 and leveling off 25 miles in 2011 and beyond. SJWC total len pipeline infrastructure is approximately 2,400 Thus a rate of about 25 miles per year is in li	Attermain M Nalley n tt of system ue to the sand sand sand sers (ASCE) SIWC's the last per year. Jacement of angth of f at about gth of O miles. ne to	0	C	Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in frastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	395,200	219,571	998,000 17	Santa Clara	Π	2009

achieve a 1% per year recommended replacement rate.

3199 4310011	4310011-018	San Jose Water Company	Pipeline Replacement Los Gatos Blvd from Lark to Burton	The project replaces approximately 2,300 feet of 20- M inch pipe along Los Gatos Blvd. The water main is a very important component of the transmission system.	0	c	A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length for pipeline replacement increase to about 17 miles in 2009 then about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SIWC total length of pipeline infrastructure is approximately 2,400 miles. Thus rate of about 25 miles per year is in line to achieve a1% per year recommended replacement rate. The pipeline is designed and constructed such that there are improvement to water quality, fire protection, and system reliability in response to earthquakes in the vicinity of the project.	1,106,000	219,571	998,000 17	Santa Clara	Ι	2009
3200 4310011	4310011-022	San Jose Water Company	Replace Two Production Wells - Twelfth St W-15 & Tully W-5	Category O Project - Replace two wells, which have M reached the end of their serviceable life. The new wells are Tully W-5 and Twelfth Street W-15. Each new highly- efficient well/pump/motorwill have a capacity of approximately 1,800-gpm each.	0	С	Category O Project - Replace two wells, which have reached the end of their serviceable life.	2,500,000	219,571	998,000 17	Santa Clara	II	2009
3201 4310011	4310011-009	San Jose Water Company	Water Main Replacement Heatherwood Dr, Cupertino	, Category O Project – Replace 1,000-ft of 12" water main M on Heatherwood Dr in Cupertino, CA between Colonoy Hill Ln & Kentwood Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	0	c	Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	299,900	219,571	998,000 17	Santa Clara	II	2009

			Suncrest Ave, San Jose	on Suncrest Ave, San Jose, CA, from Perie Ln to Boulder			replacement of potable water transmission and						
				Dr.water Main Replacement: A critical need for			distribution system infrastructure has been identified by						
				replacement of potable water transmission and			SJWC due to the changes in demography in the 1950's						
				distribution system infrastructure has been identified by			and 60 s. Based on past San Jose Water Company						
				SJWC due to the changes in demography in the 1950's			developed infrastructure studies, as well as publications						
				and 60's. Based on past San Jose Water Company			and reports from American Society of Civil Engineers						
				developed infrastructure studies, as well as publications			(ASCE) and federal agencies such as EPA and GAO,						
				and reports from American Society of Civil Engineers			SJWC's water main replacement performance over the						
				(ASCE) and federal agencies such as EPA and GAO,			last decade has averaged approximately 9 miles per						
				SJWC's water main replacement performance over the			year. The latest revised program to normalize						
				last decade has averaged approximately 9 miles per			replacement of pipeline infrastructure describes an						
			year. The latest revised program to normalize			annual length of pipeline replacement increase to about							
				replacement of pipeline infrastructure describes an			17 miles in 2009, about 21 miles in 2010 and leveling off						
				annual length of pipeline replacement increase to about			at about 25 miles in 2011 and beyond. SJWC total						
				17 miles in 2009, about 21 miles in 2010 and leveling off			length of pipeline infrastructure is approximately 2,400						
				at about 25 miles in 2011 and beyond. SJWC total			miles. Thus a rate of about 25 miles per year is in line to						
				length of pipeline infrastructure is approximately 2,400			achieve a 1% per year recommended replacement rate.						
				miles. Thus a rate of about 25 miles per year is in line to									
				achieve a 1% per year recommended replacement rate.									
2202 /210011	4210011-022	San Jose Water Company	Pineline Replacement on	Replacement of 2 910 of steel nine with 6-inch Ductile	0	c	A critical need for replacement of potable water	1 217 000	210 571	998 000 17	Santa Clara	ш	2000
5205 4510011	4510011 055	Surfose water company		Iron Pine on ARDIS AVE from STEVENS CREEK TO	0	c	transmission and distribution system infrastructure has	1,217,000	215,571	556,000 17	Sunta Clara		2005
			BUNDY IN and ADRA AVE	ARCADIA: ARCADIA DR from ARDIS TO OLSEN: BUNDY			been identified by SIWC due to the changes in						
				IN from ARDIS TO 160' S/S ADRA and ADRA AVE from			demography in the 1950's and 60's hased on past San						
				EN ITOTT ANDIS TO 100 S/S ADIA BIU ADIA AVE ITOTT			achiography in the 1990 3 and 00 3. based on past 3an						

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Water Main Replacement: A critical need for

Jose Water Company developed infrastructure studies

Society of Civil Engineers (ASCE) and federal agencies

such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per

as well as publications and reports from American

year recommended replacement rate.

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2009

Replace Water Main on Category O Project – Replace 1,470-ft of 8" water main M

CYPRESS TO 20' E/E BUNDY. The pipeline will provide

response to earthquakes in the vicinity of the project.

improvements to water quality, fire protection, and

system transmission and distribution reliability in

3202 4310011

4310011-040 San Jose Water Company

## 3204 4310011 4310011-028 San Jose Water Company

Replace Water Main on Category O Project – Replace 2,470-ft of 6" water main M Blackford Ln, San Jose on Blackford Ln in San Jose, CA between Norman Ave & Anthony Dr.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off

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Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies. as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

668.500 219.571 998,000 17 Santa Clara 2009 11

3205 4310011 4310011-014 San Jose Water Company

Replacement of

01) Tree removal (21 trees) and site erosion protection. M Greenridge Terrace Tank Plant new replacement trees.02) Farth work: excavate #1 and slope stabilization approx. 3,270 CY of the ex. slope, remove approx. top 12" of the ex. fill material under the tank, and backfill and compact.03) Slope protection: approx. 8000 sqft wire mesh drapery and 250 ft of K-rail.04) Tank #1 concrete foundation for the 90' dia. X 38' high tank.05) Drainage system: conc. valley gutter, drain pipes, conc. catch basins, etc. 9 CB, 240' 12" C-900, 290' vallev gutter, 400' 18" corrugated HDPE ditch, 44' 12" CMP.06) Tank #1 inlet-outlet piping (~100'), valves, reuse EBAA cplg, tie in ex. 12" main, etc.07) Tank #1 - 14" Tideflex Mixing System08) Tank #1 altitude valve, sensing line,vault,sump pump/discharge line,pumper conn vault.09) 90' dia x 38' high welded steel tank.10) Tank exterior and interior coatings.11) Heating and dehumidifying.12) Electrical: relocate WL transmitter/alarm/RTU/antenna, remove cathodic protection sys. install site transformer, subpanel, water level transducer, lights, wires, switches, conduits, etc. 13) Paving: approx. 4320 sqft 2" AC over 6" Class II aggregate rock base.14) Relocate approx. 110 ft existing chain-link fence and gate. To replace the existing welded steel tank which is deteriorated and beyond economic repair

at about 25 miles in 2011 and beyond. SJWC total

length of pipeline infrastructure is approximately 2,400

miles. Thus a rate of about 25 miles per year is in line to

achieve a 1% per year recommended replacement rate.

SJWC has 75 tanks of varying sizes (from 100,000-gallon to over 15MG) and types within the distribution system. The majority of the tanks are either welded or bolted steel, although five redwood tanks remain in the system. SJWC replaced most of its redwood tanks with steel tanks in the 1980's and 1990's. Tanks that require replacement do so for a variety of reasons, including but not limited to its age, size, and condition. On an average year. SJWC completes two (2) tank replacement projects.Greenridge Terrace Tank #1 is proposed for replacement due to its age, condition, and size. This tank is currently 45 years of age. According to the SJWC asset ledger, the useful asset life ranges from 35 to 50 years suggesting Tank #2 is reaching the end of its useful life. Tanks that are 50 years of age or older usually cannot provide the desired level of service and will eventually fail. The latest inspection report also shows Tank #1 to be in poor condition. Due to its age, the interior coating shows signs of deterioration and peeling. According to company records, the recommended useful life of an interior coating is 20 years. The interior coating of Tank #1 is over 37 years of age. The peeling of the interior coating causes not only water quality problems but also results in more rapid corrosion of the tank. These problems over the long-term cause damage to the tank, result in a lower level of service experienced by the consumers, and

2,412,000 219,571 998,000 17 Santa Clara ш 2009

3206 4310011	4310011-039	San Jose Water Company
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Replace Water Main on Category O Project – Replace 2,460-ft of 6" water main M on Bello Ave in San Jose, CA, between Georgetta Dr & Curtner Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

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Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

698.300 219,571 998,000 17 Santa Clara Ш 2009

3207 4310011 4310011-045 San Jose Water Company

Gish Rd, San Jose

Bello Ave, San Jose

Water Main Replacement, Category O Project - Replace 1,240-ft of 16" water main M on Gish Rd in San Jose between Knoll Cr & State Hwy 880.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

Replace 1,240-ft of 16" water main on Gish Rd in San Jose between Knoll Cr & State Hwy 880.Water Main Replacement: A critical need for infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO. SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

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493,300
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3208 4310011	4310011-042	San Jose Water Company	Replace Water Main on Lariet Ln, San Jose	Category O Project – Replace 1,310-ft of 8" water main M on Lariet Ln in San Jose, CA, at Clator Way.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline infrastructure describes an annual length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	0	c	Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SIWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SIWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	425,000	219,571	998,000 17	Santa Clara	Π	2009
3209 4310011	4310011-054	San Jose Water Company	Water Main Replacement, Wilshire Blvd, San Jose	Category O Project – Replace 940-ft of 6" Water Main M on Wilshire Blvd in San Jose, CA, between Megellan Ave/King Rd.	0	C	Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	255,000	219,571	998,000 17	Santa Clara	u	2009
3210 4310011	4310011-050	San Jose Water Company	Install chlorination system at Needles Groundwater Station	The project will install a permanent chlorination system M at the Needles Groundwater Station. A temporary system is currently in use at Needles.	0	с	The Needles Station has a temporary chlorination system and needs a permanent system. Chlorine is fed to groundwater to maintain a residual in the distribution system, providing stable water quality and keeping pipes and tanks clean.	418,400	219,571	998,000 17	Santa Clara	II	2009

3211 4310011	4310011-025	San Jose Water Company	Mt. District Pavilion Tank & Pump Station	System improvement includes development of water storage tank (~95,000 gal) and pump station site that includes; new electrical service, motor control center, three booster pumps with variable frequency drives, parking for two trailer mounted diesel powered electric generators and on-site storage of emergency repair materials. The site and service area is in the mountainous and wooded terrain of the Santa Cruz Mountains. Improvements provide for increased reliability of water supply to a relatively isolated and vulnerable area of SIWC's service territory. Direct custormers in Redwood Estates and adjacent mutual water companies benefit by having addition storage and improved pump facilities for domestic supply and firefighting porposes as well as ready access to two mobile emergency power generators in a location that frequently experiences power outges due to storms and falling trees. Improvements also include reconfiguration of piping to allow five existing fire hydrants to be readily and reliable used by firefighters with up to 90,000 gallons of stored water. The existing hydrants are only intermittenly available for use by firefighters when downstram pumps are running. Even with pumps running only about 400 gpm of water would be available without a reliable succe of supply in an emergency situation.Project will provide overall	O	)	c	Insufficient storage for fire protection and domestic supply in event of equipment failures or power outages in an area subject to acts of nature that commonly cause such interruptions of water supply to the relatively isolated area of the water system. The community known as Redwood Estates is situated in a high relief and wooded area in the Santa Cruz Mountains and is more vulnerable to damage from wild fires, storms and earthquakes such as slope failures, tree falls and power outages. These risks all necessitate that increased reliability of water service for potable and fire protection are justified. A series of four pump stations currently supplies water from the water treatment plant to Redwood Estates and other mutual water companies. The pump stations and pipeline was constructed with FEMA assistance shortly after the 1989 Loma Prieta earth quake, which devestated the water supply and distribution system in what was then Redwood Mutual Water Company. In 2006 San Jose Water Company acquired Redwood Mutual Water Company and identified some areas for improvement. The most significant being storage between pump station three and pump station four. The existing configuration places the community at risk because a failure of any one of four pump stations cripples the water supply and transmission system to the Redwood	2,400,000	219,571	998,000 17	Santa Clara	Π	2009
3212 4310011	4310011-032	San Jose Water Company	Water Main Replacement Laumer Ave, San Jose	Increase in reliability of service and significant t, Category O Project – Replace 1,660-ft of 6" water main M on Laumer Ave, San Jose, CA between Fisher Ave & Easthills Dr.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling offi at about 25 miles in 2011 and beyond. SJWC total	0	)	с	Estates Communty-Additionally five existing fire Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SIWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SIWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to	470,200	219,571	998,000 17	Santa Clara	Π	2009

achieve a 1% per year recommended replacement rate.

length of pipeline infrastructure is approximately 2,400

miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

## 3213 4310011 4310011-016 San Jose Water Company

Water Main Replacement Category O Project - Replace 3,385-ft of 24" water main M

on Titus Ave, Saratoga

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Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies. as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

1.833.300 219,571 998,000 17 Santa Clara Ш 2009

3214 4310011 4310011-020 San Jose Water Company

Water Main Replacement, Category O Project - Replace 1,700-ft of 8" water main M on Henrey Ave, San Jose, CA south of Stevens Creek Henrey Ave, San Jose BlvdWater Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

on Titus Ave, Saratoga, CA between Johnson Ave &

for replacement of potable water transmission and

and 60's. Based on past San Jose Water Company

Belwood Dr.Water Main Replacement: A critical need

distribution system infrastructure has been identified by

developed infrastructure studies, as well as publications

and reports from American Society of Civil Engineers

SJWC's water main replacement performance over the

last decade has averaged approximately 9 miles per

replacement of pipeline infrastructure describes an

at about 25 miles in 2011 and beyond. SJWC total

annual length of pipeline replacement increase to about

17 miles in 2009, about 21 miles in 2010 and leveling off

length of pipeline infrastructure is approximately 2,400

miles. Thus a rate of about 25 miles per year is in line to

achieve a 1% per year recommended replacement rate.

year. The latest revised program to normalize

(ASCE) and federal agencies such as EPA and GAO,

SJWC due to the changes in demography in the 1950's

Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO. SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

470,200 219,571 998,000 17 Santa Clara Ш

3215 4310011	4310011-044	San Jose Water Company	Pipeline Replacement on CALLE TACUBA from CAMINO RICO TO MERRICK	The project replaces approximately 1,650 feet of 6-inch M pipe along Calle Tacuba Blvd. The water main was identified for replacement in the latest infrastructure study and will improve fire protection and distribution system reliability within the reaches of the project.	0	C	A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length forpipeline replacement increase to about 17 miles in 2009 then about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus rate of about 25 miles per year is in line to achieve a1% per year recommendedreplacement rate. The pipeline is designed and constructed such that there are improvement to water quality, fire protection, and system reliability in response to earthquakes in the vicinity of the project.	515,000	219,571	998,000 17	Santa Clara	II	2009
3216 4310011	4310011-019	San Jose Water Company	Replace Water Main on Sunnyvale-Saratoga Rd	Category O Project – Replace 1,720-ft of 8" water main M on Sunnyvale-Saratoga Rd in Saratoga, CA, between Williams Ave & Big Basin Way.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles.	0	c	Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	405,800	219,571	998,000 17	Santa Clara	IJ	2009

Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

## 3217 4310011 4310011-030 San Jose Water Company

Replace Water Main on Category O Project – Replace 2,830-ft of 12" water main M Thelma Ave, Saratoga on Thelma Ave in Saratoga, CA, between Sunnyvale-Saratoga Rd & Beaumont Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

С Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's

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and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

848.800 219.571 998,000 17 Santa Clara Ш 2009

3218 4310011 4310011-012 San Jose Water Company

> Saratoga-Sunnyvale Rd, Saratoga

Water Main Replacement, Category O Project - Replace 660-ft of 18" water main M on Saratoga-Sunnyvale Rd in Saratoga, CA along Stahl R/W.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO. SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

460,400 219,571 998,000 17 Santa Clara Ш

3219 4310011	4310011-017	San Jose Water Company

Water Main Replacement Category O Project - Replace 1,960-ft of 6" water main M on Hickory Way, San Jose on both Hickory Way and Cascade Dr in San Jose, CA, between Belvedere Dr & Blackford Ave and Aurora Ave & Tanbark St and Belvedere Dr & Saratoga Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

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Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies. as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

3220 4310011 4310011-010 San Jose Water Company

NORTH)

Pipeline Replacement S. Replacement of 1,350 of steel pipe with 12-inch Ductile M SEVENTH ST (PHELAN AVE, Iron Pipe on S. Seventh St from Phelan Ave, North. The pipeline will provide improvements to water quality, fire protection, and system transmission and distribution reliability in response to earthquakes in the vicinity of the project.

A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. based on past San Jose Water Company developed infrastructure studies as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.

339,000 219,571 998,000 17 Santa Clara 2009 Ш

219,571 998,000 17 Santa Clara Ш 2009

495,300

3221 4310011	4310011-021	San Jose Water Company	Greenridget Terrace Tank #2 Replacement	01) Tree removal (3 trees) and site erosion protection. M Plant new replacement trees.02) Earth work: excavate approx. 640 CY of the ex. slope, overexcavate approx. 640 CY of the ex. fill material under the tank, and backfill and compact.03) Slope protection: approx. 5300 sqft wire mesh drapery and 180 ft of K-rail.04) Tank #2 concrete foundation for the 90' dia. X 38' high tank.05) Drainage system: conc. valley gutter, drain pipes, conc. catch basins, etc. 6 CB, 135' 12'' C-900 drain pipe, 185' conc valley gutter.06) Tank #2 inlet-outlet piping (~70'), valves, reuse EBAA cplg, tie in ex. 12'' main, etc.07) Tank #2 - 14'' Tideflex Mixing System08) Tank #2 altitude valve,sensing line,vault,sump pump/discharge line.09) 90' dia X 38' high welded steel tank.10) Tank exterior and interior coatings.11) Heating and de- humidifying.12) Electrical: remove ex. breaker/WL transmitter/cathodic protection/conduits/wires, etc. install subpanel,WL transducer,lights,wires,switches,conduits,and move antenna, etc.13) Paving: approx. 2380 sqft 2'' AC over 6'' Class II aggregate rock base.14) Retaining wall: approx 70' treated wood retaining wall with hand rail.To replace the existing wielded steel tank which is deteriorated and beyond economic repair.	0	c	SIWC has 75 tanks of varying sizes (from 100,000-gallon to over 15MG) and types within the distribution system. The majority of the tanks are either welded or bolted steel, although five redwood tanks remain in the system. SIWC replaced most of its redwood tanks with steel tanks in the 1980's and 1990's. Tanks that require replacement do so for a variety of reasons, including but not limited to its age, size, and condition. On an average year, SIWC completes two (2) tank replacement projects.Greenridge Terrace Tank #2 is proposed for replacement due to its age, condition, and size. This tank is currently 45 years of age. According to the SIWC asset ledger, the useful asset life ranges from 35 to 50 years suggesting Tank #2 is reaching the end of its useful life. Tanks that are 50 years of age or older usually cannot provide the desired level of service and will eventually fail. The latest inspection report also shows Tank #2 to be in poor condition. Due to its age, the interior coating shows signs of deterioration and peeling. According to company records, the recommended useful life of an interior coating is 20 years. The interior coating of Tank #2 is over 37 years of age. The peeling of the interior coating causes not only water quality problems but also results in more rapid corrosion of the tank. These problems over the long-term cause damage to the tank, result in a lower level of service experienced by the consumers, and	2,211,000	219,571	998,000 17	Santa Clara	Ι	2009
3222 3710020	3710020-057	San Diego - City of	RB pump station upgrade	The RB pump station upgrade project includes the M addition of pumping capacity to the existing 25 mgd capacity pump station.	0	C	RB pump station upgrade is needed to supply the current and projected demand growth in the 793 zone. The existing pump station is operating at capacity and is currently using all its four regular duty pumps and its one back-up pump tp meet existing deman	8,000,000	273,015	1,266,731 14	San Diego	v	2002
3223 3710020	3710020-055	San Diego - City of	Miramar WTP clearwell no. 2	Demolish 30 million gallon clearwell no. 2 and replace M with new prestressed concrete tanks which complies with current seismic code.	0	с	Miramar WTP clearwell no. 2 does not comply with seismic code and suffers form considerable structural damage and needs to be replaced.	20,000,000	273,015	1,266,731 14	San Diego	v	2002
3224 0110005	0110005-035	East Bay MUD	Advanced Metering Infrastructure	This project consists of installation of new metering M equipment, related telemetry, and computer systems to remotely collect (real time) EBMUD customer meter reads as frequently as every hour. The project will be coordinated with EBMUD's SCADA systems and other telemetry-based field equipment to provide on-demand pressure zone balances, and perform distribution system leak detection. The project will also include the development of computer software to track, manage and provide customer internet access to their individual water use accounts as well as a wealth of conservation best management practices and services. These systems can readily detect water waste and other conservation opportunities. They can also provide individual water budgets that can be updated daily based on weather fluctuations. The EBMUD AMI project will collect real-time demand data from customer meters that will be made available to customers via a secure website. The water usage data collected from the meter reads can then be accessed in graphical format via an EBMUD-supported Intranet connection where it will be shared with customers for their use in identifying water conservation opportunities. EBMUD water conservation opportunities. EBMUD water conservation strategies such as fixing leaks, alternative irrigation techniques, and replacing older appliances	0	C	EBMUD currently provides water service to 1.3 million residents through more than 400,000 customer accounts. Each account's meter is manually read bimonthly by in-person visits from meter reading staff. Today, new tools are needed to inform the marketplace of its water use patterns and associated costs. Customer and market surveys conducted by EBMUD and the California Urban Water Conservation Council, among others, have consistently reported that roughly two-thirds of residents report their household water use at approximately 50 gallons per day (GPD) when the actual average use is nearly 8 times the amount at close to 400 gpd. Customers are likely to conserve more water (and reduce energy use) if they know their actually use, when and where water is being used, and the direct benefits from its conservation.EBMUD conducted pilot studies using Advanced Metering Infrastructure (AMI) systems. These studies show that AMI systems have the benefits of conserving water and eliminating waste; reducing energy use; improving system reliability, providing better, real-time data used in forecasting and system operations; improving customer service and satisfaction; improving business practice efficiencies, thus reducing costs; and providing green environmental benefits through reduced landscape over watering and energy savings.In order to meet California's goal of reducing water consumption	20,000,000	386,065	1,300,000 04	Alameda	Ι	2009

3225 0110005	0110005-036	East Bay MUD	Shapiro Reservoir Replacement	The project consists of demolition/removal of the M existing 4.0 MG open cut reservoir and replacement with a new partially buried 1.0 MG, pre-stressed concrete tank in the existing reservoir basin. To support water service during construction, a temporary storage tank and a new regulator from the Pearl Pressure zone is included to maintain service. The bottom and overflow elevations of the new reservoir will match the other tanks in the pressure zone.	0	c	The existing Shapiro Reservoir is a 4.0 million gallon (MG) open cut reservoir located in the San Pablo/Richmond area. The existing reservoir is approximately four times larger than needed for serving the pressure zone demand, and lacks separate inlet and outlet which has contributed to water quality problems. The existing reservoir is covered with a pre-cast concrete panel roof system that needs extensive structural rehabilitation and that allows movement of water into the reservoir. The existing reservoir ventilation system is inadequate and the floor lining system leaks and needs replacement.	8,000,000	386,065 1,300,000 04	Alameda	Π	2009
3226 0110005	0110005-034	East Bay MUD	South Reservoir Replacement	The project consists of demolition of the existing 50 M million gallon concrete reservoir and replacement with two - 10 million gallon steel reservoirs at the same site.	0	с	South Reservoir is a 50 million gallon storage facility located in Castro Valley, California. The project consists of demolition of the existing oversized reservoir and replacing it with two 10 million gallon tanks which will better serve our customers. The reservoir was originally constructed in 1956 by excavating the site and placing fill for an embankment to create an "open-cut" reservoir. The precast concrete roof system at South Reservoir has deteriorated to the point where it is a potential life safety issue to District personnel and a water quality issue due to leakage.	17,000,000	386,065 1,300,000 04	Alameda	Π	2009
3227 0110005	0110005-033	East Bay MUD	Walnut Creek Water Treatment Plant Improvements	The project includes the following improvements at the M Walnut Creek WTP: 1) two new filters; 2) a new Leland Pressure Zone pumping plant; 3) improvements to the backwash wastewater treatment system; and 4) landscaping at the WTP prior to construction to provide screening. The new Leland Pumping Plant will correct hydraulic problems in the Leland Pressure Zone.	0	С	Improvements to the Walnut Creek Water Treatment Plant are needed to meet existing and future water demands in the Lafayette, Moraga, Orinda and western Walnut Creek area; to meet future water quality standards; to comply with environmental permit conditions; and to replace and upgrade aging infrastructure. Additional treatment capacity is required to address occasional changes in source water quality. Increases in turbidity in spring and early summer, and recent increases in algae in Pardee Reservoir have adversely affected the source water quality at the WTP. Consequently, the efficiency of the filters is reduced, and the ability of the plant to meet demands is constrained.	20,000,000	386,065 1,300,000 04	Alameda	Π	2009

3228 1910067	1910067-040	LOS ANGELES-CITY, DEPT. OF WATER & PO	W LOS ANGELES RESERVOIR WQIP - BULL CREEK	The Bull Creek project is the first phase of the Los Angeles Reservoir Water Quality Improvement Project. The second phase is the construction of an ultraviolet light treatment facility to disinfect the outflow from the Los Angeles Reservoir. The Bull Creek project includes the relocation of the Bull Creek project includes of detention basins located on the Van Norman Complex. This project will include the expansion of the inlet structure to the channel to allow increased storm water flows into the channel, as well as protecting the Los Angeles Aqueduct Filtration Plant backwash water ponds from potential inundation. The channel enlarged and a new diversion structure constructed to direct more of the runoff to the San Fernando Storm Water Detention Basin where it can then be stored for future groundwater recharge. The current spillway from the Lower Debris Basin to the Los Angeles Reservoir will be filled in, and a new spillway from the debris basin vill be constructed to allow flow from the basin to the San Fernando Storm Water Detention Basin.	M e F k s d,	0	c	The Los Angeles Reservoir must comply with the Long- Term 2 Enhanced Surface Water Treatment Rule. Currently under high intensity storm conditions, runoff can enter the reservoir via a spillway from the Lower Debris Basin located west of the reservoir. The Los Angeles Reservoir WQIP-Bull Creek will cut off the spillway and re-route the storm water around Los Angeles Resevoir to the San Fernando Storm Water Detention basin located to the south.	83,194,923	686,422 4,0	)71,873 15	Los Angeles	IV	2011
3229 2702268	2702268-003	NEW CAMALDOLI HERMITAGE WS	Domestic Supply Well Development	The proposed solution is to develop a domestic supply well to augment the water supplied by \$1. The well sit will be chosen by a geologist and selected based on accessibility and probability of accessing water. The well will have a sanitary seal and the design will comply with local and State regulations. An environmental analysis for CEQA review will be conducted. The well pump and control system will operate the well based o a signal from the existing storage tank. The control system will include safety features such as dry-run protection and over-current protection. The estimated cost includes the costs for equipment, materials, labor, and engineering and permitting; is approximately \$140,000 as shown in the following cost breakdown:Description CostGeologist \$10,000Environmental Consulting \$10000Well drilling and casing \$50,000Testing of well \$ 5,000Pump and Control System \$15,000Piping and plumbing \$10,000Labor \$30,000TOTAL \$140,000	M e y	0	Ρ	The water needs are supplied by two springs. Spring No. 1 (S1) is consistently coliform-free, and supplies all water for domestic – i.e., direct human – uses. Spring No. 2 (S2), is very close to some large redwood trees and becomes infiltrated by their roots and has tested positive for coliform bacteria during recent years. Water from S2 is used for irrigation and cooling of the electrical generator. Until now, S1 has supplied enough water to meet domestic needs. During recent years, however, toward the end of the annual dry season, the flow rate from S1 has decreased to a low level which is an indication that it will likely be insufficient to meet the minimum water needs of the Community in future years, especially during periods of lower than average rainfall or drought. In anticipation of such a shortage, and in the hope of increasing the supply of high quality, coliform-free water, S2 was recently reworked to remove the redwood roots and seal it more securely against surface water infiltration. This work, however, failed to completely eliminate coliform bacteria from the S2 water. In order to have a sufficient supply of coliform-free water for the future, the need to develop a new water source is anticipated. The feasibility of developing a new spring was investigated but no suitable site was found.	140,000	1	25 05	Monterey	U	2009
3230 2702595	2702595-002	CACHAGUA COMM CTR WS	Cachagua Community Center Water System Emergency Source	Installation of well to serve as emergency backup in case of giardia breakout or loss of infiltration gallery due to debris flows in river.	м	0	Ρ	System draws surface water from Carmel River. Filtration plant has been unable to meet Health Department turbidity standards and is susceptible to giardia due to source. Water supply has been unreliable during peak river flow due to infiltration gallery damage from debris (trees, etc) in river.Most recent Boil Water Order issued October 3rd, 2008 and currently in effect.	125,000	6	32 05	Monterey	II	2009
3231 5500148	5500148-001	CHINESE CAMP SCHOOL	Chinese Camp School	one approved source	м	0	Ρ	only one active source. History of contaminants in area.	100,000	3	35 11	Tuolumne	ш	2008

3232 2000507	2000507-001	WARNOCK FOOD PRODUCTS #2	new deeper well	we are a growing food production company and we are seeing increased water useage. this will continue and our only well is not deep enough and will not accept the diameter of a commerical pump. we need:(1)a new well and pump. (2) 400' to 600'well.	М	0	Ρ	we are a growing food production company and we are seeing increased water useage. this will continue and our only well is not deep enough and will not accept the diameter of a commerical pump.	60,000	1	40 11	Madera	Ш	2009
3233 2700592 3234 5400638	2700592-001 5400638-001	HARRISON RD WS #01 SIERRA SCHOOL	Cutler-Orosi JUSD Sierra School Pre-application	Replace storage tank. DWP funds will be used to drill a 4 inch well of approximately 1,000 feet in depth. Funds will also be allocated to determine the location of underground water and avoid, if possible, having to drill through the rock that is usually found at various depths on the property.Our plan is to keep the current wells and pumps, due to the uncertainty of the water source. The County Health Department will be involved in the inspection of the drilling and insulation of the pump. The new well will be connected to the existing water lines to bring the water to the school and the teacher's house.	M	0	P	Storage tank is rusted. Sierra School has 2 wells next to each other with a pump for each well. Both wells are over 700 feet deep. We are only able to obtain 1 gallon/minute from the two wells combined. Often, especially during the summer months, one well will dry up, and a single well is used, though flow is maintained at 1 gallon/minute. These wells serve the teacher's house and the school, with currently 9 students K-8 in this remote mountain school. Currently there is no landscaping or grass on the playground due to the need to conserve water for drinking and sanitary purposes. The school has a potential to serve up to 90 students, based upon past enrollment. As property in the area is developed, there is further possibility for school expansion. However, the existing wells do not meet current needs, much less the needs of an expanded student population.	10,000 500,000	4	40 05 40 12	Monterey Tulare	11 111	1998 2008
3235 2000507	2000507-002	WARNOCK FOOD PRODUCTS #2	filtration system, treatment system, distribution system & concrete floor	we are a growing food production company and we do have good well water. however; we are seeing the need for increased water useage along with increased filtering and treatment needs. the water is good but the well ocassioinly slumps dirt into the water and it gets pumped into the plant and we must stop this. the well water is good but we are seeing increased test samples with simple coliform bacteria and must prevent this. we can see that this need increasing in the future and we need this equipment in a centralized location to process our well water.(1)_water filtration system.(2)_water treatment system.(3)_waterpipe distribution system.(4)_centralized concrete floor.(5)_provision for future roof and walls.	м	0	Ρ	we are a growing food production company and we do have good well water. however; we are seeing the need for increased water useage along with increased filtering and treatment needs. the water is good but the well ocassioinly slumps dirt into the water and it gets pumped into the plant and we must stop this. the well water is good but we are seeing increased test samples with simple coliform bacteria and must prevent this. we can see that this need increasing in the future and we need this equipment in a centralized location to process our well water.	42,000	1	40 11	Madera	Ш	2009
3236 3400182	3400182-002	BOY S RANCH		Construct a new 150 gpm well and chlorine treatment system. Involves design and construction.	М	0	Ρ	Insufficient production from single well to meet demand.	200,000	15	50 09	Sacramento	I	2006
3237 3901322	3901322-002	MANTECA INDUSTRIAL PRK CSA-30	CSA-30 MANTECA INDUSTRIAL PARK	The work, in general, consists of installation of the new equipment purchased by San Joaquin County. Completion of the well profile to determine nitrate bearing area(s) and the sealing of those areas.	Μ	0	Ρ	CSA-30 Well #1 exceeds the Primary Drinking Water Standards for Nitrate. Well #1 is one of 2 wells designed to provide domestice water service to a 20 lot subdivision. Since an adjacent well is relatiely low in nitrates, San Joaquin County proposes to rehabilitate the existing well. San Joaquin County has expanded approximately S50,000 in an effort to profile the well and replace antiquated pump equipment. San Joaquin is seeking funding to finish the profile and rehabilitation of the well.	100,000	17	50 10	San Joaquin	Ш	2009
3238 3901322	3901322-001	MANTECA INDUSTRIAL PRK CSA-30		CONSTRUCT TREATMENT FACILITY. OTHER = DESIGN AND CONSTRUCTION	М	0	Ρ	STAND-BY WELL HAS NITRATE IN EXCESS OF MCL	600,000	17	50 10	San Joaquin	Ш	2006
3239 1000316	1000316-001	KINGS CANYON HIGH SCHOOL	New well to augment single well	New well or interconnection to another system, if possible	М	0	Ρ	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	1	79 23	Fresno	Ш	2008

3240 1500517	1500517-004	STOCO MUTUAL WATER COMPANY	STOCO - Water System Improvements	Water Storage Tank - System does not meet the fire flow requirements set forth in the Kern County development standards - (System has pressure tank only)Booster Pumps (excluding cement pads)Well Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter (Inoperable)5/8" Water Meters (replace existing to properly quantify the amount of water being used with each connection)Back - up Generator/ATS (None)Instrumental/ControlsContingencies (15%)Engineering and Adminstrative Fees - Including Reports (10%)Permit and Legal Fees	м	0	Ρ	This system needs the following items according to Boyle Engineering's Report (March 2007)Water Storage TankBooster PumpsWell Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter5/8" Water MetersBack - up Generator/ATSInstrumental/ControlsThe systems has seven connections with businesses that cannot afford such a substantial estimated cost to complete these repairs/upgrades.	525,000	6	85 19	Kern	111	2012
3241 2210911	2210911-001	Spring Hill High School	New well to augment single well	The proposed project consists of the construction of a new well.	м	0	Ρ	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	1	93 11	Mariposa	Ш	2008
3242 2100545	2100545-002	WALKER CREEK RANCH EDUCATIONAL CEN	T Repair of Water Distribution Lines on Walker Creek Ranch Campus	This project is to detect, locate and repair leaks in the water distribution system, including the installation of shut-off valves and flow meters, in a manner that will most cost effectively serve the long term water distribution needs of the Walker Creek Ranch campus. This project will further efforts to become a Marin County Certified Green Business by minimizing and eliminating water loss, and maximizing water conservation. The Main County Outdoor School at Walker Creek Ranch serves about 6,000 elementary school students per year from around the Bay Area region for a five day residential outdoor science school program. On weekends and over the summer the facility is utilized as a residential outdoor science camp site and as a retreat and conference center, which serves over 100 separate groups and over 5,000 guests annually. The summer camp programs provide scholarship opportunities for economically disadvantaged students, and include a day camp for special needs students.	Μ	0	Ρ	The existing distribution system for potable water on Walker Creek Ranch Campus is approximately 50 years old, and is currently loosing about 3,500 gallons per day due to leaks, which equates to over 1.2 million gallons annually. With the water system being fed by two wells on the property, the additional draw on the water table from this water loss is a growing concern, in the midst of the third consecutive year of drought conditions. This project aims to detect, locate and repair leaks in the distribution system, including the installation of shut-off valves and flow meters, in an effort to minimize and eliminate water loss due to leaks.	215,000	21	100 18	Marin	Ι	2009
3243 3900756 3244 2100545	3900756-001 2100545-004	LINDEN USD-GLENWOOD SCHOOL WALKER CREEK RANCH EDUCATIONAL CEN	T Replacement of Water Distribution Lines on Walker Creek Ranch Campus	DRILL NEW WELL AND INSTALL PUMP AND TANK This project is to replace the main water lines and lateral water lines that provide potable water to the campus, including the installation of shut-off valves and flow meters, in an effort to minimize and eliminate water loss in the distribution system due to leaks. This project will further efforts to become a Marin County Certified Green Business by minimizing and eliminating water loss, and maximizing water conservation. The Main County Outdoor Schoel at Walker Creek Ranch serves about 6,000 elementary school students per year from around the Bay Area region for a five day residential outdoor science school program. On weekends and over the summer the facility is utilized as a residential outdoor science camp site and as a retreat and conference center, which serves over 100 separate groups and over 5,000 guests annually. The summer camp programs provide scholarship opportunities for economically disadvantaged students, and include a day camp for special needs students.	M M	0	P	SYSTEM HAS ONLY ONE WELL. The existing distribution system for potable water on Walker Creek Ranch Campus is approximately 50 years old, and is currently loosing about 3,500 gallons per day due to leaks, which equates to over 1.2 million gallons annually. With the water system being fed by two wells on the property, the additional draw on the water table from this water loss is a growing concern, in the midst of the third consecutive year of drought conditions. This project is to replace the main water lines and lateral water lines that provide potable water to the campus, including the installation of shut-off valves and flow meters, in an effort to minimize and eliminate water loss in the distribution system due to leaks.	45,000 1,937,020	1 21	100 10 100 18	San Joaquin Marin	III II	1998 2009

3245 4901095	4901095-002	Westminster Woods Camp	Westminster Woods Cam Additional Water Storage	p Our current distribution center features two 10,000 gallon redwood tanks that are nearing failure due to leaks and overall aging of the tanks. This project would consist of constructing either one large, 60,000 gallon storage tank or two smaller 30,000 tanks to replace the current distribution center tanks. We have researched types of tanks that are naving as well as accounted for the health services requirements of safety in distributing water and the best mode of construction. With all these factors, we have settled on a factory coated bolted carbon steel water tank both for quality assurance and the ability to deliver the materials to the site of the distribution center. In order to build the new tank(s), we would be required to shut down our entire system for the time required to install the new tanks. To do this in the fastest, most cost effective and thorough way, we would hire out professional help for construction and installation. The company would need to deliver the tanks in pieces and company that has policies for construction meeting the most current standards and regulation. With this new system in place, an updated pump system would also be required to full the tanks properly and efficiently. The benefits of this system include a better more sustainable material in construction of the tank. This would then allow us to offer a more stable water supply and better facilities to	Μ	0	Ρ	Westminster Woods Camp and Conference Center 501(C)(3) non-profit organization that strives to use our own resources when we have them available. We work hard to maintain the systems that are in place, so our guests receive the most hospitable and welcoming environment upon their arrival. One advantage that we have through our location is to be part of a very well functioning watershed that allows us to filter and use water directly from our property. However, over the past years we have often experienced a shortage of water supplies due to an aging storage tank which leaks and has caused a significant loss in usable water. Additionally, the amount of storage we have often is not enough during our high use seasons, particularly in drought years when there is little rainfall. When such a shortage occurs, it disables our ability to be fully accommodating to large numbers of guests present on site. As water supplies reach low levels due to both problems at hand, we humbly ask our guests to cut back on showers, conserve water where they can, use paper plates and cups instead of our dining sets, and when that does not help, we have to buy water. The root of the problem, however, is not a shortage of spuest; rather it is a lack of well functioning storage that hinders our ability to meet the needs of a full camp. During the peak of the summer and other dry seasons, we gather five	100,000	16	120 18	Sonoma	Ι	2008
3246 2210908	2210908-001	COULTERVILLE - GREELEY HILL SCHOOL	New well to augment single well	The proposed project consists of the construction of a new well.	м	0	Ρ	The existing water system has only one hardrock well. An additional well is needed to supplement the existing well.	200,000	1	122 11	Mariposa	Ш	2008
3247 2700703	2700703-001	CALVARY CHURCH INC WS		Install seven tanks and 3000 feet of pipe.	м	0	Р	Need additional storage and to replace water mains.	60,000	5	150 05	Monterey	II	1998
3248 3301385	3301385-001	JOJOBA HILLS SKP RESORT, INC.	Water Storage Tank Replacement	This is a large project for our cooperative RV park. We fare going to address the problem of two cracked and corroded water storage tanks sitting on damaged foundations by replacing the foundations and the two upright water storage tanks with one larger, horizontal tank set on a new foundation. We will also install new distribution piping and improve the maintenance access. The project will include the following six stages: I. Planning. A geotechnical report to identify soil and earthquake considerations. II. Development. Final plans and specifications to be completed in August 2010.III. Sources. Obtaining bids and awarding contracts for engineering, geotechnical services, and installation and plumbing services will be completed by September 1, 2010. IV. Preparation: o Delivery of engineering submittals (September 2010);o Raterial delivery and crew mobilization (by Christmas, December 2010).V. Erection and installation (December 2010); O (a) One 66,000-gallon, bolted-carbon steel, cylindrical tank OSHA-approved ladders and maintenance access, (b) Foundations and access area, (c) About 200 feet of 4-inch distribution system piping.VI. Hydrotesting, crew demobilization, and project closeout (January 2011).o Assessment of compliance with all requirements, including drinking water standards. o Remedy of any norbhems ac Crew	Μ	0	Ρ	Jojoba Hills is a cooperative, over-55, 501(c)7 RV resort. Jojoba Hills has three welded steel water tanks. They are used to store the drinking water that is pumped from our 5 wells. The capacity of each tank is 15,000 gallon, with a total capacity of 45,000 gallons. The three water storage tanks were installed in 1990. In May of 2007, an inspector-diver from Dive/Corr observed corrosive cracks in the bottoms of Tanks #1 and #2. The divers' inspection report indicated that the cracks invaded the tank bottom to within 50% of the total thickness of the bottom to within 50% of the total thickness of the bottom of the tanks. Rust tubercules were densely packed, and the galvanized material was deteriorated. The divers' report concluded, "It is this Inspector's opinion that since the original steel thickness of these tanks is so thin and the costs of recoating, plus the cost of safety and code upgrades is relatively high, consider replacing these tanks in lieu of repair." He also commented that the damage to our tanks was among the worst he had seen. Furthermore, because of the age of the tanks and the extent of internal corrosion, they estimated that the tanks would last less than 10 years. In the last three years, deterioration has increased. Now, cracks also go down through the outer, visible eight-inch thick portion of the foundation. The cracks emanate radially outward from the corners of two of the four large anchor fittings. The pining connecting to the ank's distribution system was	140,000	280	154 20	Riverside	v	2011
3249 3702364 3250 2702030	3702364-001 2702030-001	CLOVER FLAT ELEMENTARY SCHOOL CYPRESS COMMUNITY CHURCH WS	new well	drill new well I Remove old tank, replace with a new one, and add an I additional tank along with necessary water lines.	M	0 0	P P	"Systems well is not properly located" One 15,000 gallon tank needs to be replaced. Another one is desired for additional storage.	75,000 15,000	1 4	160 14 200 05	San Diego Monterey	V II	2006 1998

## 3251 1900767 1900767-001 GOLDEN VALLEY MUNICIPAL WATER DISTRIC Domestic Well Replacement and Supply

## Line to Storage Tank

The project involves the replacement of a deteriorating M domestic well with a new domestic well, destruction of the existing deteriorating well, the construction of a new well masonry block pumphouse to replace the existing very small wooden pumphouse structure that is deteriorating, the replacement of deteriorating almost 30 year old electrical controls and equipment for the well and pumphouse, the replacement of deteriorating well piping and equipment with new PVC or DIP piping, , and the replacement of almost 30 year old 4 inch deteriorated steel water supply line from the well site to the water storage tank with 4 inch PVC or DIP pipe. The well and pumphouse site will also be fenced around the perimeter with 6 foot high chain link fence to provide security for the well and pumphouse facilities. Currently, the well and pumphouse are not fenced and vandalism has occured in the past. The replacement features as noted above are necessary to provide a long term and relaible source of potable water for the Gorman community.

The Golden Valley Municipal Water District has a critical need for a replacement domestic well, pumphouse, and supply water line to the District's water storage tank that serves the community with potable water. The District has only the single existing well that provides the only source of water for the community. Currently, the well is in a deteriorating condition. The well was drilled in 1981 and is almost 30 years old. The steel well casing is thin walled material at 0.188 and has recently developed hole(s) in the casing wall that caused gravel rock material to be sucked into the submersible pump bowl causing major damage to the pump and requiring an emergency replacement of the submersible pump and motor that had previously been replaced about a year ago. The District plans as a temporary measure this fall when water use in the community is much lower to pull the submersible pump and motor and drop pipe and perform a down hole video to try to locate the hole(s) in the casing wall and perform a temporary patch of the hole(s) in the deteriorating casing wall until the well can be replaced. If the deteriorating well fails, the entire community would I be left without any source of potable water and serious health and safety issues would occur with major impacts to the community population and businesses.

762,000

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200 16

Los Angeles

IV

2011

3252 3100077	3100077-001	DRY CREEK ELEMENTARY SCHOOL.		Scope and analyze recommendations. Recase or redrill	м	0	Р	Needs second well to ensure reliability.	25,000	1	200 02	Placer	I.	1998
				a well.										
3253 1000111	1000111-001	PINE RIDGE SCHOOL	New well to augment single well	Drill a new well or interconnection if possible.	М	0	Р	Single well, if it fails, the system is out of water	200,000	1	200 23	Fresno	111	2008
3254 1000193	1000193-001	NAVELENCIA SCHOOL	New well to augment	New well or interconnection to another system, if	М	0	Р	School is supplied water from only one well. If the well	200,000	6	203 23	Fresno	Ш	2008
2255 1000102	1000102 001	MONROE SCHOOL	Single well	possible New well or interconnection to another system if		0	D	Talls, a new well would be needed.	200.000	1	210 22	Fracho		2000
5255 1000192	1000192-001	MONROE SCHOOL	single well	possible.	IVI	0	r	fails, a new well would be needed.	200,000	1	219 25	Flesho		2008
3256 1000181	1000181-001	ALVINA SCHOOL	New well to augment	New well or interconnection with another system, if	М	0	Р	School is supplied water from only one well. If the well	200,000	1	240 23	Fresno	III	2008
			single well	possible.				fails, a new well would be needed.						
3257 2000846	2000846-002	SIERRA VIEW SCHOOL	Sierra View New Well Project	The proposed new system would include the following; 1. The addition of a new well and submersible pump	м	0	Р	The Sierra View Elementary School water system has the following deficiencies;	257,000	5	250 11	Madera	Ш	2007
				2. The addition of a 20,000 gallon domestic water				1. The system has one well only, so there is no backup						
				storage tank				<ol> <li>The system has no potable water storage tank</li> <li>The system has no hudertable</li> </ol>						
				3. The addition of a 3,750 gallon hydrotank				3. The system has no hydrotank						
				4. The addition of a irrigation booster pump with RP				<ol> <li>The system has no separation between domestic fire and invication water.</li> </ol>						
				5 An RR device to prevent backflow from the fire				5 The system has no booster nump for irrigation						
				storage tank to the domestic water system				6. The system has no emergency nower backup						
				6. An emergency power generator				or the system has to emergency porter buckup						
3258 1000204	1000204-001	AMERICAN UNION SCHOOL	New well to augment	New well or interconnection to another system, if	м	0	Р	School is supplied water from only one well. If the well	200,000	4	250 23	Fresno	III	2008
			single well	possible				fails, a new well would be needed.						
3259 1000196	1000196-001	RIVERVIEW SCHOOL	New well to augment	New well or interconnection with another system, if	м	0	Р	School is supplied water from only one well. If the well	200,000	1	257 23	Fresno	III	2008
			single well	possible.				fails, a new well would be needed.						
3260 1000198	1000198-001	TERRY SCHOOL	New well to augment	New well or interconnection to another system, if	М	0	Р	School is supplied water from only one well. If the well	200,000	4	260 23	Fresno	III	2008
			single well	possible.			_	fails, a new well would be needed.				_		
3261 1000189	1000189-001	LATON HIGH SCHOOL	New well to augment	New well or interconnection with another system, if	м	0	Р	School is supplied water from only one well. If the well	200,000	9	260 23	Fresno	III	2008
			single well	possible.			_	fails, a new well would be needed.				_		
3262 1000206	1000206-001	HOUGHTON-KEARNEY SCHOOL	New well to augment	New well or interconnection to a nearby system, if	м	0	Р	School is supplied water from only one well. If the well	200,000	4	310 23	Fresno	III	2008
			single well	possible.				fails, a new well would be needed.				-		
3263 1000190	1000190-001	LONE STAR SCHOOL	New well to augment	New well or interconnection to another system, if	M	0	P	School is supplied water from only one well. If the well	200,000	6	347 23	Fresno	III	2008
2264 2400254	2400254 001		single well	possible.		0	D	fails, a new well would be needed.	12 500	2	250.00	Contemporte		1000
3264 3400254	3400254-001	DILLARD ELEMENTARY SCHOOL		Replace and streamline plumbing. Replace backflow	IVI	U	P	Old and outdated plumbing. Outdated backflow	12,500	3	350 09	Sacramento	I	1998
				prevention device.				prevention device. Multiple unneeded cross-						
2265 1000104	1000104-001		New well to sugment	New well or interconnection with another system if	м	0	D	Connections School is supplied water from only one well. If the well	200.000	7	268 22	Fresho		2000
5205 1000104	1000104-001		single well	possible.		U	r	fails, a new well would be needed.	200,000	,	300 23	1103110		2008

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3266 1000208	1000208-001	ROOSEVELT ELEMENTARY SCHOOL	New well to augment single well	New well or interconnection to another system, if possible.	М	0	Ρ	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	5	370 23	Fresno	Ш	2008
3267 2000601	2000601-001	LA VINA SCHOOL	La Vina School-arsenic removal	Hire consultants and/or engineers to find best fit solution for arsenic either drilling a new well, treatment or consolidation	M	0	Ρ	Single source water system with arsenic level over the Federal Arsenic MCL of 10 ppb. Arsenic level is 10.7 ppb. Water system is monitoring quarterly to determine running annual average and compliance.	100,000	1	380 11	Madera	Ш	2008
3268 1000276	1000276-001	ORANGE CENTER SCHOOL	New well to augment	New well or interconnection to another system, if	М	0	Ρ	School is supplied water from only one well. If the well fails a new well would be needed	200,000	1	410 23	Fresno	ш	2008
3269 1000184	1000184-001	DUNLAP SCHOOL	New well to augment single well	New well or inconnection with larger system if possible.	. M	0	Ρ	School is supplied water from one well, if it goes out due to drought conditions a new well would be needed.	200,000	5	459 23	Fresno	Ш	2008
3270 1000194	1000194-001	PACIFIC UNION ELEMENTARY SCHOOL	New well to augment single well	New well or interconnection with another system, if possible	М	0	Ρ	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	1	490 23	Fresno	ш	2008
3271 1000187	1000187-001	INDIANOLA SCHOOL	New well to augment	New well or interconnection with another system, if possible.	М	0	Р	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	3	500 23	Fresno	Ш	2008
3272 1000285	1000285-002	WASHINGTON COLONY SCHOOL	New well to augment single well	New well or interconnection to another system, if possible	М	0	Ρ	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	1	550 23	Fresno	Ш	2008
3273 1000185	1000185-001	GREAT WESTERN SCHOOL	New well to augment supply	Drill a new well or if possible connect to a larger system	M	0	Ρ	School is supplied by one well that if it goes out due to drought conditions will be out of water.	200,000	5	567 23	Fresno	Ш	2008
3274 2000611	2000611-001	COARSEGOLD SCHOOL	New well for Coarsegold Elementary School	The project would include installation of a water storage tank and pump for fire suppression purposes at Coarsegold Elementary School and a new well at the school to supply drinking water for students and staff.	e M	0	Ρ	Coarsegold Elementary School is in need of additional water storage for fire suppression. There is a need for a storage tank and a pump. The school also needs a new well for drinking water for students and staff at the school. No drinking water standard, regulation, or DHS directive has been violated.	325,000	6	600 11	Madera	III	2007
3275 1000105	1000105-001	MADISON ELEMENTARY SCHOOL	New well to augment single well	New well or interconnection with another system, if possible.	м	0	Р	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	1	722 23	Fresno	Ш	2008
3276 2900532	2900532-001	PENN VALLEY SHOPPING CENTER WATER S	YSTEM	Hook into the NID treated water system. Abandon the present well.	М	0	Р	Single well source lacks reliability.	140,000	22	750 21	Nevada	I	1998
3277 1000201	1000201-001	SUN EMPIRE SCHOOL	New well to augment single well	New well or interconnection to another system, if possible.	М	0	Р	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	7	780 23	Fresno	Ш	2008
3278 3301494	3301494-001	PALM SPRINGS AERIAL TRAMWAY	Valley Station drinking water storage tank replacement	PSAT would like to remove the current Valley Station drinking water storage tank and replace it with 2 new 25' x 20' 73.5kg drinking water storage tanks. The purpose of having 2 storage tanks is to continue providing safe drinking water to customers if the other tank needs to be repaired. The type of storage tanks are Glass Fused to Steel Bolted Tanks with steel floors and knuckle roofs. These storage tanks provide interna and external corrosion and abrasion resistance and assures continuous service by minimizing tank maintenance requirements. The project includes building a foundation, erecting storage tanks, and servicing the tanks. The cost does not include PSAT's responsibility to drain and dispose of the water, remove the current storage tank, prepare the site for the foundation, unload storage tank materials and place them within close proximity, and fill the storage tanks for testing and servicing. These are PSAT's responsibility, however, if more funds are provided for the project, PSAT would like to outsource some of these items.	M f	0	Ρ	The Palm Springs Aerial Tramway (PSAT) is a Special District created by a special act by the state of California. PSAT provides aerial tramway transportation from the Valley Station (in Palm Springs) to the Mountain Station (in the San Jacinto mountains) where the public/customers can enter the Mount San Jacinto State Park for recreation. PSAT has approximately 400,000 riders each year and must provide safe drinking water to those riders as well as employees, vendors, concessionaires, etc. The Valley Station drinking water storage tank is in disrepair according to an inspection done by the Riverside County Department of Environmental Health. PSAT is required to repair the major leaks by 9/30/07. The storage tank imade out of redwood and is not expected to last more than 5 years. PSAT would like to replace the storage tank within 1 year in order to avoid having to pay for further repairs, which would not be cost beneficial. PSAT would also like to prevent any further loss of drinking water storage tank, is the dontain Station that are in disrepair, but those are expected to last more than 5 years. The Valley Station storage tank is the only source of drinking water for leaks by the cost beneficial. PSAT would also like to prevent any further loss of drinking water from leaks in the current storage tank. There are also drinking water storage tanks at the Mountain Station storage tanks (water is border to have the only source of drinking water for the water storage tank is the only source of drinking water for the storage tank is the only source of drinking water for the storage tank is the only source of drinking water for the fourther the storage tank is the only source of drinking water for the fourther the storage tank is the only source of drinking water for the fourther the storage tank is the only source of drinking water for the fourther the storage tank is the only source of drinking water for the fourther the storage tank is the only source of drinking water for the fourther there on the storage tank is	267,038	2	1,000 20	Riverside	v	2007
3279 3400180	3400180-001	BRANCH CENTER		Construct 500,000 g water storage tank with a 1,500 gpm booster station facility. Involves design and construction.	М	0	Ρ	Due to contamination, wells were shut down. Temporarily, the water is being provided through inter- tie with Citizens. Pressure loss is very large and no emergency water storage is available.	500,000	36	1,500 09	Sacramento	I	2006

3280 3301238	3301238-001	EISENHOWER MEDICAL CENTER		Planning on erecting above ground steel tank - small pumping station.	м	0	Ρ	10,000 gal. Cistern - 20 years old - below ground level. Walls leaking - needs new above ground steel tank.	50,000	1	2,000 20	Riverside	v	1998
3281 1000367	1000367-001	SELMA HIGH SCHOOL	New well to augment single well	New well or interconnection to another system, if possible.	м	0	Ρ	School is supplied water from only one well. If the well fails, a new well would be needed.	200,000	1	2,225 23	Fresno	ш	2008
3282 3301155	3301155-001	COLLEGE OF THE DESERT		Install new.	М	0	Р	System is in need of new piping, lines, and backflow devices	900,000	1	4,000 20	Riverside	V	1998
3283 3200139	3200139-001	Almanor Heights MWC	Water tank replacement for Almanor Heights Mutual Water Company	Replace our 25,000 gallon steel bolted tank that is 40 years old and has rust problems on the interior. We would like to replace this with a 50,000 gallon steel bolted epoxy lined tank which would provide adequate and improved water supply and additional fire protection for our community.	M	0	Ν	The existing 40 year old 25,000 gallon steel bolted tank has deteriated due to rust problems. We intalled a PVC liner 16 years ago but now rust on the spider rods and tank top, along with pin holes are beyond repair. Documentation, both written and photographed, will be provided of these conditions.	163,000	37	25 02	Plumas	I	2007
				The existing tank has deteriated to a point where repairs are not cost effective. Due to our lot size the olo tank will have to be removed and the new tank will be constructed on the same site.	d									
				We have a estimate that includes everything from design layout, new 50,000 gallon tank and decommission of existing tank.										
				Please contact us with any questions or comments.										
3284 3601016	3601016-001	Ponderosa Guest Ranch		Construct new storage tank, rehab well, replace mainline	м	0	Ν	Inadequate source and storage capacity, old mainline	2,500,000	1	25 13	San Bernardino	v	1998
3285 2910300	2910300-003	Malakoff Diggins SHP	Replacement of Derbec Well Shed at Malakoff Diggins SHP	For this project, we would install a building on the same location of the existing building. The new building would measure approximately 40' X 40' and the color to blend into the environment. The roof will have exhaust vents located on the top to remove summer heat and a heater installed inside the building with appropriate BTUs to heat the building and with appropriate exhaust venting. It would have 1 large roll up door for equipment access and two normal doors. One on eithe end of the building. We would then install 2 new 7500 Watt propane generators in order too keep with the State's green initiative and a 500 gallon propane tank with piping. We would then upgrade the main control panel and float switches to bring it into State and Local code. We would then have a pump company come in and raise the well head to the required height. The existing diesel tank will be removed and the area cleaned up. We would then install needed S.C.A.D.A. equipment and antennas on the building to transmit data to the appropriate areas.	e M ot t t	0	Ν	Currently the Derbec Well located at Malakoff Diggins State Historic Park is in the need or replacement. The existing building does not accommodate the needed equipment. The well is located approximately 5 miles from the nearest electrical lines so it has 2 diesel generators inside that run the well and other needed equipment. The well head is also lower than legally required. We would like to increase the size of the well building to accommodate all of the equipment. The new building would be insulated, and have a heater inside to keep the facility warm during the winter months. Several times a year, freezes hit the area and if we are not prepared for these conditions, pipes and valves within the building freeze rendering the facility inoperable. We would then install 2 new propane generators and get rid of the diesel ones. This would cut back on emissions discharged into the atmosphere. We would then work on the control console for the generators which tell them when to turn on and off and bring it up to code. We would then repair the well head and bring it up to code by raising it to the required height. Another addition we would do to the building would be to install exhaust vents on the building. During the summer month, temperatures in the area exceed 110 degrees and their is not adequate	275,000	1	25 21	Nevada	I	2009

a S.C.A.D.A. system in the building. This would monitor

3286 3103666	3103666-001	SILVER CREEK SUMMER HOME TRACT	Silvercreek Arsenic Treatment	To bring arsenic into compliance, under the MCL of 10ug/L, would require installation of new treatment technology and possibly utilizing a new water source or blending water sources. All scenarios require replacement and upgrading of the storage and distribution systems. When the current well was installed in 1990 the water quality was good at 100 feet, but the quantity was insufficient. The well was then drilled to about 400 feet The quantity is sufficient, but the quality, very poor. Previous temporary solutions have included two filtration systems, not designed to the capacity of the mineral concentrations, and an aeration system. In 2004, Silvercreek hooked up to an existing surface water spring that is utilized by nearby residents, prior to regulation by Placer County DHS in 2006 for violation to bacteriological guidance. It is possible that benefits to water quality may be obtained by capping the well at 400' interval and re- screening to the 100' water table. A larger storage tank may be sufficient to operate the system under the one well scenario. However, should pumping rates preclude necessary water capacity, as econd well could be drilled in a nearbt alits area that is likely to also hit	м	0	Ν	The drinking water for Silvercreek poses a serious health risk to consumers. The untreated community well services 23 dwellings. Water samples, analyzed at the entry point in the system, are high in arsenic, above the EPA's MCL. This is exacerbated by extremely high iron concentrations (35mg/L). Bacteriological and other mineral concentrations are also in excess of MCL and MCLG. Accretion of arsenic occurs as it binds with iron particulates in the source water and accumulates in the distribution and storage systems. This is evident by the discolored scaly deposits within the pipe and storage tank. Very high mineral concentrations are visually evident in the reddish brown tap water. The flashy nature of the system is due to frequent breaks in the water main, causing the tank to empty, and the particulates become resuspended. In an effort to reduce mineral concentrations, Silvercreek HOA has tried various options including utilizing a spring source. Directives by Placer County Health Services, in 2006, required disconnection from the spring above the community. Violation of bacteriological standards prompted a potable water notification by Placer County Health Services. Most likely this was due to the deficiencies in the condition of	211,000	23	25 02	Placer	1	2007
3287 1900893	1900893-001	CAMP BLOOMFIELD	Junior Blind Potable-Water Storage and Conditioning Project	As noted above, the well that supplies water to our Camp's storage towers has high levels of iron — exceeding the maximum allowable level by 450 parts per million. Camp Bloomfield has two water towers (10,000 gallons and 126,000 gallons). The 10,000-gallon water tower continues to have issues relating to rust (despite being relined), and must also be removed from its location on a hillside in order to avoid a landslide. However, removal of the small water tower will leave Camp Bloomfield 10,000 gallons short of the required amount of water we must maintain on the property at all times in order to provide sufficient water for our service population and comply with fire-safety regulations. To resolve these problems, we propose the following: (1) Remove the small, 10,000-gallon water tower from the hillside entirely; (2) Replace the large, 126,000-gallon water tower with a larger, 136,000- gallon water tower; and (3) Condition the water from the well — before the water enters the storage tank — in order to reduce the level of iron, helping to bring our secondary-standard contaminant levels into compliance with applicable regulations and helping to eliminate future issues with rust in the water towers. In order to install the 136,000-gallon tank, we will also need to install concrete tank foundation — to ensure adequate support for the new storage tank — and a pressure-reducing station, to maintain proper pressure	м	0	N	Junior Blind of America is a nonprofit organization dedicated to helping blind, visually impaired and multi- disabled children, youth and adults achieve independence. Our Camp Bloomfield provides children and youth who are blind, visually impaired or multi- disabled with a natural and safe environment to build independence, develop self-esteem and fully experience the joys of childhood. Nestled in the Santa Monica Mountains in Malibu, this 40-acre campground offers various week-long camp sessions for children of all ages and disabilities. The largest of its kind in the Western United States, Camp Bloomfield serves hundreds of campers free of charge each summer and is accredited by the American Camping Association. We serve a disadvantaged community at Camp Bloomfield: Three out of every five children we serve is from a low- income household. Because of this, our camp registration fees are set at only \$25 per camper — which includes water usage charges. However, even this fee can be an economic hardship for the low- income families we serve, and the fee is thus often waived. The camp's maximum capacity is 200 people. All water needs — including drinking water — for the camp are met through two water towers: A 10,000- galion steel water-storage tank. Camp Bloomfield's water- system problem is three-fold: First, our water well	500,000	5	25 16	Los Angeles	ΙV	2011

existing source

3289 4500017	4500017-001	MOOSE CAMP	Moose Camp Rehab	The current system consists of two 20 gpm wells that are about 20 years old, a 10,000 gallon above ground storage tank, 10,000 feet of very old (40 to 60 years old) 2 and 3 inch failing steel pipe serving 52 houses with the potential of about 70 total users. Water pressure ranges from below 20 to over 60 psi and there is inadequate fire flow capacity. The low water pressure may be causing infliration. There are no fire hydrants and only a few anti-back flow devices at the user connections. There are only a few blow off valves at the ends of lines and the old pipe is not buried deep enough for frost protectiuon and not properly bedded. A master water plan has been prepared by a civil engineer and proposes replacing all the steel water	M ) 2	0	Ν	We have had inflitration caused by low water pressure, backflow from users, leaking old pipe lines, stagnation from ends of lines, and possibly repairs to the system. We seldom but on occaission have not passed our water tests due to the detection of coliform. We have no automatic clorination facility so we do it by hand when we fail a water test. We also have inadequate fire flow capacity and no fire hydrants. We are basicly in a "reactive" mode in lieu of a "proactive" mode of operation.	170,000	50	50 02	Shasta	I	2007
2200 4001222	4001-001			Ines with 2 and 3 inch puc pipe buried below frost line and properly bedded in an envelope of gravel. Looped water lines will be installed with isolation valves and fire hydrants at 600 foot spacing. All ends of water lines will have a new blow off valve. All new service connections are proposed with anti-flow devices. Also a new 40 gpm well is proposed in the center of the system to provide fire flow capacity with a hydro-numatic tank and standby generator, or to retrofit one or both of the existing wells to 40 gpm. There is a third well not being used which we may either/or retrofit.	2				105 000		50.10	Gaussia		1000
3290 4901223 3291 3700184	4901223-001 3700184-001	Sonoma County Parks-Putham Park	Closure of Well #3 at Lemurian Fellowship-The Gateway	Replace well, distribution lines, water pumps, chlorinator and tank. Destruction of Well #3 will be accomplished by Tri- County Drilling, a C-57 licensed well driller. A backhoe will be used to remove the concrete cap of the well. An impermeable 2-foot benointe seal will then be placed in the bottom of the well, followed by approximately 2 to 3 feet of intermediate gravel backfill, and another 2- foot thick bentonite seal above the gravel. The existing concrete walls of the well will next be excavated and removed to a depth of 5 feet below ground surface, a 1- foot thick concrete cap will be placed over the top of the well, and 4 to 5 feet of clean soil will be placed in the excavation, sufficient to fill the hole to the ground surface. All work will be completed in accordance with current Department of Water Resources Bulletin 74-90 requirements and County of San Diego Dept. of Environmental Health guidelines. All concrete debris will be removed from the project site and hauled to a landfill and there will be now set dishcarge to the ground during well destruction.Because the well is situated near an intermittent stream, the ground around the well tends to become soft while there is water in the stream making it inadvisable to use heavy equipment in the vicinity during that time. Therefore, destruction of the well will be accomplished during the dry season when the stream has stopped flowing.	м м	0	N	Need well, distribution lines, water pumps, chlorinator and tank replacement. Well #3 is a 5-foot diameter, 12-foot deep hand-dug well that was present on the property when it was purchased in 1941 by the Lemurian Fellowship (current property owner). The problem is that the well is no longer useful, has not been used in over 30 years so is in deteriorating condition, and is not part of the Lemurian Fellowship-The Gateway water system. According to Section 20 of the California Department of Water Resources Water Well Standards (Bulletin 74-90), in its current state, the well must be destroyed to assure that the groundwater supply is protected and preserved for further use, and to eliminate the potential physical hazard that it poses. Because the Lemurian Fellowship is a church (non-profit religious corporation), funds to destroy this well are very limited and this is the reason we are applying for a grant. The bottom 7 feet of the well is unlined, and the top 5 feet of the well are lined with unreinforced concrete that extends two feet above ground surface. Cracks are visible in the above ground portion of the wall. The well is capped with a flat 3-inch thick, 5-foot diameter unreinforced concrete cap that has a 20 by 20 inch opening covered with a padlocked steel lid. The lid is not water tight. The concrete cap is in deteriorating condition and structurally unsound. The poor overall structural condition of the well is the reason it poses a physical and safety hazard.An open overflow pipe passes through the well wall and is	125,000	1 7	50 18	Sonoma San Diego	u v	1998 2011
3292 0500021	0500021-001	SKY HIGH RANCH HOA		REPLACE/REMEDIATE DISTRIB8UTION SYSTEM. OTHER = STUDY, DESIGN AND CONSTRUCTION	М	0	Ν	DISTRIBUTION SYSTEM OF SMALL PIPE SIZES, INADEQUATELY BURIED.	625,000	48	94 10	Calaveras	III	2006
3293 4000642	4000642-001	CHRISTMAS COVE COMPANY		Drilling a new well and providing a new storage tank with automatic chlorination, filtration and water softener.	М	0	Ν	Low well production and source capacity which does not meet Water Works standards.	25,000	40	100 06	San Luis Obispo	IV	1998
3294 1000166	1000166-001	CAMP EL-O-WIN		BURY ALL WATER LINES BELOW THE FREEZE LINE.	М	0	Ν	ALL WATER LINES ARE INSTALL ABOVE GROUND AND ARE SUBJECT TO FREEZING, BREAKAGE AND CONTAMINATION.	20,000	10	100 23	Fresno	Ш	1998

3295 0500028	0500028-001	SHERMAN ACRES MUTUAL WATER ASN	Sherman Acres Mutual Water Assoc Pipeline Replacement & Well	<ol> <li>Project will consist of two phases:</li> <li>Replacement of water mains - all mains (approx 8500') will be replaced with modern pipe and the system will be engineered and designed to meet all modern codes and standards.</li> <li>Development of a back-up well - a second well will b established in order to provide an alternate supply of water for the community. Depending upon the loation of the well, a pump station may be required in order te move the water to the existing water storage tank.</li> </ol>	M De n o	0	Ν	Water system is composed of aging PVC pipe installed in the early 70's with volunteer labor. The system was poorly designed and is not "looped" per modern construction standards. There are multiple dead end lines without adequate flush outs/blow-offs. These non- looped "dead-ends" are a source of contaminated water. Due to the age of the system, the main water lines are subject to failure and the entire system needs replacement before a catastrophic system failure occurs. Such a failure would leave the residents with no water. The system is also in need of a back-up well, as it relies on a single source of groundwater. There are no alternate water sources as the system is located in a remote area of the Sierra Nevada at approximately 7000' in elevation.	2,000,000	30	120 10	Calaveras	Ш	2007
3296 3600585	3600585-001	Thousand Pines Amer. Ctr.	Replace water mains	Replace water mains to comply with waterworks standards	М	0	Ν	Multiple leaks in distribution system	60,000	1	120 13	San Bernardino	v	2003
3297 1502249	1502249-001	CAMP ST NICHOLAS WATER SYSTEM		MORE CAPACITY & FIRE PREVENTION FOR CAMP	м	0	Ν	LARGER STORAGE TANK, A NON-ELECTRIC PUMP ALTENATIVE BACK-UP SYSTEM	35,000	1	125 19	Kern	ш	1998
3298 3600537	3600537-001	Camp Ta Ta Pochon		Construct new storage facility	м	0	N	Rock and mortar tank is not rodent proof	50,000	1	170 13	San Bernardino	V	1998
3299 3210300	3210300-002	Plumas-Eureka S.P.	Plumas Eureka State Park Water Main Re-route	With this project, we would take the existing 6 " main line water pipe where it comes down from the main water tank and install a T and a fire hydrant next to the historic buildings and then continue out to Jamison Mine Road. We would then turn and go up Jamison Mine Road. We would then turn and go up Jamison Mine Road. Use would then turn and go up Jamison Mine Road. Use would then turn and go up Jamison Mine Road. Use would then turn and go up Jamison Mine Road. In the parking area, we would install 2 laterals with fire hydrants on each to protect the historic structures in this area. We would then continue to run the line through the parking area and up the fire road towards the campground. The line would need to be attached to the bridge crossing Little Jamison Creek. This would remove the pipe from the creek bed. Once across the bridge, we would continue down the fire road to the campground by campsite # 53. At this point, we would run the line down the road towards the intersection by campsite #40. We would then connect into the main 4" water main that current exists in within the park. Along the entire route, we would install isolation valves and air release valves as needed. All pipe, valves, fire hydrants, and air release valves would comply with American Water Works Association, State and local codes. We would theng of the area of Camp Lisa where the water line currently crosses Little Jamison Creek and cap the line with an end of line valve. Inside the campground where the ol	M e 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0	Ν	Currently, the main waterline supplying Plumas Eureka State Park is an elevated pipe above Little Jamison Creek. This line back 10 years ago was approximately 5 feet below the creek-bed. Over the years, downward cutting of the stream exposed the pipe and now across 1/3 of the creek it is approximately 3 feet above the creek-bed. Last year we had a park visitor attempt to walk over the pipeline to avoid getting wet from the creek and broke it. This drained the entire system before park staff was notified. When we got the line repaired, we were required to disinfect the entire system and then flush it completely. This took approximately 1 week to accomplish because this system receives its water from an artisan spring which produces water at approximately 10 gallons per minute. Once the system was disinfected, we were required to draw samples from various areas of the system and have them tested to assure the water was safe for park visitors. Since the break, we have had several times where the system has comeback with positive samples requiring us to place a boil order on the system and then re-disinfecting the system and taking new samples. Their has been several instances also where we receive heavy thunder showers or during the spring run off period where we had the line fail due to debris coming down stream and hitting it. We currently have a	250,000	1	194 02	Plumas		2009
3300 1900888	1900888-001	CAMP SHALOM / JCA	Water tank restoration and water treatment improvement	Replacing the water tanks, adding new sand filters and replacing all valves and piping that are in bad shape.	d M	0	Ν	Our exciting storage and distribution system is old and outdated, repairing and improving the system will assure a safe and healthy system that serves the public.	200,000	1	200 16	Los Angeles	IV	2011

3301 1000573	1000573-001	MOUNTAIN VALLEY COMMUNITY CHURCH	Mountain Valley Community Church Water System - PreApp	California Department of Public Health notified all water M systems that they strongly recommend that a totalizing flow meter be installed as soon as possible to be monitored on a regular basis. The church operates totally on donations and would appreciate assistance with funding to install the recommended flow meter. The Mountain Valley Community Church Water System is located in the mountains east of Fresno and does experience freezing temperatures on a regular basis in the winter months. The area even experiences snow several times each winter. A pump house over the well head, pressure tank and piping would keep the system from freezing and any interruption of water service.	0	Ν	The funds requested are to cover the costs of installing a flow meter to monitor water usage and pay for the pump house that protects water source 01 well head, pressure tank and piping from freezing during the winter months.Squaw Valley, California is an economically disadvantaged area east of Fresno, California in the foothills with a population of 3,268 and a median household income of \$38,768 per 2000 census.	10,000	2	240 23	Fresno		2008
3302 1000170	1000170-002	CAMP FRESNO WATER SYSTEM	Camp Fresno Water System Improvements	The project will include engineering and development of M plans and specifications, and the construction and installation of a new water distribution system to serve Camp Fresno, including fire hydrants. The project will remove the current deteriorated two (2) inch galvanized water mains and will be replaced with four (4) inch diameter PVC water mains, in accordance with section 64573 of the Health and Safety Code. The project would also replace the 60 year old redwood storage tank. The current tank has a ten (10) to fifteen (15) thousand gallon capacity. The new water storage tank would be constructed in accordance with American Water Works Association (AWWA) standards. The current source capacity limits the adequacy of the supply system and may impact fire suppression and emergency response to Camp Fresno which would result in the possible loss of property and life.	0	Ν	Camp Fresno is a family oriented facility located along Dinkey Creek in the Sierra Nevada Mountains, in Fresno County, California. Since 1926, the City of Fresno has held a lease agreement with the U. S. Forestry Department for Camp Fresno, a 34 acre site, and an additional four acres were added with Camp Fresno Jr. in 1956, for a 37.24 acre total. The camp provides inner city, low income youth with opportunities to experience nature and outdoor activities, from hiking to campfire programs. Camp Fresno facilities include 55 rental cabins equipped with water and electricity. The water distribution system at Camp Fresno is over 60 years old and needs to be replaced to improve capacity, reliability and safety. The water line system has deteriorated beyond repair and is in constant need of maintenance and repair. In addition, the water storage tank does not meet current standards and does not provide adequate standby capacity to meet potential emergency requirements. A lack of action in replacing the water system will compromise the safety of the facilities during fire emergencies, continue to increase maintenance and repair costs, and may pose a health concern associated with the potential introduction of	200,000	1	250 23	Fresno	111	2007

stagnant water during repair and maintenance work. The current water line pressure is only nine gallons per

bacterial contaminates that may be introduced with

3303 3600534	3600534-004	De Benneville Pines Inc	Replacement of existing 2	" The planned project will replace existing 2700 feet o	f2″M	0	N	Camp de Benneville Pines is a faith-based summer camp	250,000	2	250 13	San Bernardino	V	2009
			water lines with 8"	galvanized decaying galvanized water mains that rar	nge			and conference center located in the mountains of the						
				in age from 45 to 65 years with current AWWA and				San Bernardino National Forest. This institution was						
				NFTA code lines. The new lines and mains will vary				acquired in 1961 from the Boy Scouts, who operated a						
				from 8" to 2" in diameter depending on the location	in			facility on this site from the mid to late 1940's. Our						
				the system. The project will start at the current				existing water delivery system is a combination of 2"						
				horizontal well and utilize a 650' in length 2" HDPE				galvanized shallow buried pipes installed by both the						
				(High Density Polyethylene) to supply the existing				Boy Scouts in the late 1940's and by Camp de Benneville						
				45,000 gallon storage tank. This line must remain				Pines in the early 1960's. Due to the age of the existing						
				surface run as portions of this line are located within	ı			lines (45-65 years in age) we are experiencing a high						
				the San Gorgonio Wilderness located in the San				level of both water main breaks and leakage. In addition						
				Bernardino National Forest. The well is artesian The	2			to the age of the lines, Camp de Benneville Pines is						
				current steel storage tank was relined with fiberglas	s			located on the flank of Mount Anderson in a region						
				approximately 7 years ago and has an indefinite life				known as the Barton Flats. The Barton Flats were						
				expectancy at this time. However, the tank must be				created approximately 20,000 years ago from an						
				modified to allow for the installation of an 8" outlet.				earthquake created landslide. The resulting soils are						
				Additional connections are designed into the project	to			still settling and pipe breakage resulting from both age						
				allow for the installation and connection of an				and earthquake induced soil settlement are causing						
				additional tank if such becomes necessary. The work	c			multiple links and an extremely degraded system.Camp						
				installing the new outlet is scheduled for April of				de Benneville Pines in no longer in accordance with						
				2009.In May of 2009 a temporary 2" water main will	be			NFTA and AWWA codes and standards. The facility is						
				installed so that once work on the 8" line commence	es in			located on federally leased property in the San						
				August 2009 the existing 700 foot section from the				Bernardino National Forest and is in an extreme fire risk						
				storage tank to the campus can be replaced without				zone. Current standards for fire safety systems						
				fear of destroying the existing line and interrupting				imposed by the San Bernardino County Fire Marshall						
				service.Camp de Benneville Pines is located in the				require 8" earthquake resistant lines and 6" supply line						
				breeding zones for Southern Spotted Owls. As such,				hydrants.Camp de Benneville Pines drinking and fire						
3304 1000170	1000170-001	CAMP FRESNO WATER SYSTEM		REPLACE THE OLD EXISTING STEEL PIPE AND VALVIN	G. M	0	Ν	THE WATER SYSTEM IS ABOUT 70 YEARS OLD AND THE ENTIRE DISTRIBUTION SYSTEM NEEDS TO BE REPLACED.	110,000	1	250 23	Fresno	Ш	1998
3305 4901222	4901222-001	Sonoma County Parks-Vet. Memorial Beac	:h	Replace well, distribution lines, water pumps,	м	0	Ν	Need well, distribution lines, water pumps, chlorinator	110,000	1	250 18	Sonoma	Ш	1998
				chlorinator renovation.				renovation.						
3306 3600534	3600534-006	De Benneville Pines Inc	Water System Source,	The proposed project has three major components,	M	0	N	Camp de Benneville Pines is a 501c3, not for profit camp	600,000	2	250 13	San Bernardino	V	2011
			Storage and Delivery	listed below in priority order:1. Ennance our water				located in the mountains of the San Bernardino National						
			Improvement and Repair	source by drilling a new vertical well and installing a				Forest. This institution was acquired in 1961 from the						
				pump and power source, or making other significant				Boy Scouts, who operated a facility on this site from the						
				improvements.2. Add a 100,000 gallon tank to provi	ae			mid 1940 s. The camp is open to all and provides						
				about three times the water storage currently				programming for youths, families and adults of all ages						
				available3. Replace the existing water mains through	hout			regardless of race, religion, gender, sexual orientation						
				flew. This will event complete system to create a circular				or any other factors. The facility is located on rederally						
				the same time aliminate any "deed ands" in the same	L			eased property in the san Bernardino National Forest						
				the same time, eliminate any dead ends in the sys	tem			on the northern slope of Mount Anderson in a region						
				to create a nearmer water supply for human				known as Barton Flats. Camp de Benneville Pines						
				consumption. These objectives are discussed in the				urinking and fire suppression lines are combined and						
				priority will be to develop a more productive water	L			allon storage tank. The system is gravity fod and flow						
				course. This may be done by drilling a new well and				from the well head is normally slightly higher than 2						
				installing a pump and power generating equipment	26			actions nor minute. In sovere drought years, the flow						
				well as a larger diameter HDRE feed line from the	43			bas gono as low as 1.5 gallons par minute. Due to the						
				well as a larger diameter HDFE feed line from the	700			age of the existing 2" gelyapized lines (50, 70 years in						
				fact. We will also explore the pessibility of improvin	700			age of the existing 2 galvanized lines (50-70 years in						
				our existing gravity fed system to see if we can avoir	15 1			burial and surface soil instability, we are experiencing a						
				the ongoing energy cost of pumping water from a	u			bigh level of both water main breaks and leakage The						
				vertical well. We estimate the cost of this phase to h	ne -			Camp is operated year-round although there is						
				approximately \$100,000 Addition of a 100,000 Wate	ie ir			consonal variation in use. During neak use the camp						
				Storage TankOur second highest priority to be				nonulation can reach 250 or more persons. Average						
				addressed in this phase is additional water storage				water use ner nerson ner dav is generally assumed to						
				We plan to nurchase a 100 000 gallon holted steel				he about 90 gallons or 18 000 gallons per day for the						
				storage tank to be installed on an existing level area				entire camp during our peak season (which also						
2207 0000500	0000505 001			To explore the entropy dist if		c.		Containe camp during our peak season (which also	COF 000	4.45	200.00			4000
3307 0900506	0900506-001	SPRING CREEK TRACT ASSOCIATION		To replace the aging distribution system using larger pipe to increase flows for fire protection.	M	0	N	SCTA's water distribution system which was installed in 1954 is experiencing an increasing number of leaks. Our leak repair program will soon not be cost effective	685,000	140	280 09	El Dorado	ſ	1998
								because of the large number of leaks. The repairs						
								cannot always be made in a timely manner						
								· ·						
3308 2000821	2000821-001	CAMP OAKHURST INC.	Camp Oakhurst Well System Repair	Pull two well pumps out and repair/replace them to get N them back on line and pumping adequate water.Drill new well to meet or exceed Maximum Daily Demand in conjuction with the other wells pumping together.Replace two 31 year old aging water tanks before failure occurs.	Λ	0	Ν	The well pumping system at Camp Oakhurst does not keep up with the Maximium Daily Demand (MDD) during the summer season or times of large group usage. (California Waterworks Standards Sub Section 64551.30) We have to stop irrigating most landscape plants and the lawns resulting in the plants dying back. One well is currently not working and the pump will have to be pulled to find out the cause. The other wells are only pumping 3 gal./minute, 6 gal./min, and 8 gal. min respectively. The 3 gal./min. well has a pump that is going to soon fail before next summer according to a well expert brought in to assess the problem.In addition to the low output of the wells, our two 15,000 gallon water tanks are showing signs of leakage. They were installed in 1979 and according to the well contractor they will need to be replaced within the next two to five years before failure occurs.	40,000	8	325 11	Madera		2011
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3309 1000165	1000165-001	BSA/CAMP CHAWANAKEE		INSTALL A 60,000 GALLON STORAGE TANK AND M	1	0	N	THE TANKS ARE OLD AND RUSTED.	250,000	19	400 23	Fresno	ш	1998
3310 3701965	3701965-001	MATAGUAY SCOUT RESERVATION	Water Storage Tanks replacement	This project will replace the old water storage tanks that N need repair.	Λ	0	Ν	This project with help to have clean water to the boysthat come up to enjoy the outdoors and Ranger residents that live on the Mataguay Scout Ranch. If this project goes through we will have better water with a safer system.	220,000	68	400 14	San Diego	v	2009
3311 5500031	5500031-001	CAMP MATHER	Camp Mather Water Tank Replacement/Treatment Upgrade	ss 1. Demolish and remove six existing 50,000 N gallon/each wooden clear water holding tanks.2. Install six new 65,000 gallon/each metal clear water holding tanks.3. Remove and replace one 50,000 gallon mixing tank.4. Complete upgrade of existing chemical treatment plant, which includes all new treatment facility.5. Surrounding infrastructure upgrade road and firebreak and pavment.	n	0	Ν	The city of San Francisco owns and operates a large camp ground facility as well as providing emergency services staging area, if needed, for the Hetch Hetchy water operations. Currently the system, which consists of eight large tanks holding approx. 50,000 gallons each and an addional water treatment plant, is antiquated and leaking. It's purpose is to provide potable drinking for the public each year. Our goal is to replace six of the eight tanks and to upgrade the water treatment facility.	650,000	15	500 11	Tuolumne	Ш	2009
3312 2701184	2701184-001	SAN ANTONIO LAKE PARK SOUTH WS	Lake San Antonio, South Shore, Drinking Water Treatment Plant Facility Upgrades	New electric valves need to be purchased and installed and auto controls need to be installed to operate the new electric valves. Also, upgrading and replacement of pipe systems, valves, and water distribution equipment.	л	0	Ν	Monterey County Environmental Health has stated that the treatment plant will need to be fully automated in the near future. Twelve, forty plus year old pneumatic values are ultimately not working properly and need to be replaced. Many of the existing old valves cannot shut down automatically causing possible contamination of treated water.	115,000	1	650 05	Monterey	Ι	2009
3313 2701183	2701183-001	SAN ANTONIO LAKE PARK NORTH WS	Lake San Antonio, North Shore, Drinking Water Storage Tank Replacemen	Replace four existing water storage tanks that supply N potable water to all campgrounds at North Shore, Lake it San Antonio. No current violations have been issued. However, Monterey County Environmental Health will require these tanks be replaced. Upgrading and replacement of pipe systems, valves, and water distribution equipment.	л	0	Ν	Old existing tank linings are failing, causing rust through perforation and leakage, this problem continues to worsen as they get older. Two of the tanks have already been taken out of service. This is a major concern to the parks department during the busy summer season for our patrons' use and fire protection.	112,000	1	999 05	Monterey	ΙΙ	2009

## 3314 0210300 0210300-001 CA State Parks - Grover Hot Springs

## Park Main Water Line Rehabilitation Project

Grover Hot Springs State We plan on identifying the location of the water line M within the park prior to beginning the project. We would then pothole down to the water line and insert a valve into the main line. This can be accomplished without having to shut the system down and then disinfecting it. The new valve insertion process has been approved by the California Department of Health Services and is approved by the American Water Works Association. All valves and hydrants would be installed to State and local codes by a certified company. All

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be able to meet demand on the system whenever. We would install the tank on the hill next to the park which is owned by the State and install water pipes from the well and to the distribution system. All lines would be underground and system would be built to AWWA standards. We would also build a new treatment building and move all equipment out of the historic structure it currently occupies and install it in the new building.

Creek which runs through the park. We draw a portion of the water out of the creek and run it through a treatment facility and pump the treated water to a water storage facility (tank #1) located above the campground. The water is then gravity fed down to the campground and to another storage tank located above the pool complex (tank #2). Another main line runs cannot maintain water in the system until repaired. We would like to install a 25,000 gallon water tank above

the park and connect it to the well for storage purposes.

The property that we would like to install the tank on is

owned by the state and the only restrictions we would

have would be creating an easement across the county

road. As stated earlier, the park runs off of 3 pressure

tanks only. If a new 25,000 gallon tank was installed on

the hill by the park, we could eliminate these tanks and

run off of the new storage tank.

Grover Hot Spring State is a popular campground and

geothermal pool complex located on the Eastern

Sierra's. The parks water service comes from Buck

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## 200,000 11 1,000 09 Alpine 1 2009

			valves will also be equipped with traffic grade boxes and signed for easy identification. As the project is				down through the park and services the residence and maintenance area of the park. Both of these tanks have	
			progressing, all valves, hydrants and relief valves would be GPS ed and coordinates would be logged and plotted				isolation valves located on them so we are able to isolate the tanks from the system. The tank located	
			on maps for future reference. In areas that the pipe is in need of repair, we would pothole down to the line and replace sections of line as needed. The water lines currently are not a problem but not having valves in them makes it a problem. All valves and equipment used will be approved by the American Water Works Association, State and local agencies.				above the pool complex runs the pools to keep them full and to blend with the geothermal water to cool it down. The main line when they come out of the water plant and goes to storage tank #1 does not have any isolation valves on it. If we were to have a break, we would have to drain the entire line in order to work on it. The main lines that runs form tank #1 to tank #2 and also to the maintenance/residence area also does not have any isolation valves on it. If we have a break in the system, we would have to drain the main line completely before completing repairs. This is a distance of over 2 miles of biose. We would like to install new	
							isolation valves on the system to adequately be able to	
2905001-001	South Yuba River State Park	Installation of Water Storage Tank and Supply/Distribution Line	We propose to install an 25,000 gallon water storage tank on the hill next to S. Yuba River State Park. This park has a visitation of up to 2,500 visitors per day during the summer months and is currently only has 3 pressure tanks installed in the water system to provide water. With the installation of this new tank, we would	Μ	0	Ν	Currently the S. Yuba watersystem operates on a demand basis. We do have 3 pressure tanks installed in the system but we do not have any treated water storage. When we have power failures effecting the well, we must use a portable generator to power the well until it is restored. If the well goes down, we	500,000

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3316 0910301 0910301	.002 CA State Parks - D.L. Bliss	Completion of S.C.A.D.A. Monitoring System for Sierra District Water Plant	We plan on continuing the installation of hardware and M software needed for the S.C.A.D.A. system at each ts water plant to facilitate in the collection of data at a central location within each park unit. This data would then be transmitted via a secure Internet link which is currently at each of our park locations to our main district S.C.A.D.A. data collection station at D. L. Bliss State Park which is located in the Lake Tahoe Basin. This data would then be stored on the mainframe computer for health department reporting. Information being sent would include levels, flows, valve positions, turbidity's and alarms. Alarms would be sent on a priority basis which would trigger the paging out of the Districts Chief Plant Operator or each park operator to control the water plant from remote locations removing drive time to the facility unless absolutely needed.	0	Ν	Water Plants within the Sierra District are rather spread out. The entire length of our District is approximately 400 miles long and 200 miles wide. It consists of 10 water treatment facilities and 9 sewage pumping facilities. The District has 1 Chief Operator and site operators at each plant. Park water plants are monitored each day by the units site operator but only once per day as per California Department of Public Health requirements. If a water plant goes into alarm or there is a problem (treatment, flow, security), or if a problem occurs after the operator does his checks, the system will either shut down or backwash until the problem is noticed either by the system loosing pressure or the sounding of an alarm. If the operator is not on sight which is the case in most of our park units and an alarm is noticed by a park resident or visitor due to no water pressure or an alarm sounding, they have to notify our dispatch center and once the chief operator is notfied via phone or radio and arrives on scene, it could be up to a 6 hour response time due to distances and longer if Sierra weather plays a part. The D. L. Bliss State Park water system is currently on S.C.A.D.A. (Supervisory Control and Data Acquisition). The system was installed back several years ago to oversee and operate the Bliss water treatment plant. When the system was installed, it was setup to accept information from all Sierra District water plants. This year, we	350,000	13	2,800 09	El Dorado	I	2009
3317 3400297 3400297	-001 GIBSON RANCH COUNTY PARK		Upgrade wells' double check valves, install new M backflow preventers, and replace chlorine gas treatment to liquid Hypochlorite treatment.	0	Ν	No backflow devices on wells. Double check valve does not meet standards. Chlorine gas storage unit is in noncompliance.	25,000	10	10,000 09	Sacramento	I	1998
3318 4900788 4900788·	-002 El Crystal Mobile Home Park	El Crystal MHP pre- appication	We would like to hook up to city water.The connection N is just at the front of the mobile home park.We would need to re-plumb the the mainlines and laterals in the park as the exisiting plumbing might not be adequate to handle the increased pressure of city water.We would also install water meters.The cost for this project we estimate would be between \$200-300,000.	35	C	The problem was exceedance of a chemical MCL, i.e. Manganese. We have installed filtration equipment and are currently in compliance but other problems with the system remain.City water is right in front of the property so hookup would be fairly easy. There is also a migrating plume of MTBE and other chemicals associated with an old gas station storage tanks which have leaked.	50,000	56	130 18	Sonoma	Π	2009
3319 2010014 2010014·	001 HILLVIEW WC-OAKHURST/SIERRA LAKES	Hillview Water Co., Inc.	FILTRATION OF FOUR WELLS AND INTERCONNECTION N OF THIS SYSTEM TO THE OAKHURST-SIERRA LAKES SYSTEM WHICH IS ABOUT 3 MILES AWAY.	35	С	SYSTEM EXCEEDS THE SECONDARY DRINKING WATER STANDARDS FOR TDS AND IS BORDERLINE FOR CHLORIDE.	800,000	1,007	3,006 11	Madera	ш	1998
3320 5110002 5110002·	-038 City of Yuba City	Sri Guru Nanhk Sikh Temple Water System	The requested funds would enable the City to purchase N and install 1400 feet of 8- inch pipe, fittings and meter. Although this is only one business, it serves a large number of residents each week. It is important to them that their water system provide clean, safe drinking water.	30	c	The Temple is experiencing deteriorating ground water quality and failure to meet regulatory requirementis for arsenic, and/or nitrates, iron, and manganese is imminent. The system is located with the City of Yuba City's Sphere of Influence and Water Rights Place of Use. The Temple leaders have expressed an interest in joining the City'sclean drinking water municipal system. The system is located on Bogue Road in the southern part of Yuba City. The connection would include installation of a water meter to meet the State's requirement.Yuba City has been declared a disadvantaged community by CDPH.	175,700	13,550	51,504 21	Sutter	I	2009
3321 2300730 2300730	-002 Westport County Water District	Iron & Manganese Treatment	Install treatment to remove Fe & Mn to below N secondary standards	25	с	Fe & Mn above secondary standards	500,000	69	70 03	Mendocino	П	2004
3322 0400026 0400026·	003 MEADOWBROOK OAKS	Meadowbrook	Install new water treatment sytem and pressure tanks, N backwash filters & water softeners. Building construction and necessary fencing to protect and house the equipment. Removal of old equipment & pressure system.	20	С	Water & filtrartion system to remove excess iron (feric & ferrous), Manganese and bring down turbity to acceptable levels per Butte County Health Department.	40,000	25	50 21	Butte	I	2009

3323 1610006	1610006-002	Stratford PUD	Stratford PUD Odor Mitigation and Water Storage Project	The proposed project is to furnish and install two (2) - 150,000 gallon water storage tanks connected to well #7. The purpose of the tanks are to aereate the water from well #7, provide fire flow and maximum day demand. The pipeline will allow for bypassing of either tanks. The tanks will be equiped with exhuast systems for venting purposes. During normal operations, two (2) - 5 horse power Variable Frequency Drive (VFD) centrifigal pumps with a capacity of 300 gpm each will transfer the water from the first tank to the second tank. After the second tank two (2) 15 horsepower centrifigal pumps with a capacity of 300 gpm each will pump the water into a 6,000 gallon hydropnuematic tank that will maintain the system pressure at 50 psi. A 60 KW standby generator is proposed to power the pumps to the tanks and blowers should regular power fails. A chlorine disenfection system will be installed. It is anticipated that the site requirements are a 115 feet by 150 feet area to contain the tanks and ancilliary facilities. The site is to be fenced and paved with gravel. The tank site will be adjacent to the well # 7 site.For Normal operation, the tanks will operate in series. The system can also operate with one tank off-line and one tank on-line.	N	20	C	In and effort to increase source water production, the District installed a new well (#7) in June 2004 to supplement the water production from the existing wells (#5 and #6). However, well # 7 has an odor problem and has been placed off line. The District also has concerns with regards to needed storage for fire protection and emergency power if the main power source fails.	1,400,000	294	837 12	Kings		2009
3324 1310011	1310011-010	Coachella VWD: I.D. NO. 11	Highway 86 Transmission Main Ph II and Booster Station	The Highway 86 Transmission Main Ph II and Booster N Station project will provide safe, reliable domestic water to areas along the west shores of the Salton Sea. Infrastructure improvements include approximately six miles of 30-inch ductile iron pipe and a 4,500 gallon per minute booster pump station.Design plans for the transmission main are approximately 50% complete. The project would include the design of the booster station, easement acquisition, environmental documentation and permitting, and construction of both the transmission main and booster station.	N	20	C	The Coachella VWD - I.D. No. 11 water system provides drinking water and fire protection to the communities of Desert Shores, Salton Sea Beach, and Salton City along the west shores of the Salton Sea. The water system infrastructure consists of three wells, approximately 10 miles of 16/18-inch transmission mains and one 1.0 million gallon storage reservoir. The three wells cannot be depended on as a long-term water supply source due to both reliability and water quality issues. The well field is located on the eastern slopes of the Santa Rosa mountains and taps into a shallow aquifer. As water levels continue to drop approximately 4.5 feet per year, the measured levels of TDS continue to increase and currently exceed the 1,000 mg/L secondary contaminant level.Consolidation of the Coachella VWD - I.D. No. 11 water system with the Coachella VWD - Thermal water supplies to the communities along the west shores of the Salton Sea. The TDS levels in water supplies from the Thermal water system historically average at 160 mg/L. In addition to enhancing the I.D. No. 11 water system, the transmission main is sized to allow additional service connections along the rural project route. This area is scattered with small disadvantaged community water systems that are plagued with water quality issues. The project will enable the Coachella Valley Water District	6,500,000	2,624	4,198 20	Imperial	v	2011
3325 0610004	0610004-004	City of Williams	New Well and Treatment	upgrade system capacity; identify and develop well on N new site to include storage facility; conduct preliminary engineering study of existing system quality,	N	20	С	failing wells, productivity; water quality inferior; health and safety issues	4,000,000	1,324	5,250 21	Colusa	I	2003

production; develop plans and specs; etc

3326 1510045	1510045-008	GOLDEN HILLS CSD	Wellhead Treatment Project	The project consists of the installation of a package N water treatment system for manganese removal. The method of removal would be by oxidation, precipitation and filtration through the use manganese greensand. The treatment system would include a chemical feed unit, pressure filter, and backwash system including pump and tank. Because of the freezing temperatures in the Tehachapi Mountains, the system would be housed within a small building. With the installation of this system, Well B would be able to meet the Secondary MCL for manganese, and will increase the supply capacity and reliability of the District water system.	20	c	The Golden Hills Community Services District (District) is located in the Tehachapi Mountains in Kern County, 40 miles east of Bakersfield. The District has a Median Household Income (MHI) of \$48,047 (which is 3 percent higher than the Disadvantaged Community MHI threshold). Currently the District's Maximum Day Demand (MDD) is approximately 1800 gpm during the peak summer months. The District's total source capacity is about 1900 gpm, excluding two wells that are currently not used due to poor water quality. One of these wells, Well B (120 gpm capacity), does not meet the Secondary MCL for manganese. The manganese levels for Well B are typically twice (approximately 0.10 mg/L) as much as the MCL. Currently the District uses a sequestering chemical agent to mitigate manganese. The presence of manganese in a water distribution system can cause growth of microorganisms leading to high chlorine demand, taste, odor and turbidity.	288,000	2,796	7,434 19	Kern		2009
3327 5110002	5110002-036	City of Yuba City	Ozone System	Install an Ozone system at the Water Treatment Facility. N	20	с	Ozone is the #1 preferred disinfectant process for obtaining optimum taste and minimum odor in the water. The WTP experiences seasonal taste and odor problems due to source water inceases in Geosmin algae. This has resulted in many customer complaints and impacts food providers in the community. At this time of year we have problems keeping under the secondary standard MCL for odor.	495,000	13,550	51,504 21	Sutter	I	2009
3328 2100581	2100581-001	HOG ISLAND OYSTER CO.	Hog Island/Marshall Tavern Joint water Projec	Consolidation with the Marshall Tavern water system, N which has an existing groundwater well with superior water quality compared to Hog Island's, is characterized by the local LPA as the most cost effecient and logistically superior solution to the water systems problems and the reason why the LPA brought the idea to us, the water system operators at Hog Island Oyster Co. The well is located on an adjacent property in a region where access to neighboring land to drill new wells is difficult. The Marshall Tavern owners have already established rights to the well, and have the option to drill a second well. Most of the Hog Island land is not suitable for drilling, and is dominated by wetlands and coastal marshes. In early 2007, a well was unsuccessfully attempted in one of the remaining locations for a secure well. Consolidation. as reccomended by Scott Callow LPA, Marin County Environmental Health, will include distribution lines, storage tanks for domestic use and fire control, pumps and valves along the distribution lines, fencing around the well (source water protection in an area with range animals), destruction of two old wells, engineering of distribution and storage facilities, as well as all construction requirements. Scott Callow LPA is in the process of reclassifying Hog Island as a NTNC because we have grown, expanded our	20	Ν	The sole water source, located close to Tomales Bay, is exhibiting water quality problems that are consistent with salt water intrusion. Flouride levels of 2.6 mg/L exceed the Primary MCL. Significant Secondary MCLs are violated. TDS is 1200 mg/L; Specific conductance is 2300mg/L; Chloride is 620 mg/L; Sodium is 360 mg/L. The complicated water treatment system includes five treatment components and a blending stage. Consequently, the system has not complied with all monitoring directives, as required by Scott Callow LPA, Marin County Environmental Health, including Sec. 64432 (b), (2), and (d). The system has yet to obtain a wastewater discharge permit for disposing of byproduct water from the Reverse Osmosis treatment system, as discussed with Scott Callow LPA, Marin County Environmental Health. Two attempts over the last five years to drill a suitable second well on Hog Island property have proven unsuccessful.	100,000	3	25 18	Marin	Ι	2007
3329 2300506	2300506-003	Meadow Estates Mutual	Water Quality Improvement	Installation of an ozone/permanganate treatment N system to reduce the levels of manganese and iron to acceptable levels. System will include a solution feed tank for permanganate, addition of Green Sand to our current pressure filter tanks, and installation of an ozone generator in each of the anticipated new holding tanks.	15	С	Our source water exceeds State of California standards for manganese and iron which cause user complaints related to staining, taste and odor.	15,000	35	85 03	Mendocino	II	2009

3330 1610006	1610006-004	Stratford PUD	Well 7 Methane Reduction	The project proposes the installation of an air stripper N at Well 7. The site is large enough to accommodate the improvements. The air stripper will reduce the level of methane gas from the well. The improvements will also include a wet well, electrical, controls, booster pump and discharge piping modifications. This will allow Well 7 to be used by the District.	15	c	The Stratford Public Utility District (District) provides both water and sewer service to the unincorporated community of Stratford. The District's water supply consists of three wells. The wells pump directly into the distribution system with an elevated storage tank. Well 6 is currently not in operation due to sanding problems. Well 7 which was completed in 2004 to improve the water system reliability is shut down because of methane gas. The level of gas in the well has resulted in the District not being able to use the well except for a short time during critical periods. The District constructed Well 7 in 2004. The water pumped from the well contains significant amounts of methane gas resulting in the well being turned off. The gas causes a dangerous situation for the community. Without Well 7 the District does not have an adequate water supply and experiences low pressure within the water system. The source water supply for the District does not currently meet the Title 22 Water Works Standards. The residents within the community are low income with a median household income of \$29,205 based on the 2000 census. There are 380 service connections in the District with a population of approximately 1,500.	750,000	294	837 12	Kings	III	2009
3331 0610004	0610004-008	City of Williams	Williams Manganese Filtration	In order to achieve compliance the City proposes to Ninstall filters specifically designed to remove Iron and Manganese at each of our three primary wells as the wells enter into the distribution system directly, not to a central storage tank. The filters that we have spec'd are Filtronic brand package utilizing the model V-1000 reaction Vessels. Along with all associated piping and pumps, electronic control and basins.	15	C	Our water significantly exceeds State and Federal limits for potable water for Manganese and Iron concentrations at all ground water sources. Because of these excesses, the City cannot obtain CDPH permits on our wells. Manganese Maximum Contaminate level 50 City average level is 101 Iron Maximum Contaminate level 30 City Average level is 546 The public was notified per Consumer Confidance Report of 2008	1,720,000	1,324	5,250 21	Colusa	I	2009
3332 1503145	1503145-002	BERRENDA MESA WATER DISTRICT, DOM :	SY. Domestic Water Pipeline Replacement	The project consists of the replacement of 10 miles of 6- N inch diameter pipe with 8-inch diameter pipe (complying with Kern County Development Standards for fire protection). The pipeline begins at an existing tank and booster station near Brown Material Road and Highway 46 and proceeds northwest to Highway 33. The pipeline connection to Blackwell's Corner begins at Section 30 and proceeds south to Highway 46. The existing casing and pipeline underneath Highway 46 has been replaced in the past 5 years and will not be replaced. Other project components include isolation valves that will be installed every mile and air release valves at any high points along the alignment. The pipeline would be installed with the recommended cover over the pipe, thereby complying with the California Waterworks Standards. The implementation of this project will greatly reduce the potential for pipeline breaks and leaks. Ultimately the project could save the District up to 8 acre-feet per year in water losses. More importantly, potential contamination of the distribution system is reduced thereby ensuring compliance with drinking water standards. Also, outages due to breakages will be less likely to occur resulting in better water service to the customers. Replacing the aging pipeline will maintain the existing intertie between the two water districts.	10	c	Berrenda Mesa Water District (BMWD) purchases treated wholesale water from the Lost Hills Public Utility District (LHPUD) and provides metered water service to the Blackwell's Corner community located near the intersection of Highway 33 and 46 in northwestern Kern County. According to the 2000 Census, the community is within the Census Tract 45, which has a Median Household Income (MHII) of \$29,132. The wholesale water is conveyed through 8 miles of 6 inch diameter pipe to a 35,000 gallon tank within the community. Other rural customers are also served from this system through an additional 2 miles of pipeline. These steel pipelines were installed in the 1950s and are now severely corroded leading to leaks and breaks in the system. Pipeline breaks and breaks inthe system. Each leak or break places public health at risk from potential contamination. Low pressure may result in contamination and the system. In addition, the District does not continuously chlorinate its water supply making it more susceptible to contamination. There are multiple locations of pipeline that are above ground or near the ground surface. Because of the lack of cover over the pipe, vehicles or farm equipment, can damage the pipeline. Section 64570 of the California Waterworks Standards requires	1,900,000	8	80 19	Kern	111	2009

3333 1503329	1503329-001	Hart Creek Estates Mutual Water Co.	Iron and Manganese Removal System	The two existing water supply wells are piped together N and convey water to an existing storage tank. The project involves installing a treatment system to remove the iron and manganese from the water exiting the storage tank. This will be accomplished by means of oxidation-filtration for a flow rate of approximately 110 gpm. Sodium hypochlorite and potassium permanganate will be added to the raw water and the water pumped into the storage tank. The iron and manganese particulates will be allowed to settle out in the storage tank. The tank will be cleaned out annually to remove settled particulates. As the water exits the tank it will be filtered using activated carbon and then enter the distribution system.	10	с	The Hart Creek Estates Mutual Water Company serves approximately 56 residential customers in a remote mountain community in Kern County, California. The water system consists of two small hard rock wells that supply an existing storage tank. The storage tank then supplies the community by gravity through the distribution system piping. Well 03 pumps approximately 50,000 gpd. The manganese concentration in this well is approximately 70 ppb and exceeds the chemical MCL of 50 ppb. Well 12 pumps approximately 45,000 gpd. The manganese concentration in this well is approximately 80 ppb and exceeds the chemical MCL of 50 ppb. The iron concentration in this well is approximately 2,358 ppb and exceeds the chemical MCL of 300 ppb. These attribute to colored water and create damage to pipes, clothes, and residential appurtenances.	500,000	56	499 19	Kern		2009
3334 0400012	0400012-001	FARM LABOR HOUSING	Gridley FLH - Water System Upgrade	This project would involve a water treatment system to N be installed at each of our two wells in order to remove the manganese in our water system. The east well or Well #1 would have a 200 GPM Quadaplex System, which would require (4) 36x72 automatic Iron/Manganese filters along with any plumbing and electrical work needed to install this system. The same would be done for the west well or Well #2 with the exception of the (4) 42x72 automatic Iron/Manganese filters. Also, required for this project would be two buildings to protect the system from weather at a minimum size of 6' x 14' for the east well and 6' x 16' for the west well. In addition the system would require drains for both wells that could handle 75 GPM flow (east well) and 100 GPM (west well).	10	С	Chemical testing of our water system has found an elevated amount of Manganese above the secondary MCL for consumer consumption. These "black deposits" were first detected in our water system back in 1975. Along with the appearance of the water it also has an odor, which many of our residents have complained about. To date there have been no health risks with these elevated levels of Manganese in our water system, but we believe filtering out the Manganese would be beneficial for our public's health.	68,880	144	500 21	Butte	I	2009
3335 1910018	1910018-007	Beliflower Municipal Water System	High Capacity Well #2	The Bellflower Municipal Water System (BMWS) Company plans to construct a new "high capacity" well to enable each agency to withdraw its full entitlement as necessary during dry-years. This would enable flexibility in supply so that the two agencies could better respond to any cutback in imported supply by Metropolitan Water District of California. Additional well capacity is recommended as a high priority. Additional well capacity for BMWS would benefit the BMWS system more economically if constructed within the backbone system or as direct supply to the reservoir at the City's dependence on imported supplies, which MWDSC highly encourages. Cutbacks to current State Water Project water deliveries have been the topic of discussion from Department of Water Resources. This can be considered a local water project enhancing local supplies. Future well potentially necessary to replace aging groundwater wells, and support the BMWS and other City purveyors in order to maximize the use of local sources and reduce dependency on imported supplies.	10	C	BACKGROUND - In January 2007, the City acquired the assets of the Peerless Water Company for the sum of \$5.8 million. On March 21, 2007, the California Department of Health Services (DHS) made their first site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2006 deadline. The plan must be implemented by October 1, 2007 (paragraph 2.6.2.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulations (paragraph 3). i. Wells	2,750,000	1,819	5,967 16	Los Angeles	IV	2009

3336 1610005	1610005-004	Lemoore, City Of	City of Lemoore Well #12 Water Tank	Install a 400,000 gallon water tank at the existing well N #12.	10	С	Well #12 has a limited capacity and a color problem. The tank will help with capacity during peak demand periods and allow a settling period to reduce/eliminate the color problem	1,000,000	5,597	24,500 12	Kings	ш	2009
3337 3310044	3310044-005	Rubidoux Community SD	Well 17 & 18 Manganese Removal Treatment Facility	The Well 17 & 18 Manganese Removal Treatment N facility is being proposed to eliminate Manganese from the water of 2 existing groundwater wells. The project includes the design and construction of a 5,000 gpm (max) Manganese removal facility. The treatment process involves oxidation and filtration to removal the Manganese. The District currently operates another Manganese removal facility associated with another groundwater Well and has found the operation and maintenance of the facility to be reliable and economic. Current and planned growth for the District does not allow the option to "blend" the water to meet the secondary MCL limits for Manganese.	10	c	The proposed project involves the construction of a 5,000 gpm (max) Manganese removal treatment facility on District owned property. The proposed facility will treat the water from 2 existing on-site groundwater wells, each with Manganese concentrations in excess of the secondary MCL. Most recent Manganese concentrations are 200-250 ppb. The construction of this facility will allow the District to use both of the wells for potable purposes, meeting the District's goal of providing safe and reliable drinking water to our customers.	5,000,000	6,206	26,177 20	Riverside	v	2007
3338 3610038	3610038-007	RIALTO-CITY	City Well #3 Replacement	This project would allow the City to lessen its demand of N purchasing water from our state agency and meet current demands for potable water as well as water quality standards.	10	с	Currently the well fails to produce both water quantites and per water quality secondary standards. The well currently pumps 1,028 acre feet of water per year. The City's water rights are 2,024.6 acre feet of water.	1,500,000	11,923	48,418 13	San Bernardino	v	2009
3339 3701747	3701747-001	NORTH PEAK MUTUAL WATER COMPANY	Storage tank replacement and water line and filtration upgrade	Master plan includes three primary phases:First phase N to include filtration system used to reduce iron content MCL approximately 5 fold above excepted levels.Second phase to include replacing primary current storage tank approximately 30,000 gallons with 160,000 gallon tank. Secondary tank approximately 5,000 gallons to be repaced with 40,000 gallon tank. Upgrading the primaryand secondary tanks will fulfill two needs, First primary tank heavily damagedby the cedar fire, secondary tank si underground which currently does not meet the current share holder demands for potability and fire suppression.Third phase is to include replacing the thirty year old water lines, approximately 8 to 10 linear miles. The majority of the water line system is 2 inch in diameter -	5	c	Currently NPMWC supplies approximately 90 meters with infrastructure approximately thirity years old. Water lines are currently at 2 inch width,service lines stretch less than ten linear miles. Primary water tank capacity is approximately 30,000 gallons. Secondary water tank is approximately 30,000 gallons. Secondary water tank is approximately five thousand gallons (underground - cement) Current infrastructure averages approximately 3 to 5 water breaks/year.With each break NPMWC notifies all shareholders to boil water due to thepotential of contamination due to breaks.NPMWC system is powered by three diesel generators (10kw) - system is completely off the grid (nearest power line is approximately twenty-five gallons/minute, unfortunately exceeds state level of iron content MCL by five fold. NPMWC currently has 90 water shares that currently have 45 meters in use.Approximately 20 homeowners are fulltime and approximately 25 shares (meters) are used part-time (less than 3 times per week occupied). NPMWC is physically located in the Cleveland National Park, due to the undersize of our line feed (water lines) - CDF is unable to draw water from fire hydrants due to the undersize of the lines. Master plan includes upgrading water filtration system, upgrading storage tank to 160,00 gallons, upgrading water lines from two inch to six inch by current code requirements.	2,000,000	90	25 14	San Diego	v	2009

3340 1910098	1910098-006	GSWC - NORWALK	TDS removal by membrar at Dace Well	ne Dace Well is an active well with limited time of N operation due to high TDS. This well's capacity is approimately 610 gpm. In addition of high TDS, the water from this well also has high hardness (up to 610 ppm), high conductivity (up 1800 umol/cm) and organic contaminants as well, such as TCE and PCE. Due to so many issues, membrane is the best option to treat this water. Other treatment normally can only deal on issue. For example, GAC only remove organic, while additional treatment is still required to removal TDS, hardness, etc. GSWC would like to purchase membrane skid, add PLC control unit and bring this well back online to supplement current water supply shortage.		5	C	This well has a very high TDS up to 1200 ppm. TDS is a secondary MCL, with recommended value at less than 500 ppm and max no more than 1000 ppm. Due to water shortage, GSWC would like to pump more water from this well. All the wells from Norwalk System have organic contamination problem; so GSWC is limited to the possibility of finding new well locations with good water quality. As a result, GSWC would like to utilize current wells adding treatment to bring the well to its fullest capacity. The benefit of this project is to explore the membrane project, which is becoming more popular. It is a very efficient way to remove TDS with minimum waste discharge. Membrane treatment has been shown to be one of the best treatment options for this well. GSWC would like to use this project as a showcase to explore membrane treatment and whenever applicable, apply membrane treatment at other systems in order to lower treatment cost as much as possible.	800,000	9,617	31,221 15	Los Angeles	IV	2009
3341 5800572	5800572-002	FAIRWAY DOWNS MUTUAL WATER CO	Iron and Manganese	Install iron and manganese filtration system for N	(	0	С	Well for this system has very high iron and manganese	73,000	25	60 21	Yuba	I	1998
3342 3901075	3901075-001	FAIRWAY ESTATES PWS CSA-18	Iron Treatment	CONSTRUCT REATMENT FACILITY, PRESSURE TANK AND N BOOSTER STATION. OTHER = DESIGN AND CONSTRUCTION.	(	0	С	WELL 2 HAS IRON OVER THE MCL. SYSTEM HAS PRESSURE PROBLEM.	750,000	41	68 10	San Joaquin	ш	1998
3343 2100565	2100565-002	GREEN GULCH FARM	Iron and Manganese Treatment Upgrade - Groundwater Source	The proposed project would improve water quality and N control MCL-exceeding manganese levels at the groundwater well while ensuring sufficient water supply by replacing the archaic, high-maintenance gravel filter with an automated water softening system.		0	c	Green Gulch Farm's alternate water source, used for 10- 20% of the community's annual drinking water, is a groundwater well with manganese contamination. Manganese levels in raw well water are far in excess of the 50 ug/L MCL, ranging from 120-300 ug/L over the last three years of testing. Currently a low-tech, high- maintenance aeration and gravel filtration system is in place, and keeps manganese contamination within acceptable levels. The current system, however, cannot efficiently accomodate the water volume needed during periods of well source use. The gravel filter clogs after several thousand gallons and slows to a rate insufficient to supply the consumers. At that point, the well must be taken off-line and the filter manually backwashed. The water system does not have sufficient staff to maintain this frequent backwash schedule.	10,000	17	75 18	Marin	Ι	2009
3344 2702140	2702140-001	WOODSIDE WA	Iron and Manganese Treatment	They do not describe any projects. Perhaps, they are N hoping we will tell them what they should do.	(	0	с	Water supply was found to be above the MCL for iron and manganese.	50,000	26	78 05	Monterey	II	1998
3345 3901303	3901303-002	ACAMPO WATER SYSTEM	Manganese Treatment	CONSTRUCT TREATMENT FACILITY. OTHER = DESIGN N AND CONSTRUCTION.	(	0	С	WELL 1, THE PRIMARY SOURCE, HAS MANGANESE AT ABOUT 3 TIMES THE MCL.	700,000	61	150 10	San Joaquin	Ш	1998
3346 3700074	3700074-001	CUYAMACA WATER DISTRICT	Water system improvements	Add storage tank and replace some of distribution lines, N and possibly construct a filtration system	(	0	С	Asbestos pipes are present in distribution system. Storage and distribution system is inadequate to provide proper fire protection and other needed water pressure to users. Iron is heavily detected in system.	350,000	159	200 14	San Diego	V	1998
3347 3701961	3701961-001	PINE VALLEY TRAILER PARK	Iron and Manganese Treatment	as above. N	(	0	С	Needs manganese and iron treatment system, needs piping rerouted, either new reservoir or improvements to old.	100,000	92	200 14	San Diego	v	1998
3348 1502315	1502315-001	CAMP OWEN WATER SYSTEM	Water quality problems	INSTALL FILTRATION AND WATER CONDITIONING N SYSTEM AT THE SITE OF THE EAST WELL SO THAT IT CAN BE UTILIZED. REPLACE/REPAIR WATER STORAGE TANK.		0	С	HIGH LEVELS OF IRON, TURBIDITY AND DBCP ARE PRESENT IN 1 OF OUR 3 WELLS MAKING IT UNUASBLE. SEVERAL SMALL LEAKS IN OUR 32,000 GAL. WATER TANK. NOTE: DBCP NOT PRESENT IN SAMPLES SUBMITTED.	60,000	23	220 19	Kern	Ш	1998
3349 4000507	4000507-001	GARDEN FARMS C.W.D.	Iron and Manganese Treatment	Install simple filters at wells with high concentrations of N the minerals, greensand and chemical charcoal filters are being considered.	(	0	С	Wells need a filter to comply with the iron and manganese secondary standards.	45,000	107	240 06	San Luis Obispo	IV	1998

3350 2700702	2700702-002	PRUNEDALE MWC	Iron and Manganese Treatment	Install ozone treatment and filtration system.	Ν	0	С	Wells exceed Fe and Mn MCL.	100,000	84	252 05	Monterey	Ш	1998
3351 3301630	3301630-001	Blythe - Hidden Beaches	Iron and Manganese Treatment	Construct a transmission main pipeline connection of the water system to the City of Blythe water system.	Ν	0	С	Groundwater source quality problems (TDS, iron, and manganese) and insufficient storage capacity. (see attached documentation)	6,716,000	104	300 20	Riverside	V	1998
3352 1810003	1810003-001	Lassen County Water District #1	Iron and Manganese	Purchase and installation of filters to remove the iron and manganese.	Ν	0	С	Fail secondary drinking water standards for iron and manganese.	210,000	165	320 02	Lassen	I	1998
3353 3702354	3702354-001	WARNER SPRINGS ESTATES	Warner Springs Estates/Stone Ridge Well #8	Purchase and install a filtration system to lower Iron (4.37 mg/L) and Manganese (0.14 mg/L) levels in Well #8's water so that the State of California will approve the water for consumer use. A concrete base, storage structure, flushing system including backflow valve, storage tank and other required equipment and materials, electrical and water connections, appropriat engineering consultation, plans drafted and approved and permits will be required. In order to complete the project, bids will be let to interested professional companies to complete the work in accordance with all laws and ordinances. An environmental study may be required.	N te t,	0	с	To date the Well #8, our newest and most productive well, has been a five year project yet to be completed. As drilled in 2004 this well is capable of providing 150 gallons per minute. We have been able to equip the new well with electricity, fencing, valves, a fast-fill 2- 1/2" hose connection for use of fire agencies in times of emergencies, connections for a future generator, and have met all mandated requirements except achieving an acceptable level of Iron and Manganese contents in tested water. Both of these minerals exceed State of California levels. The 2004 test resulted in a level of 4.04 mg/L Iron, which should be 0.3 or less, and 0.14 mb/L Manganese, which should be 0.05 or less. The June 6, 2007 test resulted in an Iron level of 4.37 mg/L	200,000	227	340 14	San Diego	V	2007
				Until funding becomes available, it is not possible to fully describe all that the project may entail.				which is even higher than that of 2004, exceeding the limit of 0.3 by 4.34 mg/L. In order receive state approval to supply this water source to our community, a filtration system is needed to lower the Iron and Manganese levels for consumer use.						
								Full implementation of Well #8 is vital to Warner Springs Estates/Stone Ridge, a 55+ incorporated condominium community of 300 lots and approximately 400 residents. Located 8 miles north of Warner Springs and 30 miles south of Temecula, we are totally						
3354 4000670	4000670-001	WALNUT HILLS MUTUAL WATER CO	Iron and Manganese Treatment	Construct a water treatment facility and connect to the water system	e N	0	С	Wells exceed iron, manganese and hydrogen sulfide secondary standards	50,000	26	486 06	San Luis Obispo	IV	1998
3355 2701676	2701676-001	SAN LUCAS WD	Iron and Manganese Treatment	Design and engineer a project which would enable water system to remove dirt, iron, and manganese fror water supply.	N m	0	С	High levels of iron, manganese, and dirt in water supply.	90,000	88	500 05	Monterey	II	1998
3356 5510019	5510019-001	TUD - Mono Village Water System	Iron and Manganese Treatment for Wells	INSTALL TREATMENT SYSTEMS FOR REMOVAL OF IRON AND MANGANESE.	N N	0	С	EXCESSIVE IRON AND MANGANESE IN FOUR WELLS.	162,000	275	649 11	Tuolumne	Ш	1998
3357 3301577	3301577-001	RIV COUNTY SERVICE AREA #62	Iron and Manganese Treatment	Install filtration treatment units. Construct new storage reservoir and booster pump station.	ge N	0	С	TDS is 1600 mg/l and the iron and manganese are high. Groundwater source water quality violations. Insufficient storage reservoir and booster pump station capacity. CSA # 62: See attached	100,000	195	700 20	Riverside	v	1998
3358 2710022	2710022-001	Cal Am Water Company - Hidden Hills	Iron and Manganese Treatment	Design and construct oxidation and filtration treatment facility for the removal of Fe & Mn.	t N	0	С	Ground water exceeds MCL's for iron and manganese.	500,000	437	996 05	Monterey	Ш	1998
3359 3901348	3901348-001	FAIROAKS PWS #44	Manganese Treatment	CONSTRUCT TREATMENT. OTHER = DESIGN AND CONSTRUCTION	N	0	С	MANGANESE EXCEEDING MCL	700,000	314	1,036 10	San Joaquin	ш	1998

3360 2110005	2110005-007	Bolinas Community PUD	BCPUD Pilot Study: Elimination of Taste & Odor Problems	The BCPUD would like to conduct a pilot study to determine the origin contaminant(s) causing the taste and odor problems in its reservoir water sources and recommend a solution thereto. The study will involve the district retaining a chemical engineer, water quality specialist and other appropriate professionals to design and carry out this project. The BCPUD regularly receives numerous taste and odor complaints about the drinking water from the public during summer months, which is when the district historically relies on the reservoirs to meet demand.	N	0	С	The BCPUD has three water supply sources: (1) surface water from the Arroyo Hondo creek; (2) surface water from Woodrat #1 reservoir; and (3) surface water from Woodrat #2 reservoir. The source of the water feeding the unnamed streams which fill the two reservoirs is rainfall runoff from the surrounding hillsides which are located in the Point Reyes National Seashore. The BCPUD experiences taste and odor problems in its drinking water when it is drawing upon the two reservoirs (this problem does not arise when the BCPUD is drawing exclusively from the Arroyo Hondo creek). The contaminant(s) creating the taste and order problem are unknown. The BCPUD has water rights permits allowing the diversion of up to 56 acre feet annually from these reservoir sources.	150,000	587	1,200 18	Marin	Π	2007
3361 5310002	5310002         5310002-001         Trinity Co. V           3210011         3210011-001         Plumas Euro           5610015         5610015-001         VENTURA C	Trinity Co. W.W. Dist #1	Deteriorating water quality	Provide for iron and manganese treatment system. Design and install temperature control devices at raw water reservoir.	N	0	С	Habitual reoccurrence of taste and odor problems associated with iron and manganese. Numerous taste and odor complaints.	1,300,000	540	1,500 01	Trinity	I	1998
3362 3210011	210011         3210011-001         Plumas Eureka CSD           610015         5610015-001         VENTURA CWWD NO. 19 - SOMI	Plumas Eureka CSD	Iron and Manganese	Construction of water treatment facilities.	Ν	0	С	Excessive iron and manganese concentrations in the	600,000	547	1,785 02	Plumas	I	1998
3363 5610015	5210011         5210011-001         Plumas EUREK           5610015         5610015-001         VENTURA CW           2710013         2710013-001         CWSC Las Lor	VENTURA CWWD NO. 19 - SOMIS	Iron and Manganese Treatment	Installation of iron and manganese removal facility per study by Boyle Engineering Corp dated Mrch 1993.	Ν	0	С	Well No. 12 needs an iron and manganese removal filter to comply with secondary standards.	620,000	775	2,266 06	Ventura	IV	1998
3364 2710013	0013         2710013-001         CWSC Las Lomas           0018         4410018-001         Central Water District	CWSC Las Lomas	Iron and Manganese	Design and construct filter system.	Ν	0	С	Well water is above the MCL in iron and manganese.	640,000	660	2,349 05	Monterey	Ш	1998
3365 4410018	4410018-001	Central Water District	Iron and Manganese Treatment	Construct a new well with better water quality in the vicinity of the other two wells. Plans and specifications on file with the Department of Health Services.	N	0	С	Three of five wells exceed Fe and Mn MCL.	275,000	808	2,700 05	Santa Cruz	II	1998
3366 3510004	3510004-001	Aromas Water District	Additional capacity need	ed drill new well with needed capacity and acceptable water quality	N	0	С	Need additional capacity. Currently system is on voluntary water rationing. Also need water quality improvements for elevated manganese levels	976,664	884	2,700 05	San Benito	II	2002
3367 2410003	2410003-001	GUSTINE CITY	City of Gustine Water System Prop 84 Pre- Application	The project elements include the following: Design and construct a replacement well for Well No. 1, and provide wellhead treatment for nitrate at the new well. The well should be of equivalent capacity to deliver and treat 1,100 gpm. Design and construct wellhead treatment for nitrate at the other two wells with elevated nitrate levels. Treatment capacity should be approximately 2,000 gpm for these two wells. Implementing this nitrate treatment will provide full compliance with nitrate standards, provide full capacity to the water system by allowing the new Well No. 1 to operate normally (not as standby only), and allow compliance with the TDS MCL in the distribution system by accommodating blending of water from Well No. 5 which is high in TDS. Replacement of Well No. 1 will also prevent sand from entering the distribution system.	N , ,	0	С	The 2002 Water System Master Plan identified the major water quality problems in the City's wells. These include high concentrations of salinity as measured by total dissolved solids (TDS) and high concentrations of nitrates, chlorides and sulfates. Previously, the City had to shut down and replace wells that exceeded the MCL for nitrate. Presently, three of the four existing supply wells exceed one half the MCL for nitrate and require quarterly monitoring. Well No. 1 typically produces water with a nitrate concentration of 40 to 43 mg/L and only serves as standby capacity. Two other wells produce water with nitrate concentrations ranging from 22 to 38 mg/L. Studies of the local area groundwater basin and recent drilling of test wells show nitrate levels increasing rapidly since 1990 with groundwater containing low nitrate concentrations not within the area of the existing water distribution system. Well No. 5 has developed water quality problems with TDS concentrations consistently exceeding the MCL, averaging approximately 1,200 mg/L. Well No. 1 has been in operation over 60 years and produces sand that enters the distribution system. Previously, the City had to replace a well when the casing collapsed due to sand.	3,500,000	1,756	5,311 11	Merced	11	2007

3368 4110010	4110010-043	Montara Water and Sanitary District	Iron and Manganese Treatment and Rehabilitation at Portola 2 Well	This project will involve chemical rehabilitation of the existing Portola No. 2 well and installation of wellhead treatment for iron and manganese.	Ν	0	с	The District owns and used to operate Portola Well No. 2. Water from the well showed high levels of iron and manganese and the well was taken out of service for this reason. This project will allow for chemical rehabilitation of the existing groundwater source and putting it back in service with wellhead treatment for iron and manganese. This project will enhance the District's water supply portfolio by putting an existing source back in service.	135,000	1,640	5,412 17	San Mateo	Ι	2009
3369 2410006	2410006-002	DELHI CWD	Iron and Manganese	CONSTRUCT A STORAGE TANK WITH A BOOSTER SYSTEM TO STORE AND PUMP TREATED WATER.	N	0	с	THE WATER SYSTEM IS EXPERIENCING PROBLEMS WITH IRON, MANGANESE, AND NITRATE. THE NITRATE LEVELS ARE BELOW THE MCL.	1,500,000	2,254	5,548 11	Merced	Ш	1998
3370 3310800	3310800-002	California Rehabilitation Center - Norco	Manganese Treatment	Add Mn removal treatment system	Ν	0	с	CRC's wells produce Mn from 400 to 1200 mg/L. Due to this level this system has to be flushed out to get rid of the oxidized Mn.	550,000	1,600	5,730 20	Riverside	V	1998
3371 1010005	1010005-001	Firebaugh City	Iron and Manganese Treatment	INSTALL TWO NEW FILTERS AT EACH PLANT SITE AND CONSTRUCT A BACKWASH WATER RECLAMATION SYSTEM AT EACH PLANT SITE.	N	0	с	THE CITY'S TWO IRON AND MANGANESE REMOVAL PLANTS DO NOT HAVE ENOUGH FILTERS TO RELIABLY TREAT ALL THE WELLS THAT ARE PUMPED TO THE TWO PLANTS.	1,073,500	1,347	6,500 23	Fresno	ш	1998
3372 2710020	2710020-001	Pajaro Community Services District	Manganese Treatment	Install a treatment plant to eliminate or reduce manganese to an acceptable level.	Ν	0	С	Well 01 is very high in manganese.	450,000	742	6,500 05	Monterey	Ш	1998
3373 1910085	1910085-005	MAYWOOD MUTUAL WATER CO. #2	5207 Maywood Avenue Treatment Plant	To start the project off, we will conduct a pilot test on our well to attain the desired filtration rate that will be used in the design. Once the design is ready, we will take all the necessary steps to install it at our facility. Once it is installed, the necessary tests will need to be done to ensure proper operation. Once everything is setup to run properly, we will take water samples to ensure the water is safe then we start up the treatment plant.	N	0	с	Our well location at 5207 Μaγwood Ave. is over the MCL for iron and manganese.	1,500,000	1,908	6,700 16	Los Angeles	IV	2012
3374 2710005	2710005-001	Castroville Community Services District	Increasing TDS / salinity	Drill new well deeper or further from intrusion area	Ν	0	С	Sea water intrusion close to main well	500,000	1,544	6,722 05	Monterey	Ш	2004
3375 3410033	3410033-004	Florin County Water District	Degraded water quality	Treatment plant and water storage tanks.	Ν	0	С	Declining water table with a degradation of water quality and decreasing production ability.	100,000	2,235	7,260 09	Sacramento	I	1998
3376 1910160	1910160-008	TRACT 349 MUTUAL WATER CO.	Well No. 3 Manganese Filtration System	Install filtration equipment on Well No. 3 in order to operate without violating the secondary MCL for Manganese	Ν	0	с	Well No. 3 historically exceeded the secondary MCL for Manganese for over 10 years. A permit amendment issued that waived the secondary MCL to operate the well expired in November 2008. Well No. 3 is now operating on extended permit amendment that waives the Manganese secondary MCL until November 6, 2017. After November 2017 a treatment processing equipment must be in operation to be able to operate without violating the secondary MCL for Manganese. Well No. 3 is our primary source of water supply to the community.	500,000	908	7,500 07	Los Angeles	IV	2011
3377 3410002	3410002-001	SCWA - Arden Park Vista	Iron and Manganese Treatment	Install wellhead treatment facilities (greensand filters).	Ν	0	С	Levels for iron and manganese exceed MCL.	1,300,000	2,999	9,887 09	Sacramento	I	1998
3378 5510001	5510001-003	TUD - Sonora/Jamestown Water System	Iron and Manganese Treatment for Groundwater	ADD A 300 GPM IRON AND MANGANESE REMOVAL SYSTEM FOR THE WELL.	N	0	С	THE JAMESTOWN AREA OF THE SYSTEM DOES NOT HAVE SUFFICIENT PRESSURES DURING PEAK DEMAND PERIODS. THIS FORCES THE USE OF A WELL THAT HAS EXCESSIVE IRON AND MANGANESE LEVELS.	128,000	4,342	10,294 11	Tuolumne	ш	1998
3379 5610011	5610011-010	Santa Paula Water System	Iron and Manganese Treatment	Design & construct iron and manganese removal treatment facility at Well #1B site to treat approx. 1,500 gom.	N )	0	С	Well #18 needs an iron and manganese removal filter to comply with the secondary standards.	750,000	7,150	29,281 06	Ventura	IV	1998

3380 1910028	1910028-005	CRESCENTA VALLEY CWD	Installation of MTBE Removal Treatment System at CVWD's Mills Plant Manganese Treatment	The purpose of this application is to secure funding to assist CVWD with the financial cost for remediation an removal of methyl tertiary butyl ether (MTBE) within the Verdugo Groundwater Basin. In 2006, MTBE was discovered in CVWD's groundwater Well 7 above the MCL of 13 mg/L and in Well 1 above the Secondary Standard of 5 mg/L in accordance with Article 5.5 - Primary Standards - Organic Chemicals of Title 22, Tab 6444+A.In 2007, the MTBE level in CVWD's Wells 1 an 7 dropped to below detection limit for reporting of 3.0 mg/L, but was between 2.0 mg/L and 0.5 mg/L.Starting in 2007, CVWD began working with Regional Water Quality Control Board on the clean-up of gas station sites.In July 2008, Well 7 was put back into service and MTBE levels remained low. However, in September 2008, the MTBE level in Well 5 rose to 14 mg/L and it was taken out of service. Since then, the MTBE level has gone up to 47 mg/LCVWD water supply consists o local groundwater and imported water from Metropolitan Water District of Southern California (MWD) via Foothill Municipal Water District. Currently the ration of groundwater to imported water is a 60/4 split. We are limited by CVWD's agreement with FMW and, the amount of water we can purchase is also limited by FMWD's distribution system, which is currently under maximum capacity conditions.CVWD also has an emergency water supply connection with A modular treatment plant was designed for 300 GPM	N nd ole ol of VD VD	0	c	The purpose of this application is to secure funding to assist CVWD with the financial cost for remediation and removal of methyl tertiary butyl ether (MTBE) within the Verdugo Groundwater Basin. In 2006, MTBE was discovered in CVWD's groundwater Well 7 above the MCL of 13 mg/L and in Well 1 above the Secondary Standard of 5 mg/L in accordance with Article 5.5 - Primary Standards - Organic Chemicals of Title 22, Table 64444-A.In 2007, the MTBE level in CVWD's Wells 1 and 7 dropped to below detection limit for reporting of 3.0 mg/L, but was between 2.0 mg/L and 0.5 mg/L Starting in 2007, CVWD began working with Regional Water Quality Control Board on the clean-up of gas station sites.In July 2008, Well 7 was put back into service and MTBE levels remained low. However, in September 2008, the MTBE level in Well 5 rose to 14 mg/L and it was taken out of service. Since then, the MTBE level has gone up to 47 mg/L-CVWD water supply consists of local groundwater and imported water from Metropolitan Water District of Southern California (MWD) via Foothill Municipal Water District. Currently, the ration of groundwater to imported water is a 60/40 split. We are limited by CVWD's agreement with FMWD and, the amount of water we can purchase is also limited by FMWD's distribution system, which is currently under maximum capacity conditions.CVWD also has an emergency water supply connection with Manganese secondary MCL exceeded; need to install treatment system to remove manganese and iron.	3,990,000	8,133	38,000 15	Los Angeles	IV	2009
				but was never installed before the well was abandone. This project will construct a shelter large enough to accommodate this plant.	ed.									
3382 1910047	1910047-001	HAWTHORNE-CITY WATER DEPT.	Iron and Manganese Treatment	Reconstruct treatment plant.	Ν	0	С	Existing Fe/Mn removal facility is in need of modifications and upgrades.	2,000,000	6,151	43,111 22	Los Angeles	IV	1998
3383 5610019	5610019-002	CAMARILLO WATER DEPT	Iron and Manganese Treatment	Construct Fe & Mn, hydorgen sulfide removal filtration treatment facility for one of the three wells with additional plants proposed in the future.	n N	0	С	Wells need a filter to comply with the iron and manganese secondary standards.	2,867,700	12,522	44,831 06	Ventura	IV	1998
3384 5710001	5710001-006	City of Davis	Well 34 - New Deep Well and Well Treatment for Source Water Capacity	Project Description: Construct new deep aquifer Well : and well treatment system to help supply current demands, comply with manganese secondary MCL levels, and improve source water quality for the city's wastewater treatment plant. The overall purpose of th new deep aquifer Well 34 and well treatment system i to replace lost well capacity to the City of Davis by providing a reliable source of high quality potable wate that meets all regulatory requirements and results in the lowest overall cost to the consumer. Specific proje objectives are to: • Provide necessary groundwater supply lost from wells removed from service and compensate for historic increase in demand. • Constru the well treatment system to obtain better water quality.• Meet current and anticipated primary and secondary drinking water standards established by CDPH.• Improve aesthetic water quality and reduce constituents of concern in wastewater supplied to the City's wastewater treatment plant to minimize potenti for violating current or anticipated NPDES permit requirements.The new deep Well 34 will be completed into the deep aquifer (to a depth between 700 and 20 feet below ground surface) with a pumping capacity of 2,250 gpm. The new well will help supply current demands and replace 30 percent of the supply lost fro the abandoned intermediated depth wells. The new well	34 N he is eer ect ial d 00 f	0	c	Problem Description: Significant water quantity problems caused by source water capacity are insufficient to supply current demand. The City of Davis relies solely on groundwater to meet 100 percent of its potable water demand. Since 1917, the City of Davis policy had been to utilize the intermediate depth aquifer. Therefore the current wells can range from 22 to over 50 years old. Since 1987, the City has had to remove seven intermediate depth wells from service due to age, poor water quality, production, and/or operations and maintenance problems. The total average well capacity removed from service is approximately 6,050 gpm, resulting in a significant water quantity problem and an inability to supply current demand. Since 1992, the city policy changed to require that all new wells be installed in the deep aquifer where the supply is better and of higher quality. A new deep aquifer Well 34 is required to replace lost well capacity to the City of Davis and meet current demands. The City strives to provide the best water quality possible to its customers. The intermediate depth aquifer has experienced water quality problems including elevated levels of calcium, manganese, TDS, nitrate, boron, hexavalent chromium, and selenium. Studies indicated that better water quality exists in the deep aquifer, with much lower levels of hardness, selenium, total salinity, nitrates and other	3,750,000	16,339	68,420 09	Yolo	I	2009

3385 4210011	4210011-001	SANTA MARIA WATER DEPARTMENT	Santa Maria Groundwater Treatment Pilot Program	In 2008, the City of Santa Maria completed a feasibility study for groundwater treatment that determined that reverse osmosis or electrodialysis reversal treatment on a side stream of the groundwater supply are likely to be the two most cost-effective treatment options for addressing the constituents of concern in the City's groundwater. Both of these technologies are sensitive to specific water quality, and may or may not work as expected. Other water suppliers implementing similar technologies have benefited from pilot studies to determine if the water supply has some constituents that negatively impact the use of the technology, and to gather data necessary for the design of a cost-effective full scale facility. The City's pilot project would provide this same opportunity on a water supply with different water quality.	Ν	0	C	The primary concerns regarding Santa Maria groundwater are the Total Disolved Solids (TDS) with a concentration ranging from 600 parts per million (ppm) to 1,200 ppm and a long-term average of 844 ppm; and nitrate, with concentrations of 70 mg/L in two of six production wells. Currently groundwater represents approximately 35% of the the City's water supply. The remainder of the water supply is imported water received through the State Water Project. A water sale between the City of Santa Maria and Nipomo Community Services District (NCSD) mandated per the Santa Maria Groundwater Litigation, Lead Case No. 770214, requrs that NCSD receive a minimum of 2,500 acre feet of water minimum from the City of Santa Maria to cure their basin overdraft. With next year's anticpated State Water allocation of 10% it is necessary to begin groundwater treatment to service this jurisidiction with a quality water supply through groundwater treatment at the City's Blending Facility. Santa Maria holds the rights to 27,095 acre feet of water from appropriative rights validated through the litigation as well as Twitchell Dam Project yield. In order to make use of these much needed resources, treatment must occur. The current production volume of groundwater is 4,940 acre feet of water. The anticipated production would increase to up to 7,440 acre feet of water with treatment.	1,000,000	21,204	83,756 06	Santa Barbara	IV	2008
3386 4210004	4210004-018	GOLETA WATER DISRICT	Anita Wellhead Treatment Project	<ul> <li>Preliminary design is 75% complete. Complete final design specifications and construction drawings, construct wellhead treatment system incoporateing Iron removal by oxidation and filtration, along with TTHM formation reduction process (to be determined in final design).</li> </ul>	Ν	0	С	Anita well is now producing levels of Iron and TTHM above the MCLs, of each contaminate. Well head treatment is required to operate this well on a continuous basis.	405,000	16,088	84,000 06	Santa Barbara	IV	2011
3387 4310012	4310012-003	City of Santa Clara	Manganese Treatment - well 19	Investigate the problem and then do whatever construction is found to be necessary.	N	0	С	The manganese level in Well 19 exceeds the MCL.	300,000	26,610	105,831 17	Santa Clara	II	1998
3388 5610017	5610017-014	VENTURA WATER DEPARTMENT	Saticoy Conditioning Facility Renovation	This 2009 Water Master Plan capital improvement project involves the renovation of the Saticoy Conditioning Facility (Project) to 7 MGD. Some of the existing facilities and equipment can be utilized or by retofit and upgrade during construction. The existing plant footprint will not be increased beyond what it is now.Three groundwater wells will be connected to the Saticoy Plant and include the existing Saticoy Well #2 (1,000 gpm) and the County Yard Well (2,000 gpm), and the future Saticoy Well #3 (2,000 gpm) expected in 2010. Only two (2) wells are expected to pump to the plant during operation. The plant production will range between 4.3 to 5.7 MGD.The Project will include the following: Additional filters to remove iron and manganese, refurbishment of the existing filters and replacing media, replace all valves and include Device- net capability, replace instrumentation, automated control upgrades, retrofit controls for decant/sludge system, install plant site security system by connecting to City's emergency response resources and upgrade the electrical room. The Project includes the replacement of sodium hypochorite disinfection system with gaseous chlorine. Gas chlorination is the City's standard and is used at the Avenue and Bailey treament plants and operated in compliance with Federal Risk Management Plans and State Accidential Release Program. This includes the following: Replace the	Ν	0	c	Iron and Manganese treatment is required for the Santa Paula Basin groundwater wells located on the eastside of the City. Throughout the Santa Paula basin iron levels flutuate widely and periodically exceed the SMCL, and the manganese levels continuously exceed the SMCL by 3 to 10 times. The renovation of the existing treatment plant (Project) is recommended in the 2009 Water Master Plan as a means to continually meet iron and manganese SMCLs, utilize local groundwater supplies to the fullest extent, replace losses of surface water supply, maintain the existing level of water supply, and provide for drought-proofing, backup and redundancy of the water supply. This project will not increase the overall supply of water for the City. The Ventura River surface water supplies are the highest quality and lowest cost water available to the City. However, the Ventura River supply is subject to limitations due to cyclical drought shortage conditions, and operational contraints during the summer and fall due to the endangered steelhead trout. A loss of about 2,000 acre-feet is projected each year to help sustain and restore fish habitat and passage. Additional supplemental and more reliable groundwater supplies are needed to offset the loss of the less reliable surface water supply and this amount is about 2,000 acre-feet. This also includes expected drought shortages from the wholesale surface water supplier, Casitas Municipal	11,000,000	31,312	107,490 06	Ventura	IV	2009

3389 1910213	1910213-003	TORRANCE-CITY, WATER DEPT.	Iron and Manganese Hjydrogen Sulfide Treatment	A groundwater treatment facility is proposed that will improve water quality by eliminating odor complaints and by meeting secondary standards for iron and manganese. The proposed facility will also mitigate possible future contamination by the	N	0	С	Wells contain hydrogen sulfide that has caused customer odor complaints, also iron and manganese concentrations are exceeding secondary standards. In addition, a saline water plume is encroaching on the groundwater production area,	7,027,000	26,432	113,136 22	Los Angeles	IV	1998
3390 3310009	3310009-006	Eastern Municipal WD	Iron and Manganese Treatment	Install wellhead treatment facilities to remove these contaminants and meet standards.	N	0	C	Iron, Mn, and hydrogen sulfide in the groundwater in the San Jacinto area have rendered the recently drilled Quandt Well unusable for domestic use.	1,241,000	141,243	414,710 20	Riverside	V	1998
3391 2500513	2500513-002	MJUSD-Arlington Elem. School	Manganese Treatment	Drill a new well in a strata that meets the MCL for manganese.	Ν	0	Р	The manganese level in the existing well exceeds the MCL for manganese.	44,850	1	35 01	Modoc	I	1998
3392 4900703	4900703-001	Oak Grove School	Iron Treatment	Install filtration or ozonation system with holding tank.	Ν	0	Ρ	Well water is discolored (iron >MCL) and often has smell. Water seems corrosive.	30,000	7	350 18	Sonoma	Ш	1998
3393 4900710	4900710-001	Twin Hills School Dist-Apple Blossom Sch	Deteriorating water quality	Drill new well, install iron & manganese and pH treatment, separate drinking water from irrigation water.	Ν	0	Ρ	Corrosive water, high iron & manganese, drawing sand, high turbidity, periodic bacti problem.	100,000	1	400 18	Sonoma	II	1998
3394 4900707	4900707-001	Twin Hills School Dist-Twin Hills School	Deteriorating water quality	Drill new well, install iron & manganese and pH treatment, separate drinking water from irrigation water.	Ν	0	Ρ	Corrosive water, high iron & manganese, drawing sand, high turbidity, periodic bacti problem.	105,000	2	440 18	Sonoma	II	1998
3395 1500296	1500296-001	FULLER ACRES MUTUAL WATER COMPANY	Consolidation Project with Lamont PUD or Arsenic Treatment	Install 3000 feet of pipeline to connect to Lamont PUD; replacement of 7,000 feet of undersized and old distribution system with a 6-inch PVC pipe, installing 185 meters, and destruction of existing system wells.	0	45	С	Well 01 produces water with arsenic 12 ug/L which is above the new EPA arsenic MCL of 10 ug/L. Also our distribution system piping is over 30 years old and will need to be replaced when consolidating with Lamont PUD. We will also need to install meters on 185 service connections.	1,200,000	200	571 19	Kern	Ш	2007
3396 1000105	1000105-002	MADISON ELEMENTARY SCHOOL	Madison Elementary Connection to City of Fresno Water System	The project will consist of a preliminary design report. The report will analyze the alternative solutions prior to commencing with the design and construction. One potential solution is connecting the potable lines to the City of Fresno water system located approximately one (1) mile to the East, while maintaining the existing well for irrigation purposes. This is the preferred solution as the City system is already expanding in the school's direction and will eventually supply development surrounding the school. Another potential solution includes treatment of the existing well using either lon Exchange, Reverse Osmosis (RO), Lime Softening or Electrodialysis Reversal (EDR). These methods of treatment are effective but often include ongoing monitoring and maintenance. A third alternative is the construction of a new well. A test well would be drilled, zone tested, and analyzed for water quality prior to construction of a production well.During the preliminard design report phase, Central Unified School District (CUSD) will discuss the options with the City of Fresno and the feasibility of connecting to their system. Once the analysis has been completed, the construction documents will be prepared and the project will be put out to bid.	O Y	45	Ρ	The Madison Elementary School water system consists of a single well that serves approximately 350 users (students and staff). The school is located at 330 South Brawley Avenue, Fresno, CA (Northeast corner of Brawley and Madison Avenues). The site consists of approximately 18 acres and is comprised of buildings, playgrounds, fields, parking lots and other typical elementary school facilities. The site is approximately one half (1/2) of a mile west of the City of Fresno, and approximately one (1) mile away from the existing City water system. The site is inside of the current City of Fresno Sphere of Influence. As shown in the 2009 Consumer Confidence Report (CCR) dated 02/15/2010, the contaminant level of Barium detect was 27 parts per million (ppm), which exceeds the Maximum Contaminant Level (MCL) of 1 ppm. The CCR also noted a detection of Coliform Bacteria. Additionally, there were subsequent monitoring samples completed in June of 2010 that resulted in the 90th percentile lead concentration of 0.030 milligrams per liter (mg/L). This exceeds the MCL of 0.015 mg/L.	1,090,000	1	722 23	Fresno	11	2011
3397 5510013	5510013-006	TUD - Columbia Water System	monitoring for crypto	INSTALL PARTICLE COUNTERS	0	40	с	LACK OF PLANT MONITORING EQUIPMENT FOR CRYPTO	18,000	1,548	3,646 11	Tuolumne	111	1998
3398 5510013	5510013-001	TUD - Columbia Water System	Lower Columbia Ditch piping	PIPE APPROXIMATELY 800 FEET OF DITCH AND GUNITE LINE APROXIMATELY 2000 FEET OF DITCH.	0	40	с	THE LOWER COLUMBIA DITCH LOOSES WATER THROUGH LEAKS AND IS CONTAMINATED BY LOCALIZED	78,000	1,548	3,646 11	Tuolumne	Ш	1998
3399 5510013	5510013-002	TUD - Columbia Water System	Upgrades for Matelot Ditch and Reservoir	CONSTRUCT RESERVOIR IMPROVEMENTS AND PIPE THE MATELOT DITCH TO PROVIDE SOURCE WATER	0	40	С	THE MATELOT DITCH AND RESERVOIR THAT SUPPLY THE WATELOT DITCH AND RESERVOIR THAT SUPPLY THE WTP ARE SUBJECT TO CONTAMINATION.	1,210,000	1,548	3,646 11	Tuolumne	Ш	1998
3400 2400148	2400148-001	Merced Adventist church Water Syst.		CONNECT TO THE CITY OF MERCED WATER SYSTEM.	0	40	Р	VERY SMALL SYSTEM WOULD BENEFIT BY CONNECTING TO THE CITY OF MERCED WATER SYSTEM.	50,000	1	50 11	Merced	ш	1998

3401 1800521	1800521-001	Herlong Mobilehome Park	Well replacement with Herlong Public Water	Herlong Mobile Home Park would like to consolidate with Herlong Public Utility District and offer Safe Public water to the park and its customers.	0	35	C	Herlong Mobile Home park is currently on a private well that has Periodic total coliform bacteriological failures; no E.coli. Has Failed the bacteriological MCL in August 2010, October 2009, July & August 2008. The park currently serves 23-25 residences but has 61 total spaces (36 vacant spaces) that have water hookups from the well. Herlong Public Water District has a main pipeline on the frontage road outside the park which is less than 100 yards away.	312,000	25	23 02	Lassen	I	2012
3402 4500104 3403 1500579	4500104-001 1500579-001	SUNRISE MOBILEHOME PARK LIFE WATER CO-OP	Life Water Co-Op Sytem #1500579 Water Shortage Funding Request	Consolidate with Clear Creek C.S.D To remedy the insuficient water problem and intertie with Inyokern Community Water District is being requested. The project would require a looped mainline to connect the Life Water co-op to the Inyokern C.S.D. system. mainlines, laterals, water meters, meter boxes and other appurtenances will be required to assure adequate pressure throughout the project area. Engineering services will be required as well as annexation into the I.C.S.D. service area.	0 0	35 35	c c	Existing source is well water. Due to an ongoing water shortage problem we have been issued a compliance order for violation of the California Waterworks Standard since we are required to maintain a minimum of 20 psi at all times. We have not been able to do this due to having to shut the well down to allow the storage tanks to recharge.	100,000 1,500,000	16 18	25 02 30 19	Shasta Kern	I III	1998 2007
3404 1502247	1502247-003	DESERT BREEZE MOBILE HOME ESTATES	Consolidation/Intertie witl Rosamond Community Services District	n Project will include planning (surveying, design, CEQA, connection fee, annexation fee, AVEK fee, Quimby fees, etc.) for consolidation with Rosamond CSD and installation of approximately 2,000 feet of 12-inch diameter pipe, new master meter, valves, RP backflow prevention assembly, fire hydrants, destruction of the existing well (Well 01), and physical disconnecting existing storage tank from distribution system. Approximate Cost breakdown is:Planning (surveying, design, CEQA, etc.); \$31,000Connection & Annexation Fees: \$519,000Construction Cost: \$250,000	O	35	с	We only have one well (Well 01) for domestic water supply. Well 01 has arsenic ranging from 7.5 to 9 ug/L as compared to the arsenic MCL of 10 ug/L. Gross Alpha level in the well range from 15 to 18 pci/L and uranium level is about 15 pci/L compared to the MCL of 20 pci/L. So, we are on the borderline compliance with the arsenic and radiochemical MCL's. TDS in the well is 1,200 mg/L which is over the 1,000 mg/L Upper Secondary MCL for TDS.	800,000	60	95 19	Kern	Ш	2011
3405 1710007 3406 1410001	1710007-001	Kelseyville Co Waterworks District 3 CITY OF BISHOP	Emergency Interconnection with Indian Creek Community Services District Stimulus Funds	Install filtration system an/or connect to Soda Bay water or system. Replace Valley Vista Tanks. Since Well 1 cannot be used as a source of drinking water for an extended period of time due to its high levels of Fluoride, an emergency interconnection for fire- flows or other unplanned emergencies (major water system shut down), would be beneficial. The City's 1 million gallon tank can contribute to increase Indian Creek Community Services District's water system reliability by providing some emergency storage that they currently lack. The connecting system will be able to operate on a regular and emergency basis. Emergencies and circumstances that could require use of the interconnection could be earthquakes, floods, fire, well collapse, power outage, facility maintenance, storage system failure, planned connection system testing, pipe collapse, or water quality. The proposed interconnection will be a permanent connection between the two systems. Both the City of Bishop and Indian Creek CSD will give and receive water. There are currently no source water monitoring requirements for system interconnections. The City must submit a permit amendment application with the California Department of Health Services to add the connection to their list of approved sources.	0	35	c c	One supply source is surface water influenced. Need filtration system and storage. City of Bishop's Well 1 cannot be used as a source of drinking water due to its high levels of Fluoride, which exceeds its MCL. For this reason, Well 1 is regarded as a stand-by well by California Department of Health Services (CDHS). Well 1 also has high levels of Arsenic, close to its MCL. The condition leaves the City's productive wells to Well 2 and Well 4. If either one of the product wells fail (2 or 4), or require extensive maintenance or inspection, the remaining well will not be able to supply the summer demands by itself.Near Highway 168, portions of the City's and Indian Creek CSD's systems are in close proximity to each other, although no connection exists. The proposed interconnection could supply water to either the City of Bishop or the ICCSD by the other entity. The Indian Creek CSD has excess capacity from which the City of Bishop can benefit. Indian Creek CSD has no potable water storage, but the City does have storage. The City's storage could then be available to the ICCSD through the interconnection. This will be especially helpful during summer months, extended downtime of wells, and fire events. The interconnection can be used for emergency, seasonal, or continuous use. The interconnection can flow either direction. The Indian Creek CSD system is located, as the crow flies, less than	1,000,000 619,000	950	2,550 03	Lake Inyo	II V	1998
3407 2400066	2400066-001	PLANADA SCHOOL		INSTALL A PIPELINE TO INTERCONNECT TO THE PLANADA CSD WATER SYSTEM.	0	35	Ρ	THE SCHOOL WOULD LIKE TO CONSOLIDATE WITH THE PLANADA CSD WATER SYSTEM.	50,000	1	605 11	Merced	Ш	1998

3408 1500555	1500555-002	MUSTANG MUTUAL WATER SYSTEM	Consolidation with Vaugh Water Company to resolv High Arsenic in Well Wate	n As part of this project, Mustang MWC may connect wit e the distribution system of Vaughn Water Company r which is between 1 and 2 miles away from the. The project would inlcude approximately 10,000 feet of pipleine to connect with the Vaughn Water Company. The project would also include upgrading of distribution system of Mustang MWC if required by Vaughn Water Company for consolidation.	n	30	C	Arsenic in the system well water exceeds the new EPA arsenic MCL of 10 ug/L.	1,500,000	50	200 19	Kern	111	2007
3409 2700773	2700773-002	Sunny Mesa Water System	Pajaro/Sunny Mesa Community Services District (PSMCSD) - Hudson Landing Area Water Project	PSMCSD currently provides potable retail water service to the Fruitland Avenue area which is immediately adjacent to the proposed Hudson Landing project. The project would consist of water lines, pumps, and storage tanks that would be constructed and connected to PSMCSD's existing water system. The construction of the system for Hudson Landing would result in the retirement and closure of numerous contaminated wells. Additionally it would provide a guaranteed pure and potable source of domestic water supplies to approximately 72 residences in the area. Many of thes residences are occupied by very low income farm worker families that would not otherwise be able to afford the construction of a water system to cure their grave water pollution problems.	es O e d of se	30	c	The Hudson Landing/Wells Road/Spring Road area of the Pajaro/Sunny Mesa Community Services District (PSMCSD) is a very old, low-income residential community that developed in the 1920-1930 period. At the time, fresh, surface water (springs) was originally the source of consumptive supplies, however this source was quickly exhausted and replaced with a proliferation of shallow, unsealed wells on small, individual lots. These lots are also occupied by numerous old, leaking, septic tanks. The proximity of these septic tanks to the numerous small domestic wells has led to chronic and acute well water contamination from nitrates and household wastes.Additionally, in 1995, a catastrophic flood in the Pajaro Valley caused millions of dollars of damage to the infrastructure of the area. There are nineteen (19) aging wells that were damaged in the 1995 flood. This proposed project would connecct to an existing Public Water System.The private wells currently serving the residents have both quanity and severe quality problems with extremely high levels of nitrate and salt intrusion. The nitrate contamination is caused from the numerous failing septic tanks leachate in the areas and from fertilizer run- off from the increasing large number of strawberry and vegetable farms surrounding the areas. The Hudson Landing Road area is a very low income area. The majority of residents in the area revery impoverished	2,840,000	275	880 05	Monterey	Π	2009
3410 5610021	5610021-003	WARRING WATER SERVICE INC		Purchase the Ventura County Water Works District's domestic delivery system in Warring Water Service are and consolidate the system	O ea	30	С	Consolidate the Rissman Mutual Water Company service which was not in compliance with DHS.	300,000	483	1,700 06	Ventura	IV	1998
3411 1500449	1500449-003	FOURTH STREET WATER SYSTEM	Construct New Tank/Repair Old Tank	Increase storage, repair existing tank.	0	25	С	Storage inadeqate.	50,000	24	35 19	Kern	Ш	2007
3412 1502465	1502465-001	PANAMA ROAD PROPERTY OWNERS ASSOC	Arsenic removal app	Arsenic removal equipment. and adddition of 30,000 gallons of storage with booster pump.	0	25	С	Potential problems with arsenic contamination, and storage volume.	600,000	16	50 19	Kern	Ш	2007
3413 1000057	1000057-002	WATERTEK-METROPOLITAN		DRILL THE EXISTING WELL DEEPER	0	25	С	EXISTING WELL HAS HIGH NITRATES AND NITRITES, BUT THEY DO NOT EXCEED THE MCLS.	25,000	26	60 23	Fresno	Ш	1998
3414 1500324	1500324-001	Wonder Acres Water System		Acquire/Design/Instal 3 miles of pipe in the distributio system and abandon existing system in ground	on O	25	С	Positive Samples for E.coli in the Water System	450,000	25	65 19	Kern	Ш	2002

3415 3700937	3700937-002	LAZY H MUTUAL WATER COMPANY	Lazy 'H' Dual Water System Project	By installing pipelines as required to connect the existing wells to the green belt areas irrigation systems, so that this portion would be removed from the domestic system; then connecting a larger diameter connection to the Yuima MWD system so that they would also supply fire protection, we would be off of well water completely for domestic use. This existing, modified system would then be the domestic supply system and would be turned over to and be operated be Yuima MWD.Yuima MWD requires that we turn over a satisfactory system to them which meets AWWA system requirements and standards, so that there is no cost to their existing rate payers. About 2/3rds of our system will meet this requirement, but we would also have to replace some of our infrastructure and add water meters to the service connections in the system. The YMWD system is a much higher pressure system than ours so it would also require a pressure reducing station to feed our system.	о , у	25	c	The Company water supply consists of 2 ground water wells, both of which are now showing nitrate levels at or above the MCL and an emergency connection with Yuima MWD. This nitrate problem has popped up before and gone away, during which time bottled water was use for drinking.Share holders are under a "Do Not Drink Water" order at this time and weekly testing is being conducted to determine if the system can be returned to normal well use. It is obvious that the nitrate problem will surface from time to time creating an MCL violation and should be deti with by a perminent solution.We are using the emergency connection with Yuima MWD for a water supply as required, but it is very costly and our financial condition will not allow long range use of this source.	300,000	37	70 14	San Diego	V	2009
3416 1503145	1503145-001	BERRENDA MESA WATER DISTRICT, DOM	SYSTEM	Pipeline replacement. Installation of rechlorination	0	25	с	Pipe leaks	375,000	8	80 19	Kern	Ш	1999
3417 1500336	1500336-002	BURLANDO HEIGHTS MUTUAL WATER CO	).	Replace 4" diameter mains with 6" diameter.	0	25	С	Undersized water mains	300,000	42	85 19	Kern	ш	2006
3418 1502653	1502653-001	BELLA VISTA MUTUAL WATER COMPANY		DRILL AND HOOK UP NEW WELL IMPROVED CHLORINATION SYSTEM INCREASE STORAGE. OTHER - DESIGN AND CONSTRUCTION	0	25	с	REACHING CAPACITY OF SYSTEM, (ALLOWED 42 HOOK- UPS) NEED BACK UP WELL, NEED TO IMPROVE WATER TREATMENT, INCREASE STORAGE	80,000	34	86 19	Kern	Ш	1998
3419 3900927	3900927-001	SPRING CREEK ESTATES PWS		CONSOLIDATE WITH CITY OF RIPON. OTHER = DESIGN AND CONSTRUCTION	0	25	С	SYSTEM HAS SINGLE WELL	450,000	36	90 10	San Joaquin	Ш	1998
3420 0800557	0800557-001	Hunter Valley CSD		Replace all of distribution lines with schedule 40 P.V.C. pipe	0	25	С	Distribution water lines are deteriorating and leaking.	75,000	65	96 01	Del Norte	I	1998
3421 1502670	1502670-001	Fairview Water Company, LLC		Replace 2 Cla Val. 4" pressure reducing valves. Replace 1 mile of 4" PVC 40 w/ 4" C900. Add 15,000 gal. plus 2 10,000 gal. storage tanks. Add electrical control lines underground. Set up booster pump. Other - study/design/construction	0	25	C	This system is now twelve years old and we are having problems with the continuous leaks on a mile long portion of the system in addition to pressure problems and inadequate storage tanks	100,000	84	100 19	Kern	Ш	1998
3422 1500252	1500252-001	KERN VALLEY MUTUAL WATER		Have new wel drilled ajoining current system. Other - Construction/other: drilling	0	25	с	SUMMER TIME WATER OUTAGES NEED BACK-UP WELL; reranked to "O" from "E"; system drilled well using own resources	15,000	35	100 19	Kern	Ш	2006
3423 4700546	4700546-001	Cal Ore Trail Mobile Estates		System replacement.	0	25	С	Various water system components are old and near the	50,000	61	102 01	Siskiyou	I	1998
3424 4900584	4900584-001	Timber Cove County Water District		Construct dike where creek banks washed out. Repair	0	25	С	Repair storm damage at source and pumping station. Protect source from future damage	75,000	143	110 18	Sonoma	Ш	1998
3425 4900584	4900584-002	Timber Cove County Water District		Install backflush system & repair pipes (flush lines for future silting).	0	25	С	Source experienced severe silting and storm damage.	20,000	143	110 18	Sonoma	Ш	1998
3426 3103310	3103310-001	EMIGRANT GAP MUTUAL WATER CO.		Replace 820' of 4" steel pipe with 820' of 4" C-900 pipe and construct four new manifolds.	0	25	с	Existing water main is deteriorating; needs replacing.	10,000	43	125 02	Placer	I	1998
3427 1000430	1000430-001	COUNTRY VIEW ALZHEIMER CENTER		CONSTRUCT A NEW WELL.	0	25	С	THE WELL EXCEEDS THE NITRATE AND URANIUM MCL'S. Reranked from E to O (1/10/02)	20,000	2	125 23	Fresno	Ш	1998
3428 3810003	3810003-001	HHW&P Moccasin Compound-SFPUC		Construct filtration facilities and appurtrnaces.	0	25	с	Need backup filtration for high turbidity events for filtration avoidance.	200,000	35	150 04	San Francisco	Ш	1998
3429 1200671	1200671-005	Benbow W.C.	Filter Renovation	Replace media filter underdrains with slotted stainless steel laterals and re-coat filter tank interior shell and	0	25	С	Existing multimedia, pressure filters have underdrain lateral errosion and high levels of interior corrosion.	70,000	101	150 01	Humboldt	I	2009
3430 3600400	3600400-002	Apple Valley Village MH Est		pppng. Consolidation with Apple Valley Ranchos	0	25	с	Single source system in need of backup source of supply	100,000	93	180 13	San Bernardino	v	2001
3431 3600400	3600400-003	Apple Valley Village MH Est		Mainline replacement	0	25	с	Distribution mainline leaks.	250,000	93	180 13	San Bernardino	v	2001

3432 4600018	4600018-003	Sierraville P.U.D.		<ol> <li>Drill well.</li> <li>Install new 200K gal. tank.</li> <li>Expand pumphouse by 25 sq. ft.</li> <li>Install parallel pumping system.</li> </ol>	0	25	C	<ol> <li>Inadequate water supply; deteriorating collection area.</li> <li>Inadequate water storage.</li> <li>Storage tank for fire protection defunct.</li> <li>No backup system when we experience mechanical failure.</li> </ol>	217,500	102	200 02	Sierra	I	2004
3433 1700546	1700546-002	Clearwater Mutual Water Company	Treatment Plant/Storage Improvements	Install new clarifier and filter and larger storage tank.	0	25	С	5. No storage raciitizes for supplies. The current system is not big enough to produce and store enough water for the current customer water needs This needs to be verified for ranking of project can be any bigher.	225,000	93	250 03	Lake	II	2002
3434 3600156	3600156-002	Lucerne Valley MWC		Purchase and install backup power generator	0	25	С	Frequent power outages interrupting water service	20,000	55	275 13	San Bernardino	V	2000
3435 3600156	3600156-001	Lucerne Valley MWC		Construct mainline	0	25	с	Mainline replacement	150,000	55	275 13	San Bernardino	V	1998
3436 1500542	1500542-001	WILLOW SPRINGS MOBILE HOME PARK		CONNECT TO THE CITY WATER SYSTEM	0	25	С	WATER QUALITY PROBLEMS	50,000	55	300 19	Kern	111	1998
3437 1500251	1500251-001	RIVERKERN MUTUAL WATER COMPANY		UP-GRADE MAINS, CONSTRUCT "LOOP" AND GET RID OF ALL DEADENDS. OTHER - DESIGN AND CONSTRUCTION	0	25	С	NEEDS RELIABLE DISINFECTION EQUIPT. SYSTEM VERY OLD AND HAS MANY "DEAD-ENDS". 3 WELLS PRODUCE TOTAL COLIFORM POSITIVE WATER	240,000	102	336 19	Kern	Ш	2006
3438 5410007	5410007-001	LSID - Tonyville		RADIO SPREAD SPECTRUM TELEMETRY AND CONTROL. OTHER - DESIGN AND CONSTRUCTION	0	25	С	SURFACE SOURCE - RAW WATER STORAGE INADEQUATE REMOTE MONITORING CAPABILITY	80,000	50	400 12	Tulare	Ш	1998
3439 1300616	1300616-001	PALO VERDE COUNTY WATER DIST.	replace wells	Replace existing wells, with two new wells drilled at a better location.	0	25	с	Two wells located near lake may be under the influence of surface water. Have had intermittent bacteriological problems.	100,000	161	410 14	Imperial	V	2000
3440 1500406	1500406-001	TRADEWIND WATER ASSOC.		Hire cirtified agent to sandblast and coat old tank. Need to install additional Air Vaccuum Valves to remove existing problem.	O e	25	с	Old storage tank needs to be refurbished because it is leaking. Air problems in our pressure system	50,000	214	450 19	Kern	Ш	1998
3441 1500406	1500406-003	TRADEWIND WATER ASSOC.		Establish a three phase plan for a new well including a capped well shaft with casing and concrete pad,; pump & electrical load center; excavation & pipeline connection to existing system	0	25	С	Two old wells with unknown water table depth and submersible pump efficiency.	150,000	214	450 19	Kern	ш	2004
3442 3610110	3610110-004	ARROWBEAR PARK CWD		Install fencing around storage tanks	о	25	с	Unprotected storage tank facilities	10,000	942	582 13	San Bernardino	v	2000
3443 3610110	3610110-003	ARROWBEAR PARK CWD		Tank recoating	0	25	С	Interior of storage tank shows signs of rusting	19,500	942	582 13	San Bernardino	V	2000
3444 1500290	1500290-003	EDGEMONT ACRES MUTUAL WATER COMP.	٥	CONSTRUCT TREATMENT FOR ARSENIC. OTHER- DESIGN AND CONSTRUCTION	0	25	С	WELL WITH ARSENIC OVER THE MCL - CURRENTLY BLENDING WATER TO MEET MCL.	500,000	148	600 19	Kern	ш	1998
3445 1500290	1500290-002	EDGEMONT ACRES MUTUAL WATER COMP.	٥	UPGRADE OTHER SYSTEM, PAY OF DEBT AND DISSOLVE OTHER CSD	0	25	С	TWO COMPANIES SUPPLY WATER TO COMMUNITY. OTHER CSD HAS OPERATIONAL AND MANAGEMENT PROBLEM. THEY WOULD LIKE TO CONNECT TO EDGEMONT.	250,000	148	600 19	Kern	Ш	1998
3446 3200104	3200104-002	Grizzły Lake RID-Delleker	Delleker 10" Water Line	The installation will consist of approximately 3000 linea feet of 10" PVC water main and appurtenances. The line will follow existing road and other rights of way from the water tank above town to State Highway 70.	I O	25	С	Fire flows to the southern side of Delleker cannot be met utilizing GLRID's existing water system.	600,000	199	657 02	Plumas	I	2009
3447 3200104	3200104-003	Grizzly Lake RID-Delleker	Delleker Wells Control	This project involves the installation of the following telemetry and control systems:1) Master Station in the Grizzly Lake Resort Improvement District's main office2 An AGM Electronics Well RTU - at the well site3) Data Flow Systems Rail Data Radio - Transmition and receiving radio4) An AGM Electronics Tank RTU - at the Delleker storage tank5) Solar panels to provide power to the tank RTU and radio system6) New float switches for controlling the well pumps	0	25	c	The community of Delleker has two drinking water wells. Delleker well #2 has exceeded the MCL for uranium. Sauers Engineering has proposed a plan to CDPH which will identify the necessary actions to take to correct the violation. This plan identifies that automatic control of the wells is necessary to either prove or disprove that compliance with the uranium MCL can be achieved by blending the water from each well before entering the distribution system.Additionally, radio telemetry and controls would be installed at the Delleker storage tank. This would allow the system to "talk" to one another and controll the on/off cycles of the wells feeding the storage tank.	15,000	199	657 02	Plumas	1	2009

3448 5400792	5400792-004	WOODVILLE FARM LABOR CENTER	Woodville Farm Labor Center new water system	The orginal water system that began in 1937 is still in place, and after 72 years needs to be replaced. The current system that utilizes two well was developed in 1949. The orginal water lines that were previously in place (prior to 1949) were not touched. Over the years more home sites have been added, and the accompanying water lines were added to the orginal lines. Now the lines must all be replaced, starting at the wells, and ending at the last of the 173 home sites. The orginial lines being 70 years old. In addition to the water lines, there are no street located shut-off valves. Any repair work to the system requires turning off all ol the water to the entire project until necessay repairs are made. Last and certainly not the least, is the need for a backup generator system for the water supply. If electricity is lost (Woodville FLC is in a very rural setting , there is no water. Not only does this effect the lack of drinking water, it also means no fire protection, large oo small. We are requesting the replacement of the primary water lines throughout the project. Secondly to better serve the community there is a strong need for localized street level shut off valves. And lastly a viable backup generator for drinking water and fire protection. The manpower requirements for this project would be significant. Five to eight different trade organizations would be utilized, for a total of 20-30 individuals that would be needed to complete the	e f f f r o o	25	C	The Woodville Farm Labor Center (FLC) was built in 1937. It was known then simply as the Woodville Labor Camp. Since its inception, the center has been through remodels and modernization projects large and small. Plus over the years, additional housing has been added to meet the continued needs for expansion and growth. The Woodville FLC now serves 173 families year around. All of the tenants work in farm related employment. Rents are determined by the tenants income. The rental income from the Woodville FLC covers the basic maintenance and repair of all the home sites. However, there is never enough cash reserves to cover the cost of major improvements to the site. The orginial water system that began in 1937 is still in place, and fully operational. As the center continued to grow, new lines were added, however the original system has never been replaced. Simple math says that we have a 72 year old system that is in serious need of replacement. The sewer system and wastewater treatment plant duplicate the fresh water story. It is also 70+ years old. Rental income generated from the FLC will never be enough to cover the cost of purchasing a new water system. Waiting until the lines collapse before addressing the problem is not a wise decision. A methodical plan designed to replace the old system now is a much better approach to the problem verus waiting for major problems to start occurring at inconvient	1,500,000	181	725 12	Tulare	11	2009
3449 3600086 3450 3600139	3600086-001 3600139-003	Daggett Comm Svcs Dist Jubilee MWC	Water tank replacement, pressure station upgrade and replacement well	Construct transmission line Install new 140,000 gallon tank. Upgrade the ageing components of pressure station. Buy property and dig replacement well including new monitoring system.	0 0	25 25	c c	Lack of transmission line to utilize well Not enought storage capacity to disinfect the system nor provide sufficient water turnover in system to prevent bacteria growth, especially in the summer. We cannot meet safe drinking water standards nor comply with new water works standards for 2009.	200,000 1,500,000	159 171	795 13 855 13	San Bernardino San Bernardino	V V	1998 2009
3451 3110024	3110024-001	Placer CWA - Alta		Construct 500,000 gallon storage tank.	0	25	С	General system improvement. Storage tank insufficient size.	600,000	265	875 02	Placer	I	1998
3452 1710018	1710018-001	Lake County CSA 2 - Spring Valley		Improvements to intake gallery & creek banks. Possibly construct new intake gallery or extend existing one.	γO	25	C	Permanent structure required to protect creek water source from 100-yr stream flows.	200,000	420	1,018 03	Lake	Ш	1998
3453 1010020	1010020-003	Laton Community Services District	Install standby generator	Install a standby generator on District's newest well.	0	25	с	Currently, the District has only one well that has an auxiliary power source, a diesel powered generator that was purchased through a surplus sale. Entire water supply is dependent on this generator during power outages.	145,000	454	1,236 23	Fresno	ш	2002

3454 1610009	1610009-007	Kettleman City CSD	Water Distribution Replacements	The Kettleman City Community Services District is proposing to replace all of the defective gate valves an fire hydrants. The KCCSD staff will have to coordinate systematic approach to the gate valve and fire hydrant replacement program to minimize customer outages.	O nd a t	25	c	The Kettleman City Community Services District (KCCSD) water distribution gate valves were installed in the early 1970's. A large major of the original gate valves will not close, or remain frozen in the "open" position. Likewise, it is also possible for the working gate valves to become stuck in the "closed" position. When repairs or connections to the distribution system are made, the gate valves must be closed. Due to the failed condition of the many valves, it first becomes necessary to determine the location of the properly functioning valves nearest to the repair area. Often, a large portion of the system must be shutdown to isolate the repair site, which can disrupt water service to a significant portion of the population for a narea varying from 2 to 6 blocks, or 30 to over 100 residences, to be without water at one time during the initial repair work. These repairs also affect schools and businesses.On many occasions the connections are made in a "wet" condition with water flowing down the street because the gate valve(s) will not close. When the require flushing and sanitizing of the water distribution system. The majority of the KCCSD fire hydrants were also installed in the early 1970's, and are not equipped with break off risers and check valves. Thus, the only method available to close the hydrant when unanticipated	1,300,000	356	1,499 12	Kings		2009
3455 1610009	1610009-001	Kettleman City CSD		INSTALL UV DISINFECTION AND GAC FOR TREATMENT. OTHER - DESIGN AND CONSTRUCTION	. 0	25	С	GAC TREATMENT PROVIDED FOR BENZENE IN TWO WELLS-TASTE AND ODOR CONCERNS UNRESOLVED	260,000	356	1,499 12	Kings	ш	1998
3456 1210022	1210022-007	Resort Imprvmt. Dist. #1		A "Cumulative Impact Study" for Telegraph Creek drainage.	0	25	с	Need Department requested study of impact of development on source. System has service connection limit based on intake in possibly vulnerable location.	50,000	513	1,500 01	Humboldt	I	1998
3457 1210022	1210022-010	Resort Imprvmt. Dist. #1		Engineering design and construction of pipe line.	0	25	с	Inferior grade of steel pipe in distribution system. Mains have been constant source of leaks.	2,841,000	513	1,500 01	Humboldt	I	1998
3458 1210022	1210022-004	Resort Imprvmt. Dist. #1		Upgrade existing intake facility.	0	25	С	Operational problems with intake facilities constructed in 1965.	195,000	513	1,500 01	Humboldt	I	1998
3459 5410012	5410012-003	Strathmore Public Util Dist		INSTALLA TRAVELING WATER SCREEN IN THE EXISTING CANAL STRUCTURE.	i O	25	С	DISTRICT SOURCE IS FRIANT-KERN CANAL. THE TURNOUT FROM THE CANAL HAS A SCREEN WHICH IS MANUALLY CLEANED AND BUILDS UP WITH ALGAE.	110,000	479	1,904 12	Tulare	Ш	1998
3460 3310047	3310047-002	Cabazon Water District		See attachment B	0	25	С	Construction of 32,500 LF of 16" and 12" diameter pipeline in response to a system review by DOHS.	1,800,000	875	2,229 20	Riverside	v	1998

3461 1310008	1310008-002	Westmorland, City of	City of Westmorland Reservoir Rehabilitation Project	Due to the high level of coating blisters, it is important that the City of Westmorland re-coat the two reservoirs and replace the roofs. This cost is extremely expensive for this process. The City would also like to have the roofs replaced as well as having the exterior of the reservoirs painted as well. As noted in an underwater inspection, internally the center column is in need of re-coating; the roof underside costing is rated as fair to poor and the roof underside affected zones are to large to patch. It was also recommended that the float guide wire be replaced with a new one of the proper length; the beam end coating in the last 2 - 3' of the beams is in poor condition in all cases and roof underside coating is in poor condition also. Having had an Underwater Inspection performed and the recommendations in hand the City of Westmorland is ready to move forward with implementing the recommendations as soon as funds are awarded.	O f	25	с	Deterioration of the roof underside and scale formation/metal loss is beginning to appear. The underwater conditions of the water reservoirs are as follows: the big tank (0.78 MG) is more severely affected than the small (0.35 MG) tank. In the large tank, all patches placed are in poor condition. A moderate size rust tubercle is found at each of the patch sites. In addition, there are many patches of coating blisters on the floor and to a lesser extent on the wall and center column. Where the blisters were exposed, they break to the steel. The rectifiers should be monitored every two weeks or monthly at the most by in-house personnel. The City's residents were notified "Boil Water Order", as the water contains a high level of chlorine residual.Although the reservoir tanks were built in the year 2000, it is unsettling as to why the rust tubercles are so large.	800,000	601	2,444 14	Imperial	v	2009
3462 1710001	1710001-008	Clearlake Oaks County Water District	Clearlake Oaks 2007 Infrastructure Improvements-Main Replacement	Install 4500 feet of PVC main to replace existin concrete asbestos mains in the Caltrans right of way.	2- 0	25	С	Asbestos mains are failing due to age and ground movement, causing potentially catastophic highway failure. Booster stations have no back-up power causing low pressure problems, potentially allowing backsiphonage and contamination.Replace 4500 feet of asbestos main.	501,500	1,667	2,458 03	Lake	II	2007
3463 1710001	1710001-010	Clearlake Oaks County Water District	Rehabilitate Surface Wate	er Funds from this project would be used to install and construct the following: - A 400kW propane back-up generator at the water treatment plant A liquid feet chlorine system - A 75,000 gallon backwash tank and recovery system - A HiPox generator to reduce formation of DBPs and UV system - Rehabilitate ozone system - Replace two 432 gpm pressure filters	O d	25	C	Surface water treatment plant does not currently have a reliable generator to operate the plant during power outages. Power outages are experienced at least several times a year.A backwash recovery system at the WTP would alleviate pressures on the wastewater system and allow the plant to recycle at least 10% of the volume produced at the plant. The current chlorine gas feed system is dangerous and does not conform to risk management principles or OSHA standards. The District periodically experiences elevated total trihalomethanes and haloacetic acids. The District is experiences turbidity performance inconsistencies with current pressure filters and is concerned about future performance with respect to turbidty requirements to operate plant.	2,100,000	1,667	2,458 03	Lake	Ι	2009
3464 1510009	1510009-002	ERSKINE CREEK WC	Arsenic Treatment Plant	Construct arsenic treament plant.	0	25	с	Arsenic is high but not over the MCL at this time.	100,000	1,211	2,500 19	Kern	ш	2007
3465 1710008	1710008-003	Nice Mutual Water Company		Modify WTP piping to relocate pumps and motor	0	25	с	Treatment plant is subject to inundation by the 100-yr	240,000	1,059	2,500 03	Lake	Ш	1998
3466 1710008	1710008-004	Nice Mutual Water Company		Controls above elevation 1332 ft. Design and construct an automatic filter effluent system and corrosion control system.	n O	25	с	Treatment plant does not have automated filter effluent control system or corrosion control system.	100,000	1,059	2,500 03	Lake	Ш	1998
3467 5410009 3468 4710008	5410009-007 4710008-001	Pixley Public Util Dist City of Mt. Shasta	Install SCADA Distribution Tanks Recoating Project	Install SCADA system Recoating of exterior surfaces of Tanks #2 and #3	0 0	25 25	C C	Wells are not centrally controlled or monitored The exterior of tanks #2 and #3 of the Distribution system have been strongly recommended by California Department of Public health on several occasions, most recently in a letter dated September 26, 2008. The purpose of the tank recoating is to cover the lead based paint coating and seal exterior rust to avoid tank replacement.	100,000 300,000	801 1,675	2,793 12 3,642 01	Tulare Siskiyou	III I	2007 2009

3469 1410001	1410001-002	CITY OF BISHOP	Development of Well 3	The City of Bishop wants to build a new well on City o owned property. The new well will be built to serve as a back up well when either of the two main wells (Well 2 and Well 4) fails. A Request for Proposals for the Environmental Impact Report was released in March, 2007. Also, a one million gallon storage tank and booster station will be constructed to increase the operational and fire flow storage capacity based on the City's current potable water daily demands (Maximum Daily Demand for 2002 4.28 MGD). The construction work includes the installation of a small diameter test well to 1000 feet below the ground surface on the proposed Well 3 site; construction of a well for municipal water supply including casing, pump, motor, and booster station; improvement of well site suitable for a municipal production well including water treatment facilities (chlorination), grading, construction of perimeter fencing and gates, site access, well building, site drainage, well controls, telemetry, and security; provide electricity and communication service to well site; construction of two 12-inch water lines to connect to existing distribution systems.	25	C	The City of Bishop owns and operates three wells from which it supplies water to its customers; Well 1, Well 2 and Well 4. Fluoride levels at Well 1 exceed its respective MCL. For this reason Well 1 can only be used as a stand-by well for a limited duration per California Department of Health Services (CDHS). The Arsenic concentration in Well 1 is considerably higher than in the other wells, and is close to the MCL. The bottom 220 feet of the well was recently capped with concrete to plug zones suspected of supplying water containing significant Fluoride and Arsenic. The capping was not successful at bringing Well 1's water quality into compliance. This condition leaves the City's productive wells to Well 2 and Well 4. If either one of the producing wells fail (2 or 4), the remaining well will not be able to supply the required maximum day demand by itself. Well 1 cannot be used for more than 5 consecutive days and/or more than 15 days in a year per CDHS regulations.	2,403,000	1,161	3,643 13	Inyo	v	2007
3470 2910001	2910001-006	City of Grass Valley	Water Meter Replacemen Project	O Project involves replacing old antiquated water meters with new radio read style water meters (which will improve the City's ability to obtain water meter readings) and their service laterals. This will improve the distribution of treated water to the City's cutomers, reduce the potential for contamination of the City's water distribution system, save the City and its customers approximately \$120,000 per year, reduce wasting of water resources, and improve the City's ability to detect leaks.	25	c	Approximatley 1,800 water meters in the City of Grass Valley are approximately 20 years old and have exceeded their expected service life of 12 to 15 years. These antiquated water meters pose several problems such as their high cost of meter reading, their need for repair and replacement, there tendancy to show low water usage readings (about 15% lower than actual use per AWWA), their difficulty in showing readings for leak detection, and their potential for allowing undetected contamination of the water distribution system. The City of Grass Valley spends approximately \$100,000 each year for monthly readings and \$20,000 for repair/replacement of old meters and service lines. In addition, the old water meters are connected to the City's water system with old service lines that commonly brake, rupture, and fail. These failures cause a potential for contaminantion to the City's system, damage to infrastructure, a significant cost to the City and its water customers, and the wasting of our water	3,115,000	2,328	5,600 21	Nevada	I	2009

resources. Replacement of these water service lines will benefit the City and its water customers.

3471 0410004	0410004-001	City of Gridley	SCADA System	The City of Gridley will install a SCADA system to 0 improve monitoring and control of the water system. The SCADA system will provide essential data regarding water levels, chlorine levels, fluoride levels, system pressures, and other information to ensure a more efficient and safe water system. The project will include installation of a central radio, a SCADA computer, control panels at each well site, and appurtenant equipment.	25	c	The City of Gridley has six wells distributed throughout the city that supply water to the distribution system. The wells are automatically regulated by water pressure in the distribution system. Chlorination and fluoridation are continuously provided at each well site. The sequencing of well operation is currently accomplished by manually adjusting on and off target pressures at each well site. A significant drop in the water table at certain times of year requires a minimum of three water system operators, each at a separate well site, to simultaneously adjust target pressures to achieve proper system operation. The City has one chart pressure recorder located at the Corporation Yard. Pressures at individual well sites can only be read manually at each well site. Chlorine and fluoride levels are checked at each well site once per day. More frequent checks of the chlorine and fluoride levels would improve safe operation of the water system.	690,000	2,058	6,403 21	Butte	I	2009
3472 1110001	1110001-002	City of Orland	Eighth Street Well Construction	A new replacement well will be drilled and put back into O service to meet the City's water capacity needs.	25	С	The "Eighth Street" well was not producing sufficiently and was having iron bacteria problems. The well was abandoned and destroyed.	450,000	2,615	6,525 21	Glenn	I	2009
3473 1110003	1110003-001	Cal-Water Service CoWillows	Willows "City Wide" Wate Conservation Program	r The city wide water conservation program has two elements. A. Indoor: CWSC intend to replace 4,000 bathroom fixtures (Toilets and Showerheads) over a four month period. This will save 124 acre feet of water per year. b. Indoor: CWCS intends to replace 578 ET units. This will save 18 acre feet of water per year.	25	С	CWSC intends to reduce the district total water consumption to match the long term water supply.	1,958,000	2,302	6,680 21	Glenn	I	2009
3474 5110001	5110001-013	City of Live Oak	City of Live Oak Well #5 Nitrate & Arsenic Remova	Treatment of Well 5's arsenic and nitrate is being 0 Investigated at a preliminary level. Current strategies call for Well 5's arsenic to be treated in kind with the City's other wells currently in service, namely coagulation-filtration with a manganese dioxide media. Wellhead treatment of arsenic would treat all of the well's water; intermittent backwash waste would be discharged to the sewer. The arsenic treatment system would be skid mounted and housed in a CMU building for protection given the well's close proximity to the high school. Treatment of nitrate requires additional investigation; however, given the current level of nitrates is only slightly in excess of the MCL, one possible alternative would utilize treatment of a sidestream flow by reverse osmosis (RO) and subsequently blended. Well water would initially all flow into the arsenic treatment system; treated flow would then be split – a sidestream would be treated by RO to remove the nitrate and then returned and blended with the untreated flow to reduce the net nitrate levels in the final treated water. Other treatment schemes are still possible and alternative treatment for mitigating nitrate could be developed pending further investigation.	25	c	Well 5 has historically complied with arsenic and nitrate limits since it was originally drilled in 1983. Since the promulgation of the Arsenic Rule, however, the well's average raw water arsenic concentration of 22 ppb became out of compliance with the revised 10 ppb MCL. In addition, Well 5 recently experienced elevated nitrates. Prior to the Spring of 2007, nitrate concentrations from Well 5 have historically been 3-4 ppm; since then, nitrate levels have increased to 10.5 ppm, which is in excess of the 10 ppm MCL.	1,000,000	2,186	7,475 21	Sutter	I	2007

3475 5110001	5110001-015	City of Live Oak	City of Live Oak Apricot Street from N Street to Larkin Road Water Main Replacement Project	The City of Live Oak will replace the existing water main O from Well No.4 from N Street to Larkin Road with 12- inch pipe, including all fitting, hydrants, valves and other appurtenant equipment required to connect to the existing distribution system, homes and businesses.	25	с	The existing primary water distribution system connecting the City's wells is undersized. The majority of the existing distribution system is 8-inch with the remainder being primarily 6-inch pipe. These mains constitute the backbone of the City's distribution system and currently limit the amount of water that can be distributed through the system for fire suppression. The mains are undersized and cannot meet the demands of Live Oak's growing population.	100,000	2,186	7,475 21	Sutter	I	2009
3476 5110001	5110001-016	City of Live Oak	City of Live Oak Pennington Road East of Highway 99 Water Main Replacement Project	The City of Live Oak will replace the existing Pennington O Road water main from Larkin Road to J Street with 16- inch and 8-inch mains, including all fittings, hydrants, valves, and other appurtenant equipment required to connect to the existing distribution system, homes and businesses.	25	с	In 2003, a 1.4 MG water storage tank was constructed at the City's Memorial Park. The tank is filled by two City wells on the same site (Well 1A and 2A). Discharge from the tank is through a booster pump station capable of pumping 4200 GPM. The discharge water main from the station to Pennington Road is a 16-inch diameter pipe. The main in Pennington Road varies in size from 6-inch to 10-inch and limits the amount of water that can be distributed by the booster pump station. The Pennington Road water main is in the primary east-west distribution main in the City. The main is undersized and cannont meet the demands of the Live Oak's growing population.	380,000	2,186	7,475 21	Sutter	I	2009
3477 5110001	5110001-017	City of Live Oak	City of Live Oak Pennington Road West of Highway 99 Water Main Replacement Project	The City of Live Oak will replace the existing Pennington O Road water main from 350 feet west of DeRee Road to Broadway with 16-inch, 12-inch and 8-inch mains, including all fittings, hydrants, valves and other appurtenant equipment required to connect to the existing distribution system, homes and businesses.	25	C	In 2003, a 1.4 MG water storage tank was constructed at the City's Memorial Park. The tank is filled by two City wells on the same site (Well 1A and 2A). Discharge from the tank is through a booster pump station capable of pumping 4200 GPM. The discharge water main from the station to Pennington Road is a 16-inch diameter pipe. The main in Pennington Road varies in size from 6-inch to 10-inch and limits the amount of water that can be distributed by the booster pump station. The Pennington Road water main is the primary east-west distribution main in the City. The main is undersized and cannot meet the demands of the Live Oak's growing population.	395,000	2,186	7,475 21	Sutter	I	2009
3478 1510041	1510041-005	North of the River MWD	Water Storage Security Wall	The project is the construction of a 6 foot high concrete O block wall, topped with barbed wire. This wall would completly surround the District's water tanks and pumping facilities.	25	с	The purpose of this project is to increase security of the District's water supply and facilities. The water district maintainence yard, and it's two 4.5 million gallon reserviors, is surrounded by a chain link fence. This fence has been repeatedly cut through, and materials stolen and the tanks climbed upon. This plan is to construct a 6 foot high block wall, with barbed wire topping the wall.	320,000	2,025	7,500 12	Kern	III	2009
3479 1710002	1710002-005	Golden State Water CoClearlake System		Install cathodic protection in the treatment plant's O clearwell.	25	С	Cathodic protection in the plant's clearwell is required to prevent corrosion and maintain the integrity of the vescel	20,000	2,238	7,544 03	Lake	II	1998
3480 1710002	1710002-002	Golden State Water CoClearlake System		GAC in contactor #2 will be replaced with regenerated O	25	с	Recent tests performed on the GAC have shown that	25,000	2,238	7,544 03	Lake	Ш	1998
3481 3610032	3610032-001	NEEDLES, CITY OF	Additional Reservoir Capacity and Back-Up Power Capability Request	The addition of a three (3) million gallon tank and two O (2) mobile generators would allow for sufficient additional water storage capacity, and provide back- up power to service the community until recovery occurs from any exigency that might befall the City.	25	с	The City of Needles has existing water storage capacity for 24 - hours. Should a well fail or electricity be down due to microburst, severe flooding, or any of a host of potential causes for longer than 24- hours, the water storage would be depleted and the City would be unable to pump any additional water because the pumps are energized by electricity.	3,950,000	1,770	8,851 13	San Bernardino	V	2008
3482 3610025	3610025-001	JOSHUA BASIN CWD		Construct Surface Water Treatment Plant to minimize O overdraft of groundwater basin	25	с	Groundwater basin in overdraft	2,200,000	4,370	9,000 13	San Bernardino	V	1998

3483 3610025	3610025-007	JOSHUA BASIN CWD	Medical Center Redundancy Pipeline Project	The project consists of constructing approximately 6,000 linear feet of 12-inch diameter PVC or ductile iron water pipeline within existing desert rights-of-way. The construction will also include various appurtenances, including valves, air-vac valves, blow-offs and fire hydrants.		25	c	The District's 96 square mile service area is located in the high desert region of San Bernardino County. The District is part of the Morongo Basin, which includes more than 4,000 square miles and a population of 85,000 with communities from Wonder Valley in the east to Morongo Valley in the west. The only regional medical and trauma center in the 4,000 square mile Morongo Basin is located in the Joshua Basin Water District service area. Currently, that medical center. the Hi-Desert Medical Center, is served water from a single pipeline without a backup system. In the event of a regional earthquake or other disaster, severing of that pipeline would result in significant disruption of the medical center operations. The hospital is located in the same complex as the California Highway Patrol office, the Morongo Basin Sherif's office and the Morongo Basin Superior Court and their water supply would be similarly affected. The District has proposed this project to provide a redundant waterline supply to the medical center reliability of water service under emergency conditions.	175,000	4,370	9,000 13	San Bernardino	v	2009
3484 3610025 3485 3610025	3610025-005 3610025-009	JOSHUA BASIN CWD JOSHUA BASIN CWD	Undersize mainline replacement Booster Station Rehabilitation Project	Replace mains with 8-in diameter pipe The project consists of constructing two package booster pump stations, one to replace the I-Zone station and one to replace the E- and D-Zone stations. The replacement stations will consist of manufacturer provided package pumping systems, housed within simple, prefabricated buildings. Each station will use in- line vertical turbine pumping units. The J-Zone station will have a design capacity of 260 gpm and a total dynamic head (at design flow of 460 gpm and a total dynamic head of 290 feet, while the D-Zone pumps will have a design flow of 550 gpm and total dynamic head of 225 feet. The stations will be constructed on the same site as the existing stations, and the existing stations will be demolished. The stations will have minimal HVAC system sond will be connected to the District's SCADA system for regular monitoring and operation.	0	25 25	c c	120,000 feet of mainline are undersize (<8in diameter) for fire flow The District's water system has been constructed over a significant time period. As such, specific system components are beginning to approach useful life expectancy. Of particular consideration are the District's water booster stations. These stations contain deteriorating and highly inefficient pumping equipment. The District has identified several stations for rehabilitation. In all cases, rehabilitation is focusing on achievement of significantly increased pumping efficiency for District-wide energy conservation, and replacement of aging equipment to eliminate system failure. In addition, the rehabilitation projects have the value-added advantage of decreasing operation and maintenance cost, and providing emergency power facilities to increase system reliabilitythe area has regularly occurring power outages impacting service to customers. As the service area is within an earthquake- prone portion of the state close to the San Andreas full the schedilition of the otations will being the	11,040,000 225,000	4,370 4,370	9,000 13 9,000 13	San Bernardino San Bernardino	v	2007 2009

system up to current standards for public service reliability.

3486 3610025	3610025-008	JOSHUA BASIN CWD	Reservoir Rehabilitation & Relocation Project	The project consists of dismantling an existing 0.5 MG or steel reservoir within the District's "C" pressure zone, and relocating the reservoir to the District's "H" pressure zone. The relocated tank will be co-located on an existing tank site. The relocated tank will be upgraded to include new ladder and safety equipment, and will be connected to the District's SCADA system for monitoring purposes. The District's two-pump J-booster station will have to be moved to make room for the new tank. The booster pumps will be replaced with higher capacity more efficient ones. Minor pipeline alterations will be required at the relocated tank site to reconnect to an existing larger reservoir once the smaller tank is relocated.	25	с	Water service pressure, emergency water storage, and backup fire protection water supply within the District's distribution system is maintained by water storage facilities within each pressure zone. The District has a long-term program of maintaining and expanding these reservoirs for system cost and increasing reliability, the District will relocate and rehabilitate one of its existing reservoirs from one pressure zone to another. This project minimizes economic pressure on already strained steel material availability, and maximizes cost effectiveness for District consumers. The relocated reservoir will be upgraded to current design and public safety standards when constructed. Alternatives to this project would include the design and construction of an entirely new reservoir at approximately two to three times the cost. The relocated reservoir will also reduce the energy consumption of the system's booster stations by providing increased storage and allowing pumping during off-peak hours.	225,000	4,370	9,000 13	San Bernardino	v	2009
3487 0410005	0410005-001	Cal-Water Service CoOroville		Treatment plant upgrades: particle counter, liquid alum O feeder/mixer, current monitor, SCADA system and gaseous chorine containment.	25	С	Surface water treatment plant needs improvements and upgrades to improve operations and reliability. Also need improvements to comply with the Cryptosporidium Action Plan.	220,000	3,928	9,427 21	Butte	I	1998
3488 0410005	0410005-002	Cal-Water Service CoOroville	Oroville "City Wide" Wate Conservation Program	r The city wide water conservation program has two elements. a. Indoor: CWSC intends to retrofit / replace 5,250 bathrooms with water conservation products (toilets & showerheads) and the extimated water savings is 161 acre feet per year.b. Outdoor: CWSC intends to replace 875 ET units and the estimated water savings is 27 acre feet.	25	С	CWSC intends to reduce the districts total water consumption to match the long term water supply.	2,550,000	3,928	9,427 21	Butte	I	2009
3489 5810002	5810002-001	Linda County Water District	Division of fire-water and domestic water systems a Yuba College	The intent of the project is to provide a new dedicated O t campus domestic water distribution system. The existing water system will remain in service providing water for fire suppression and irrigation uses. The proposed water system will consist of constructing a new pipe distribution network of AWWA approved pipe materials such as C900 PCV or ductile iron pipe with sectional control valves. At each building where the connection is converted to the new pipe system a reduced pressure principal assembly will be installed to protect the water system from potential contamination. The whole system will be fed by a new service connection to the public water system. Project costs will include all the hard construction costs as well as design soft costs and service connection fees to the public water system	25	С	The original water supply at Yuba College came from 3 wells on the campus grounds. The 3 wells were systematically shut down between 1977 and 1991 and replaced with county domestic water. The existing water system at Yuba College combines both domestic water and fire water in one water system loop around the campus buildings and facilities. The existing water lines are 50-year old AC pipe (transite) with domestic drinking water coming from these lines. Because of the deteriorating condition of the existing pipeline, the college must separate domestic water from these existing pipes due to the inherent health risks associated with 50-year old transite pipelines and domestic water.	950,000	3,975	10,000 21	Yuba	I	2009

3490 4510001	4510001-001	City of Anderson	North-Central Anderson Public Water System Extension	The City of Anderson has engaged the services of the O engineering firm CH2MHill to prepare environmental clearance documents (anticipated to be either a categorical exemption or a negative declaration under CEQA and either a categorical exclusion or a FONSI under NEPA) and construction plans, specifications, and estimates to bid the construction of an extension of the City;s municipal water system to serve the properties in North-Central Anderson the City annexed in 2005. The project will consist of the installation of approximately 2,950 linear feet of 12 inch water main, 2,300 linear feet of 10 inch water main, and 1,250 linear feet of 8 inch water main, plus laterals and water meters to service 56 properties currently served by private well water. Upon connection to the City's extended service, the private wells will be abandoned in accordance with City and Shasta County Environmental Health standards. The project will interconnect three isolated pressure zones, the City's main pressure zone to the southwest, the Ox Yoke pressure zone to the north, and well #13 to the east which currently provides fire sprinkler service only to two nonresidential properties. Two presently isolated wells will require replacement pumps and to be added to the City's ScADA system. Along the water main extension, 21 fire hydrants will be installed in accordance with the City standard of spacing hydrants not farther than 300 feet apart, improving fire	25	C	The City of Anderson, in response to the requests of area residents and property owners, annexed an area in North-Central Anderson known as "Annexation 04-01 (Alexander, Bellevue, Pinewood and Loop Area)" in February 2005. One of the principal reasons that area residents and property owners desired annexation was to access City water and wastewater systems, as individual leach fields on several small residential lots were performing poorly. Recently, water produced from shallow private wells on these small residential lots have tested positive for fecal coliform. The City and area residents and property owners desire to extend City water service to these properties such that safe drinking water may be made available to these citizens, many of whom are unemployed and poor.	1,217,000	3,077	10,050 02	Shasta		2009
3491 1210001	1210001-002	City of Arcata	Klopp Lake Water Line	The scope of work for this project includes the O installation of approximately 2500 linear feet of 2" water line, including excavation and bury. Also included is the purchase and installation of a drinking water fountain.	25	С	Currently, the Klopp Recreational Lake is used by tens of thousands of visitors a year that come to view birds, launch kayaks, hike and fish. The main parking area is approximately one mile from any potable water source, and the City has receive many requests over the years to install drinking water and restroom facilities. The cost to extend potable water to this location has been prohibitive.	10,000	5,278	16,651 01	Humboldt	I	2009
3492 1210001	1210001-006	City of Arcata	7.5 Kw Solar Power Systen for Alliance Road Pump Station	n A 7.5 kW photovoltaic system would provide almost 100% of the electricity necessary to run the building. The avoided electricity costs would total almost \$2,000 a year. Avoided carbon emissions would be 195 tons a year, equivalent to 643,384 miles of driving or planting 3.4 acres of trees . Additionally, comparable lighting retrofits performed in the City resulted in 6% savings of energy and close to \$80 in avoided energy costs; as energy costs rise, cost savings are expected to improve.	25	с	7.5 kW photovoltaic system and lighting retrofits at the Alliance Road Water Pump Station, \$60,000The Alliance Road pump station is one of the most heavily used water pump stations in the City. From this point, water is delivered directly to much of the community. This pump station is also located in an area that receives an excellent solar window, with minimal shading. Lighting retrofits would need to be performed on this building prior to the installation of a solar system to increase the overall system efficiency. Retrofits are not expected to exceed \$5,000 and would consist of replacing the magnetic ballasts of the existing florescent lighting structure with digital ballasts. Additionally the circuits in the building would be rewired to allow for task lighting. A 7.5 kW photovoltaic system would provide almost \$2,000 a year. Avoided carbon emissions would be 195 tons a year, equivalent to 643,384 miles of driving or planting 3.4 acres of trees. Additionally, comparable lighting retrofits performed in the City resulted in 6% savings of energy and close to \$80 in avoided energy costs; as energy costs rise, cost savings are expected to improve.	55,000	5,278	16,651 01	Humboldt	I	2009

3493 3310016	3310016-011	Hemet, City of	Substandard Water Line Replacement	Replace approximately 10,000 linear feet of existing 2- inch, 4-inch and 6-inch waterline with 8-inch diameter waterline.	0	25	С	The City of Hemt has approximately 10,000 linear feet of substandard waterlines (2-inch, 4-inch and 6-inch). Some of these lines, many of which are in excess of 60 years in age, are showing signs of fatigue in the form of leakage and/or are now undersized for today's fire flow	3,750,000	8,667	20,047 20	Riverside	V	2009
3494 1610004	1610004-004	Corcoran, City of		NEW WATER SYSTEM MASTER PLAN	0	25	С	standards. OLD MASTER PLAN WHICH DOES NOT INCLUDE THE SECOND PRISION (ADDITIONAL 2,200 GPM DEMAND)	100,000	2,878	26,047 12	Kings	Ш	1998
3495 1610004	1610004-007	Corcoran, City of		INSTALL WATER STORAGE AND BOOSTER SYSTEMS, INCLUDING 1 MG RESERVOIR. OTHER - DESIGN AND CONSTRUCTION	0	25	С	WATER SYSTEM EXPERIENCES WATER PRESSURE FLUCTUATIONS	1,200,000	2,878	26,047 12	Kings	Ш	1998
3496 2710017	2710017-003	Marina Coast Water District		Construct a 4,500 linear foot pipeline to supplement existing water line	0	25	С	need sufficient long-term water supply for the Marina Airport	300,000	8,133	34,600 05	Monterey	Ш	2000
3497 2710017	2710017-002	Marina Coast Water District		Replace Bayer Tank	0	25	С	Bayer Tank is not being operated efficiently due to structural deficiencies	650,000	8,133	34,600 05	Monterey	Ш	2001
3498 2710017	2710017-001	Marina Coast Water District		Replace inadequate 300,000 gallon reservoir to meet current and planned demands	0	25	С	need sufficient long-term water supply for the Marina Airport	900,000	8,133	34,600 05	Monterey	Ш	2000
3499 2710017	2710017-006	Marina Coast Water District		Complete feasibility study of system infrastructure to identify corrective action to solve problem	0	25	С	Pipeline pressure losses in the water distribution system	100,000	8,133	34,600 05	Monterey	Ш	2001
3500 3310008	3310008-006	Mission Springs WD	1400/1240 Transmission Line	Install 1240 zone transmission tie in to new well 38 and make modifications to existing well 22 to be able to change from the 1240 pressure zone to the 1400 pressure zone. Requires pipeline installation, tie ins, modify well 22 pump and motor, including new conversion piping from 1240 to 1400 pressure zone. This pipeline work is in concert with the District's other preapplication (Well 38) to acheive repalacement of lost production and reduces Well 38 transmission pipeline costs by approximately 1 million dollars by making the changes to the existing well 22 and pressure zone pipeline construction. All pipeline construction and materials will conform to District Standard Specifications.	O t	25	с	This project will work in concert with the District's othe preapplication "Well 38" to tie in the new well and make changes to an existing well (well 22) to allow greater flexibility and savings in pipeline costs to move water into two different pressure zones. The well project is necessary to replace lost production due to having to place our Well 30 on standby to avoid possible violation of MCL for Uranium. The pipeline project complements and goes hand in hand with the other project preapplication.	1,000,000	11,773	38,500 20	Riverside	v	2009
3501 3310049	3310049-004	Western MWD	Arlington Desalter Biodenitrification Treatment	Western Municipal Water District (Western) proposes construction of a fixed-bed biological treatment (FXB) to remove multiple contaminants from groundwater. The FXB will be used in conjunction with the Arlington Desalter. Based on pilot testing performed by Western, FXB:o Will reduce nitrate by 80 to 90 percent. Following FXB treatment, bypass water will have nitrate concentrations of 5 mg/L or less. Nitrate will no longer be the limiting factor affecting the proportion of bypass water within finished water. FXB in conjunction with the Arlington Desalter will increase the amount of local water meeting drinking water standards by 3.7 mgd over existing levels. O Will avoid the need to expand the Arlington Desalter and associated Santa Ana Regional Interceptor (brine disposal line).o Does not create a concentrated waste stream. The removed nitrate is converted to nitrogen and released to the atmosphere.o Does not add chloride or other salt anions and does not exacerbate basin salinityo Reduces perchlorate in the bypass water. During pilot testing, influent water had perchlorate concentrations of approximately 6 µg/L; after FXB treatment perchlorate concentrations were below the detection limit. The FXB is anticipated to be the first full scale biologically active denitrification facility in the nation. The FXB will use an innovative bioreactor to remove multiple contaminants from groundwater. The FXB facility will consist of a	0	25	c	Existing groundwater in the Arlington Basin does not meet standards for nitrates, total dissolved solids/salts, or perchlorate. This local water supply and the Arlington Desalter are not being used at optimal levels due to water quality issues, particularly nitrate. The standard treatment practice for nitrate, ion exchange, exacerbates the existing salinity issue within the basin. The Arlington Basin in Riverside County is a valuable groundwater resource for Riverside County, particularly those residents that use this groundwater, generally the City of Norco and communities eastward to the City of Riverside, including Jurupa Community Services District. Unfortunately, the Arlington Basin is contaminated due to historic agricultural and industrial practices and groundwater exceeds the MCLs for nitrate (as NO3), salts (as total dissolved solids (TDS)), and perchlorate. Raw groundwater has approximately 87 mg/L nitrate (MCL is 43 mg/L), approximately 1,190 mg/L TDS (MCL is 1,000 mg/L and SMCL is 500 mg/L), and between 2 µg/L to 7.3 µg/L of perchlorate. To utilize the Arlington Basin as a local water supply source, the Arlington Desalter was built and began operation in 1990.The water delivered to customers from the Arlington Desalter is a blend of permeate from the desalting process and groundwater (also called bypass water). Due to the high concentration of nitrate in the bypass water, the amount of water produced for customers is	5,825,000	19,311	60,895 20	Riverside	v	2009
3502 3610039 3503 1200817	3610039-001 1200817-001	SAN BERNARDINO CITY Kneeland School		Construct new well Cajon Canyon Purchase a new pump.	0 0	25 25	C P	Replace older low production well The submersible pump in the collection reservoir is over 15 years old.	400,000 10,000	42,301 1	173,359 13 48 01	San Bernardino Humboldt	V I	1998 2006

3504 2800840	2800840-003	NAPA COUNTY SCHOOLS: POPE VALLEY	Pope Valley School Surface Water Project	e Survey solution options and install upgraded equipment	: 0	25	Ρ	Heavy fluctuations in source water contaminants loading existing treatment system.	110,000	1	100 03	Napa	II	2011
3505 1200546 3506 3600602	1200546-002 3600602-001	Casterlin School Alpine Covenant Conf. Centre	Alpine Camp and Conference Center	Install filtration with increased capacity. The SCADA system to be installed will provide complete control over Alpine Camp and Conference Center's water system. Wells will be turned on and off based on the level of water in the reservoir or other system parameters. When properly instrumented, other system parameters such as well flow and well water depth can be monitored and historically recorded to provide a graphical representation over time. The computer system and software will allow the operator to make changes in the system operation and control the flow of information to the Lake Arrowhead Community Services District.In addition, replacement of plumbing in the distribution system will improve efficiency and enhance conservation efforts.	O O O	25 25	P	Filter system with inadequate capacity. This project is purposed to resolve storage monitoring and regulation problems inherent in our present system. A new SCADA system is needed to resolve this problem. Current methods entail visual monitoring and hand controlled regulation of wells and reservoirs.Furthermore, water distribution is compromised by archaic plumbing that frequently ruptures. Current water system plumbing is need of replacement and upgrading for efficient distribution and conservation.	70,000 108,862	1 1	130 01 250 13	Humboldt San Bernardino	I V	1998 2009
3507 1000206	1000206-002	HOUGHTON-KEARNEY SCHOOL	Houghton - Kearney Well Treatment	The project will begin with a preliminary design report. The report will analyze the alternative solutions prior to commencing with the design and construction. Potentia solutions include treatment of the well using Reverse Osmosis (RO), Electrodialysis Reversal (EDR) or possibly a Chemical Feed System. Additionally, it is recommended that two (2) tanks and a booster pump system be constructed to allow the potable portion of the water to be treated, while the irrigation water is not. The different treatment options will be evaluated during the preliminary design report to make a recommendation. Once the design report is complete, construction documents will be prepared and the project will be put out to bid.	0	25	Ρ	Houghton - Kearney Elementary School's water system consists of a single well that serves approximately 300 users (students and staff). The school is located at 8905 West Kearney Boulevard, Fresno, CA (Southeast corner of Kearney and Westlawn Avenue). The site consists of approximately 8 acres and is comprised of buildings, playgrounds, fields, parking lots and other typical elementary school facilities. The site is approximately five and one half (5.5) miles west of the City of Fresno and approximately five (5) miles completed in June of 2010 resulted in CDPH requiring additional samples to be taken as the copper and/or lead levels exceeded the action levels.	640,000	4	310 23	Fresno	III	2011
3508 4400725	4400725-001	COUNTY FAIRGROUNDS		replace aged water tanks, upgrade or replace two wells	0	25	Ρ	Tanks and wells outdated and deteriorated - system	200,000	1	500 05	Santa Cruz	П	2002
3509 3810006	3810006-001	HHW&P-Early Intake Cpd-SFPUC		Install membrane filtration system with appurtenent facilities.	0	25	Ν	Need backup filtration for high turbidity events for filtration avoidance.	100,000	12	8 04	San Francisco	II	1998
3510 3200154	3200154-001	FRCCSD - TWAIN	New Well	Increase source capacity through additional well.	0	25	N	Existing well has reportedly deminished summertime capacity. No documentation indicating water shortages or outages, however.	45,000	1	25 02	Plumas	I	2002
3511 3810005	3810005-001	HHW&P-O'Shaughnessy Dam Cpd-SFPUC		Filtration system with appurtenent facilities.	0	25	Ν	Need backup filtration for high turbidity events for filtration avoidance.	100,000	8	25 04	San Francisco	Ш	1998
3512 3200155	3200155-001	FRCCSD - HOT SPRINGS CSD	Well Rehab	Regular cleaning of the well casing and possibly provide continuous chlorination down the well casing.	0	20	с	Declining production due to scaling.	40,000	17	13 02	Plumas	I	2002
3513 3200114	3200114-001	Evergreen Motel & Trailer Park	System Improvements	new submersible pump, filtration system, storage tank and pressure pump.	0	20	С	High Iron Content / Sediment - Water Storage	30,000	28	28 02	Plumas	I	2002
3514 0202503	0202503-001	WOODFORDS MUTUAL WATER COMPANY		Pre-app for future unseen needs.	0	20	с	Replace old well.	100,000	16	50 09	Alpine	I.	1998
3515 3900517	3900517-001	ALMOND PARK WATER SYSTEM		RENOVATE WELL, REPLACE PUMP, AND INSTALL AUXILARY POWER. CONSOLIDATE WITH NEIGHBORING SYSTEMS. OTHER = DESIGN AND CONSTRUCTION	0	20	С	WELL IS OLD AND SYSTEM HAS NO AUXILARY POWER.	450,000	20	60 10	San Joaquin	III	1998
3516 1800524	1800524-001	Lassen Mobile Home Park	New Pipe Construction	Replace old pipes.	0	20	с	The system has old pipes.	43.800	30	62 02	Lassen	1	2003
3517 1500540	1500540-003	PINON HILL WATER COMPANY		Replace reservoir.	0	20	C	Twenty-five year old steel distribution reservoir leaks at welded seam.	10,000	38	75 19	Kern	ш	2000
3518 1500434	1500434-001	BISHOP ACRES MUTUAL WATER COMPANY	(	Install a 20,000 gallon storage tank and replace the bowls and any parts and labor that is needed.	0	20	С	Low pressure problems requires the construction of a new 20,000 gallon storage tank and to repair the bowls to help the system run above the 47% to 67% or preferred replace the bowls so that the system runs at	100,000	28	81 19	Kern	III	2002

<sup>100%.</sup> 

3519 0400023	0400023-001	GOLDEN OAKS MOBILE ESTATES	Golden Oaks Mobile Home Park	e Install flow source meter and correct plumbing.Installation of an automatic compressor to maintain proper air-water level.Increase the storage capacity of our well system.Evaluation of source capacity to determine our water systems' ability to meet water works standards, and if it doesn't, make necessary upgrade.Install an emergency generator back up system to operate pump in case of emergency or power failure.	O k	20	С	Outdated Water System	50,000	52	86 21	Butte	Ι	2009
3520 1100405	1100405-001	Black Butte Mobile H.P.	Water/Well System Upgrade	Extend/deepen existing well and/or integrate existing 2nd well on the property into the water system.	0	20	С	Well is at insufficient depth to sustain adequate water supply for the community given the lower water table (drought) and increased use in the area (agriculture and housing development).	90,000	49	94 21	Glenn	I	2009
3521 0400016	0400016-004	BERRY CREEK COMMUNITY SER DIST	Berry Creek Community Services District "Well Replacement", "Additiona Storage Tank".	To complete the new well site we are required to develop the well. To develop the well we must test the al water for contaminants or bacteria, and determine the installation of a test pump. The 72 hour test would determine the viability of the well, and the proper size pump to be installed. Installation of the pump and any electrical or pump water distribution items necessary to complete the project, would be the last step. We need to add another drinking water storage tank to our facility, in addition to developing the new well. The steps for adding an additional drinking water storage tank are determing the proper location and grading of the site; the constrution of the foundation, the constuction of the storage tank itself, and the installation of any electrical or drinking water distribution items necessary. I have determined the overall cost of the projects, by getting some current bids from contractors in our area and also researching the overall process.	0	20	c	Berry Creek is a small community in the foot hills of the Northern Sierra Mountains. The Community Services District is a non profit, all volunteer organization experiencing a number of impotant issues. The first is we have an aging well system. We recently drilled a new well to replace one that is failing! This was vital, because our wells are working extremely hard to keep a safe water level in our only storage tank! The second issue we are experiencing is the lack of enough storage of treated drinking water. We are requesting the funds to add another storage tank to our facility. I have discussed the discrepancy of the number of connections in our district with Elaine McSpadden our County Rep. The proper number of connections should be , 47 not 36. Elaine McSpadden may be contacted at 530-538- 6773. Any questions concerning our facility or operations will be answered by, either Rex Monroe 530- 343-5100 our Certified Distribution Operator or Fredrick Smith 530-589-2234 President of the Berry Creek CSD.	199,000	36	99 21	Butte	I	2009
3522 1500252	1500252-002	KERN VALLEY MUTUAL WATER	Consolidation with Erskine Creek	Kern Valley water system proposes to consolidate with Erskine Creek water company. Erskine Creek is willing t consolidate.The system proposes to connect to Erskine Creek via construction and installation of an approximate 1000 ft pipeline; rehabilitation and replacement of the deteriorated distribution system; installation of individual service connection meters; an connection of the existing wells and storage tank to the Erskine Creek water system. The final project will depend on best engineering practices and cost effectiveness.	O O d	20	c	This water system has two active wells; well 02, and 03. Source water at well 03 has recurring documented TCR failures that resulted in coliform MCL violations within the last three years. Well 03 cannot be taken offline because Well 02 does not produce enough water on it's own to meet the system demand. Both wells together are scarcely meeting current system demand. The system does have a reliable adequate safe water source.	325,000	35	100 19	Kern	III	2008
3523 3901113	3901113-001	WALNUT ACRES		IMPROVE DISTRIBUTION SYSTEM AND INSTALL AUTO- TRANSFER SWITCH FOR AUXILIARY POWER UNIT. CONSOLIDATE WITH OTHER SYSTEMS. OTHER = DESIGN AND CONSTRUCTION.	O N	20	C	SYSTEM NEEDS SYSTEM WORK TO BETTER DISTRIBUTE WATER	500,000	30	100 10	San Joaquin	Ш	1998
3524 3900512	3900512-001	MORADA ACRES WATER SYSTEM		IMPROVE DISTRIBUTION SYSTEM WITH NEW, LARGER LINES. INSTALL AUXILIARY POWER. CONSOLIDATE WITH NEIGHBORING SYSTEM. OTHER = DESIGN AND CONSTRUCTION	O H	20	С	SINGLE WELL SYSTEM WITH DETERIORATING STEEL LINE.	250,000	32	105 10	San Joaquin	Ш	1998
3525 3900523	3900523-001	MORADA MANOR WATER SYSTEM		REPLACE WELL AND INSTALL AUXILIARY POWER. CONSOLIDATE WITH NEIGHBORING SYSTEM. OTHER = DESIGN AND CONSTRUCTION	0	20	с	SINGLE WELL SYSTEM WITH DETERIORATING WELL.	450,000	32	109 10	San Joaquin	Ш	1998
3526 4900788 3527 1100237	4900788-001 1100237-001	El Crystal Mobile Home Park Willow Glenn Mobile H.P.		Replace pipes and install meters Construct system improvements to correct problem.	0 0	20 20	C C	Aging infrastructure Low on source capacity.	50,000 50,000	56 87	130 18 150 21	Sonoma Glenn	II I	2000 1998
3528 3301018 3529 3900722	3301018-001 3900722-001	ANZA PINES MOBILE HOME PARK MORADA ESTATES PWS		See attached CONSTRUCT PRESSURE TANK AND BOOSTER PUMP. CONSOLIDATE WITH NEIGHBORING SYSTEMS. OTHER = DESIGN AND CONSTRUCTION.	0 0	20 20	C C	Inadequate water supply DISTRIBUTION SYSTEM PRESSURE PROBLEMS	58,878 300,000	52 86	150 20 158 10	Riverside San Joaquin	V III	1998 1998

3530 2700772	2700772-002	STRUVE RD WS #02		Extend the main line from Pajaro/Sunny Mesa CSD to serve this water system	0	20	С	Well is sanding in.	200,000	81	166 05	Monterey	Ш	2000
3531 1500575	1500575-002	SAN JOAQUIN ESTATES MUTUAL		Replace existing lines to every property, estimated cost of each line is \$1.100	0	20	С	Waterlines (service lines) to various properties are breaking are having to be repaired.	66,000	59	220 19	Kern	Ш	2005
3532 4500014	4500014-002	LAKESHORE HEIGHTS MUTUAL WATER	Lakeshore Heights Settlin Tank Roof Project	g We have an old (40+ years) concrete block tank of about 30,000 gallons with an almost flat roof made of wood beams and galvanized tin. It is badly rotted and is ready to collapse. We need a new roof very soon. (This yearl) The tank measures 18-1/2 feet wide and 58-1/2 feet long and is 8 feet high. We propose to use 4/12 pitch trusses on 2-foot centers (about 31 trusses) with 5/8 OSB plywood for structure. We would then cover that with white painted tin panels about 30 inches wide Snow load in Shasta County is 50 pounds per sque foot and this design will easily meet this requirement. Our best estimate at this time for materials and labor is \$12,000.	O 5 2.	20	С	Our water source is surface water from a small dam. Water is brought to our treatment plant via pipe and first goes to a settling tank before going through filtration. The roof on the settling tank is badly deteriorated and natural debris can get in through cracks and holes in the roof.	12,000	78	225 02	Shasta	I	2009
3533 4100582	4100582-001	COUNTY SERVICE AREA 11		Consolidate with another system. (Pescadero High School)	0	20	С	In dry year, low water supply; need to improve water supply reliability.	50,000	85	280 17	San Mateo	П	1998
3534 3200188	3200188-003	Greenhorn Creek Services District	Greenhorn CSD Distribution System 2	Well 02 rehab, addition of booster station on Greenhorn Road, other distribution system improvements.	0	20	с	Potential need for new booster station, decreased production at Well 02, dead ends.	415,875	90	280 02	Plumas	I	2006
3535 5400710	5400710-001	BADGER HILL ESTATES		INCREASE STORAGE CAPACITY, INCREASE PUMPING CAPACITY AND DRILL NEW WELL.	0	20	С	LACK OF CAPACITY AS SUBDIVISION DEVELOPS	500,000	77	300 12	Tulare	Ш	1998
3536 1100616	1100616-004	Elk Creek Community S.D.	Elk Creek Community Service District "Water Source Modification"	The completion of the relocation for the intake would dramatically improve effluant quality and decrease operating costs. We would raise the intake elevation and obtain better quality water from higher in the lake. The old intake could be used for emergency or extremely low lake levels. We would have to drill an eight inch diameter hole in the dam at the appropriate level to receive better water, without creating any structual problems. This would require a release from the Bureau of Reclamation engineers. We are currenthy working on obtaining this. Once the new port is drilled, then the appropriate seals and valving could be installed, along with hangers to run approximately eighty feet to our current six inch pipeline.	0	20	С	We need to improve the influant quality by elevating the current intake pipe. The Elk Creek Community Service Distirct is located in western Glenn County. It's source of water is Stony Gorge Reservoir. The Stony Gorge REservoir is a small reservoir, about 50,000 acre feet. Consequently, because of it's small size, it has a tendency to statify during the summer months. As a result, the influant gains a considerable amount of iron due to it's warm lake, and organics due to decomposing algae. The influant is filtered and disinfected with chlorine. When the chlorine is disinfecting the water it is also acting on the smell in the water created by the decomposing algae. Iron in the water created by the chlorine as it turns the water brown. The solution to this is better quality influant. This could be obtained by elevating the intake pipe. The advantage would be that we would have better influant without increased operating costs. The influant problem extends through most of the year, July to November, and contributes to	240,000	90	300 21	Glenn	1	2009

many customer complaints.

3537 1100616	1100616-003	Elk Creek Community S.D.	Elk Creek Community Service District "New We For Water Source"	This project would entail drilling three wells to obtain Ils potable water at a minimum of one hundred, (100), gallons per minute per well. This would require a geologic survey as well as a current well history study to obtain the :best site". The wells would then require power lines and pumps with appropriate piping to reach our current water mains as well as secure structures to protect the equipment. Depending on the "best site" locations, we may have to buy the property and/or obtain right of ways for new pipelines. Pump controls could be run from our current tank controls or new radio controls.	0	20	c	The Elk Creek Community Service District obtains it's water from Stony Gorge Reservoir. The water in the reservoir has been degrading a little more each year. New erosions in the water shed each year impacts the influent to the treatment plant heavily. The Service District needs to get away from surface water by drilling three wells with the appropriate pumps, piping, and housing structures to support this community. The influent water from Sony Gorge Reservoir contains high levels of iron and organics, and our problems with these seem to get worse every year, starting in July and continuing through November. While we have not had any compliance issues yet, we are concerned that we will have some in the near future. Controlling the elements present in the surface water becomes a constant battle every year during the warm weather when water levels are low and the algae and iron levels are high.	500,000	90	300 21	Glenn		2009
3538 3400106	3400106-002	MSA: EAST WALNUT GROVE PWS		Construct 1,000 gpm well and upgrade pipeline distribution system. Involves design and construction.	0	20	с	Provide a new well and upgrade pipelines.	250,000	70	300 09	Sacramento	I	1998
3539 3400106	3400106-001	MSA: EAST WALNUT GROVE PWS		Construct a 250,000 gallon water storage tank. Involves design and construction.	5 O	20	С	Provide a new storage tank.	250,000	70	300 09	Sacramento	I	1998
3540 1700526	1700526-001	Pine Grove Water System		Hire hydrologist and spring developer to encase and enhance spring. Put liners in tanks. Rebuild distribution system.	0	20	С	Surface influenced spring. Subsized distribution system. Leaking storage tanks.	100,000	91	304 03	Lake	II	1998
3541 1700554	1700554-007	Lake County CSA 13 - Kono Tayee	CSA #13 (Kono Tayee) Water Storage Tank Replacement Project	This project is for the replacement of two co-located tanks at Tank Site #3, and will include the construction of two seismically engineered concrete tank foundations, two 50,000 gallon capacity anchored bolted steel tanks, associated piping and controls. Disinfection, filling and coordinated crossover from existing tanks will take place along with dismantling and removing of the existing redwood tanks. Security fencing will complete the project.	0	20	С	The Kono Tayee water system serves customers within the County Service Area #13. Tank decay and leakage is occuring at the Tank #3 site. The Tank #3 site consists of two redwood tanks (tanks 3 and 4). This project is to replace the existing redwood tanks with two new bolted steel storage tanks. This need was recognized last year, and funding for tank replacement was diligently sought and denied twice last year through the previous DPH's funding cycle and DWR's Water Use Efficiency Program. The District is once again seeking funding for this much needed tank replacement project.Health benefits include reliable and leak-free storage of drinking water and fire flow.Economic benefits includes construction (engineering, construction materials (piping, tank and controls), and construction labor.Regulatory benefits	350,000	136	333 03	Lake	Π	2009

include compliance with DPH regulations.

## 3542 1200553 1200553-009 Weott C.S.D.

1200553-007

Weott C.S.D.

Transmission lines,

3543 1200553

1200355 005 Webtt 6.5.5.

Repair/Refurbish main This repair would have the tank completely drained O (We can operate without the tank on-line)and using a water storage tank Confined Entry Team clean, remove any remaining forming materials, sand blast entire interior, make any patching repairs etc. as needed then apply a coating of sealer, an Epoxy paint or something comparable to industry standards. The 2 access hatch doors on top can be replaced with the installation of positive sealing jams and doors. This system improvement will allow us to insure proper chlorination, conserve the water that has steadily increased in loss amounts, remain in compliance with CDH request to have tighter sealing hatches and stabilze our main water tank from further deterioration.

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С

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С

collectors at sources and but have been evaluated as operating below their new Treatment Plant potential in collection amounts, maintenance needs and turbidity levels of water collected. Engineering and subsequent improvements will help in our reduction of turbidity levels and other water supply issuesTransmission Lines:Both A & B transmission lines are failing from the effects of 60 years of corrosion and improper installation. The continued efforts to keep water flowing through the lines and not out of numerous leaks is reaching a level of concern for our ability to supply source water to treatment. There is also a concern for potential intrusion of contaminents into these same leaks during times of low flows.Treatment facility:The treatment facility for both A & B filtration has beeb observed and noted by the CDPH as not being "capable of meeting the requirements of the LT1ESWTR". A treatment facility engineer should evaluate our needs and facility for either improvements or replacement.Overall, there may be a potential for source, filter and treatment consolidation, using Decker Creek solely, as it has the best guality water, cleanest water shed and most dependable flows in summer. WCSD would have to evaluate new engineering before opting for this, as they would have to lower their water production and consumption.

Source collection sites:All 5 sites currently collect water, O

separate source, collection, transmission, filtration and distribution systems including 1 main water storage tank for each. The 95,000 gallon metal tank that is for B system's storage is less than 10 years old and is in good repair. The 67.000 gallon concrete tank that services the A system is almost 70 years old with a new 10 ft lift added to it approximately 30 years ago. The addition of 10 ft in height doubled the previous capacity, but has lead to an ongoing deterioration of the tank. The obvious problem is the cold joint between the old and new concrete and a small amount of the concrete forming materials that were not completely removed after the lift was installed. In several places there is water weeping out at the cold joint, which may or may not be why there is an increasing amount of leaks appearing in the same areas. The old forming wood has been a constant drain, demanding extra chlorine to ensure proper disinfection and system residual. The proper repair would be to drain the tank and using a Confined Entry Team clean, sand blast, make any patching type repairs as needed then apply a coating of sealer, an Epoxy paint or something comparable. Another concern of WCSD and CDH are the 2 access hatches. They are not the right type or application and have been an ongoing problem to have a tight seal. Using thick pieces of foam rubber has been the best we Weott Community Services District (WCSD)has 2 sources. "A" & "B", while a 3rd source (Decker Creek) joins "B" source at the settling tanks. There are a total of 5 collection sites joining to create "A" & "B" transmission lines. In February & December of 2007

Weott Community Services District (WCSD) has 2

WCSD's treated water had less than 95% of all turbidity samples below .51%, with a highest sample of 1.29 NTU's. In 2005 WCSD had a combined total of 11 failed turbidity standards. To help reduce turbidity from the sources, all collection boxes and/or dams need to be substantially improved (including engineering). The extrordinary turbidity collected at these sources can be reduced during high winter flows by proper design and application. Each collection site will require improvements particular to that site. Decker Creek has the best flow and highest quality of water, so dependable collection (currently it has a "hand stacked" rock dam)and a larger transmission line (increase from 2" to 3") would be a good improvement in lowering NTU's both going into treatment and in the finished water. In our last received field inspection report from CDPH (inspection done on 7/7/06), dated 3/16/07, our system "must make upgrades to comply with LT1ESWTR". Now that L2ESWTR enforcement is upon us, there is a real concern about our ability to properly treat our water to compliance guidelines. Both A & B systems are using pressure filtration that was not

35,000 150 364 01 Humboldt I 2009

2,000,000 150 364 01 Humboldt I 2008

3544 1200553	1200553-008	Weott C.S.D.	Water Treatment Plant: Improvements/Upgrades	WCSD's water treatment facility needs to have an additional filtration level to continue producing quality water without drinking water violations. Using our existing facility as the main filteration unit we can add at the end of the filtration train either a complete nanofiltration or ultrafiltration unit. This unit can be used when needed in times of high raw turbidity to remain in compliance and if need be could be used continually to meet the higher filtration standards being exposed to us by LT2 and into the forseeable future	0	20	с	In 1989 Weott Community Services District (WCSD) had a new water treatment plant installed to comply with the Clean Water Drinking Act. At the time a pressurized mixed aggregate filtration plant was considerd to be more then adequate for the treatment of WCSD's surface water sources. In 2005, WCSD had 11 failed turbidity standards. In 2006, in a report evaluating our facilities it was noted that the facility must be up graded in order to meet the LT1 standards. In 2007 both February and December had less than 95% of it's turbidity samples below. 51. The requirements for quality have gotten harder and harder for us to produce water for. What was once considered okay for consumption is now a violation. These violations are documented and passed along to our customers, who don't want to use bad water.We now have LT2 applications to comply with.	400,000	150	364 01	Humboldt	I	2009
3545 0800532	0800532-003	Big Rock C.S.D.	Replace Water Storage Tanks	The Special District needs to replace the 100,000 gallon Redwood tank with a 215,000 gallon or larger steel tank. The 50,000 gallon Redwood tank must be replaced with a 100,000 gallon or larger steel tank. The aging water distribution lines between them should be replaced. Gated cyclone fences at least 6 feet high and topped with razor wire must be constructed around each tank to ensure security. The telemetry system has to be replaced and upgraded in capability to be monitored by the General Manager and the President in their homes.	0	20	c	The Big Rock CSD currently owns two Redwood storage tanks that are about 300 yards distant from each other on a hillside, which cycle water during the summertime about every four or five days. A 100,000 gallon tank was built in 1971 and is leaking at the rate of about three gallons per minute. It has been tightened, but the number of leaks is continuing to increase. A second and somewhat newer tank holds 50,000 gallons of water. It is in better condition at the moment, but is likewise beginning to show signs of aging. The telemetry system between the two tanks fails on a frequency of about two times per week, whereupon an attendant must climb the hill and restore operation. It also appears that at least one of the lines connecting the tanks is leaking, probably both. Because of boundary growth in the Township of Hiouchi, the Special District must increase the capacity of both tanks to accommodate residential growth, increased irrigation for landscaping, and imminent annexation of the Jedediah Smith Redwoods State Park. Both tanks must be surrounded by gated security fences to comply with the Homeland Security Act.	450,000	113	400 01	Del Norte	I	2007
3546 0800532	0800532-005	Big Rock C.S.D.	Permit and Construct Replacement Infrastructure	The precise scope of construction is not entirely definable at this juncture, for an engineering plan must be developed. However, it is estimated that the Special District owns and operates about 10 miles of water distribution lines, 40 main valves, 15 backflow valves, 10 fire hydrants, 113 meters, two 10 hp submersible river pumps, three pickup lines buried deeply in the river bed, a well head, a 10'x10' chemical treatment building, two access roads to two storage tanks mounted on a hillside that require grading, a turbidimeter, single-phase electrical power, and chemical treatment equipment. All of these assets must be replaced or refurbished.	0	20	с	The Big Rock CSD's water distribution system was installed in 1971 to satisfy the residential, commercial, and fire suppression needs of the Township of Hiouchi. It has been improved to a small extent over the years, but is generally nearing the end of its life cycle. This California Special District must comply with the safe drinking water standards that have become more demanding, the new Homeland Security Act, a water- allocation limit imposed by the California Water Resources Control Board that must be adjusted, and a place-of-use jurisdiction that is increasing in size. In this context, the Special District requires funds to permit and replace all of the existing infrastructure. The leakage rate is approximately 26%.	2,450,000	113	400 01	Del Norte	I	2007

3547 0800532	0800532-004	Big Rock C.S.D.	Engineer a Plan to Replace or Improve the Existing Infrastructure	The Special District's water source is the Smith River, a "wild and scenic" body of water that is not fully allocated, and our allocation limit is a little over 41 million gallons per year. An application with the California Water Resources Control Board is pending to change our place of use, which includes expanding the Jedediah Smith Redwoods State Park. Estimated system leakage rate is 26%. Water quality is outstanding during all seasons of the year. An application is underway that would increase our water allocation limit to accommodate projected growth in residential demand and the annexation of the park. Thus, the project must address (a) location and characterization of all existing and abandoned water lines, valves, meters, hydrants, electrical lines, pumps, warning system, storage tanks, generators, well system, and structures, (b) a modest design for replacement or improvements to these assets that ensures adequate water pressure, quality, security, and volume for all customers, (c) an engineering plan that recommends and instructs contractors and regulators accordingly and that articulates the appropriate permitting processes given the Special District's small size, (d) the Big Rock CSD's infrastructure needs for the coming 15 years in 5-year increments, (e) the adequacy and health of the fire hydrants, and a maintenance plan to keep them in	O m gg t	20	c	The Big Rock CSD's water distribution system was installed in 1971 to satisfy the residential, commercial, and fire-suppression needs of the Township of Hiouchi. It has been improved to a small extent over the years, but is generally nearing the end of its life cycle. This California Special District must comply with safe drinking water standards that have become more demanding, the new Homeland Security Act, a water- allocation limit imposed by the California Water Resources Control Board that must be adjusted, and a place-of-use jurisdiction that is increasing in size. In this context, the Special District requires funds to (a) analyze the somewhat undocumented history of the infrastructure system and its water-distribution inadequacies, (b) design the necessary improvements, (c) engineer the construction plan to include permitting assistance, and (d) map the entire system using GPS technology.	800,000	113	400 01	Del Norte	I	2007
3548 2310013	2310013-007	Point Arena Water Works	Security Gate and Fences	Install an electric gate and security fence at the Main water storage tanks located at 135 Riverside Drive, Point Arena. Install security fence around the Garcia River well located on Windy Hollow Road, Point Arena.	0	20	С	Lack of security around Main Water Storage tanks and well.	41,300	210	465 03	Mendocino	II	2009
3549 4500195	4500195-004	STARLITE PINES MUTUAL WATER CO INC	Storage, generator, & security	<ol> <li>Upgrade security; fencing, doors, &amp; alarm system. 2) Imrovement or replacement of storage facilities. 3) Provision of backup or reliability features; update generator &amp; automatic transfer switch.</li> </ol>	2) O	20	С	Mutual has deficiencies that are eligible for SRF funding and not covered in any of the other SRF categories including improvement or repacement of storage facilities and provision of backup or reliablity features.	100,000	170	510 02	Shasta	I	2004
3550 3410047	3410047-001	CalAm - Walnut Grove		Grand Avenue main replacement. Involves design and construction	0	20	С	General system improvement. Inadequate supply main.	120,000	195	657 09	Sacramento	I	1998
3551 4710004	4710004-001	City of Etna		Replace lines; increase storage; and improve intake facilities.	0	20	С	Distribution lines are old; storage tank is not large enough for summer demands; and intake facilities have deficiencies that are limiting flows.	200,000	385	769 01	Siskiyou	I	1998
3552 5010007	5010007-003	Hillsview Homes	Reverse osmosis & generator	Install reverse osmosis treatment with 0.5 million gallon storage tank and boosters to supply existing system. Also purchase and install backup power generator.	n O	20	с	One well has nitrate levels above MCL. Both wells contain TDS levels, which also exceed standards.	1,300,000	217	840 10	Stanislaus	Ш	2001
3553 4910003	4910003-002	Penngrove Water Company (PUC)		Consolidate to Canon Manor system	0	20	с	Use of expensive Agency water	1,200,000	505	1,200 18	Sonoma	П	2002
3554 1710022	1710022-002	Lake County CSA 20 - Soda Bay	Soda Bay Water System Backwash Water Storage Upgrade	Due to the limited size of the facility, the use of a portable tank is preferred. The unit will be located (parked and blocked) on site adjacent to the backwash system. Backwash water will be directed to the unit if additional storage is needed. Since the unit will be portable, maintenance personnel can temporarily relocate to another location within the facility if needed during other maintenance activities.	J	20	c	As a follow-up to a site inspection, DPH issued a letter- form directive (7/9/08) to the Lake County Special Districts Administration for deficiencies at the Soda Bay Water Treatment Facility. Part of the directive addressed the need to expand the filter backwash water storage capability located at the treatment facility. The project includes the purchase and installation of a liquid storage unit, similar to what is commonly known as a "Baker Tank". The unit will be sized to accept approximately 3,000 gallons and remain movable (when empty) within the limited space at the treatment facility.HEALTH BENEFITS will include adequate safe storage volume for the treatment facility's filter backwash liquids.ECONOMIC BENEFITS include procurement of the tank and continued economic benefit through the hiring of pumper truck services to pump and haul the filter backwash liquids.COMPLIANCE BENEFIT includes compliance with the 7/9/08 DPH directive.	200,000	596	1,342 03	Lake	I	2009
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3555 1710022	1710022-003	Lake County CSA 20 - Soda Bay	Soda Bay Water Treatmen Facility Ozone System Upgrade	t The ozone generator project will replace both ozone units at the Soda Bay Water Treatment Facility. The new units will consist of slab mounted ozone generators, piping and controls. The units will be mounted on the existing concrete slabs. Piping and controls will be installed to match the existing piping paths and electrical wiring conventions. Two ozone monitors and alarms will be installed, one "process" monitor, and one "safety" monitor. The old equipment will be removed to make way for the new equipment.	0	20	С	On July 9, 2008, the Lake County Special Districts Administration was issued a letter-form directive from DPH for the Soda Bay Water Treatment Facility. Part of that directive involved the ozone system. Due to its contribution to the water treatment process and the condition of the existing ozone generators, DPH recommended their replacement. The Soda Bay Water Treatment Facility treats surface water from Clear Lake to drinking water standards. Ozone is a part of the treatment process. The existing system is old and is no longer supported by its' manufacturer (no parts or service). The replacement of the two ozone units will insure performance and safe operations for CSA# 20 customers for years to come.HEALTH BENEFIT includes a higher and more reliable level of treatment.ECONOMIC BENEFIT includes construction (engineering, equipment	450,000	596	1,342 03	Lake	Π	2009

supply, and labor to install), andan additional benefit through a modern manufacturer and supported (ongoing tech service) equipment.COMPLIANCE BENEFIT includes compliance with the DPH directive, better system performance and reliability.

3556 1710022	1710022-004	Lake County CSA 20 - Soda Bay	Sodium Hypochlroite Disinfection System	The project includes the installation of a poured concrete slam, and anchored 3,000 gallon HDPE or fiberglass storage tank, associated pumps, pipes and controls to provide liquid sodium hypochlorite to the treatment process for disinfection. The entire chlorine gas system will be removed to make way for the new system. Once certified by Environmental Health inspectors, the facility will be in compliance with the regulatory directive.	0	20	c	The Soda Bay water treatment facility provides water for the County Service Area #20. The facility treats surface water from Clear Lake to drinking water standards. A portion of the treatment process utilized chlorine gas for disinfection.Lake County Environmental Health conducted an inspection of the facility's Hazardous Business Plan. The chlorine gas disinfection system was deemed to be a hazard requiring replacement with a non- hazardous method of disinfection (see Cal-Arp program).HEALTH BENEFIT includes the use of a community-safe disinfection system.ECONOMIC BENEFIT includes construction (engineering, components, and labor for installation) and ongoing benefit (supply and delivery of sodium hypochlorite solution). Secondary Economic Benefit (for the District and Rate payers) will be reduced permit fees from Environmental Health.COMPLIANCE BENEFIT includes continued reliable treatment (disinfection) and Hazard reduction, and complies with the regulatory (LC Environmental Health) directive.	100,000	596	1,342 03	Lake	Ι	2009
3557 4710002	4710002-002	City of Dunsmuir		Infiltration and inflow study, design repairs, construct	0	20	с	Infiltration and inflow high, lack of storage	1,500,000	1,285	1,923 01	Siskiyou	I	2002
3558 2210001	2210001-001	MARIPOSA PUBLIC UTILITY DIST		storage RELOCATE THE AIR VENTILATION SYSTEM AND CONSTRUCT A CONCRETE ENCASEMENT AROUND EXPOSED CONDUITS.	0	20	с	THE SAXON CREEK RAW WATER PUMP STATION IS SUBJECT TO FLOODING FROM THE MERCED RIVER. IT WAS FLOODED DURING THE JANUARY 1997 FLOOD CAUSING ABOUT \$500,000 DAMAGE.	163,000	671	2,000 11	Mariposa	Ш	1998
3559 1710012	1710012-001	Cobb Area County Water District		Bring in contractor specializing in spring redevelopment	. 0	20	С	Boggs Spring needs redevelopment.	25,000	708	2,500 03	Lake	П	1998
3560 0810002	0810002-002	Smith River C.S.D.		Complete a mainline loop with approximately 1,100 feet of 8-inch pipe.	t O	20	С	Pressure problems.	70,000	508	2,568 01	Del Norte	I	1998
3561 1710021	1710021-003	Lake County CSA 21 - North Lakeport	Water Treatment Ozone Generation Unit	The Ozone Generator project will replace the second ozone generator at the North Lakeport Water Treatment Facility. The new unit will consist of a slab mounted ozone generator, piping and controls. The unit will be mounted on an existing concrete slab. Piping and controls will be installed to match the existing piping path and electrical wiring conventions. Two ozone monitors and alarms will be installed, one "process" monitor to examine ozone concentrations within the treatment process, and one "safety" monitor to examine ambient ozone within the work space. The old equipment and monitors will be removed to make way for the new equipment.	0	20	c	This project's Ozone Generator will replace the second ozone unit at the North Lakeport Water Treatment Facility. The second ozone unit is no longer supported by its' manufacturer (for either parts or service) and is no longer capable of producing/generating ozone at its' rated output. The second ozone unit is close to 30 years old. The North Lakeport Water Treatment Facility treats surface water from Clear Lake to drinking water standards. Ozone is a part of the treatment process. Seasonal water quality determines ozone use. Should raw water conditions develop requiring ozone at or near the rated output of the current ozone generator, quantities would be insufficient to adequately treat the water. DPH regulates and requires the North Lakeport Water Treatment Facility to fully treat all water prior to distribution. In the event of insufficient available ozone, the treatment process would be shut down, and the treatment facility would be unable to supply fully treated drinking water. Compliance Order #02-03-08-002 was issued on May 13, 2008 for failure to provide sufficient source capacity. The treatment facility design and permitted operation includes two ozone units (primary and secondary) to insure ozone supply. The primary ozone unit was replaced in 2006. The replacement of the second ozone unit frough this project will insure performance, serviceable units, and safe operations for CSA #21 customers for years to	122,500	1,204	2,868 03	Lake	Ι	2009

3562 1710021	1710021-004	Lake County CSA 21 - North Lakeport	Sodium Hypochlorite Disinfection System	The Sodium Hypochlorite System project includes the installation of a poured concrete pad, an anchored 3,000 gallon HDPE or fiberglass storage tank, associated pumps, pipes and controls to provide liquid sodium hypochlorite for disinfection. The chlorine gas disinfection system, consisting of high pressure cylinders, piping, and controls will be removed to make way for the new safer system.Once certified by Environmental Health inspectors, the facility will be in compliance with the regulatory directive.	0	20	c	The North Lakeport Water Treatment Facility provides water for the customers in County Service Area #21. The facility treats surface water from Clear Lake to drinking water standards. A portion of the treatment process utilizes chlorine gas for disinfection. Lake County Environmental Health conducted an inspection for the purpose of updating the facility's Hazardous Business Plan. The chlorine gas disinfection system was determined to be a hazard requiring replacement with a non-hazardous method of disinfection (see Cal-Arp program).HEALTH BENEFIT includes the use of a community-safe disinfection system.ECONOMIC BENEFIT includes construction (engineering, components and labor for installation) and ongoing benefit (supply and delivery of sodium hypochlorite solution). Secondary economic benefit (district/Rate payers) reduced permit fees from Environmental Health. COMPLIANCE BENEFIT includes continued reliable treatment (disinfection) and Hazard reduction and complies with the regulatory (LC Environmental Health) directive.	125,000	1,204	2,868 03	Lake	Ι	2009
3563 1610001	1610001-003	Armona Community Services Dist		INSTALL A SCADA SYSTEM. OTHER - DESIGN AND CONSTRUCTION	0	20	С	SYSTEM CONSISTS OF 2 WELLS AND A WTP AND STOARAGE FACILITIES WHICH ARE UNDER CONSTRUCTION. THE DISTRICT DOES NOT HAVE THE MEANS TO MONITOR THESE FACILITIES.	80,000	1,179	3,239 12	Kings	Ш	1998
3564 0510003	0510003-007	Angels, City of	City of Angels Pressure Filter Project	To complete the installation of a fourth filter a significant amount of infrastructure modification work is required. Only a limited amount of flat area is presently available to locate the fourth filter and to continue to allow roadway access on the west side of the control building. To provide the desired access, the expanded filter building and roadway must encroach upon the existing abandoned clearwell. To provide the adjacent flat area a segment of the existing clearwell must be brought up to grade by installation of a retaining wall and backfilling and paving the area. The fourth filter control valves and facing piping is to be housed within the filter building in a similar manner to the existing filters. Therefore, a control building connections to the existing raw, filtered and backwash drain pipelines are all required. Relocation of existing underground piping and plant instrumentation affected by the building expansion will backfill and pave a segment of the existing follows:1. Install 12-foot high reinforced concrete retaining wall, install backfill and pave a segment of the existing abandoned clearwell. Construct a 12-foot wide wood frame filter control building and part instrumentation affected by using abandoned clearwell. Sconstruct a 12-foot wide wood frame filter control building addition. Includes reinforced concrete slab and perimeter footing, building finishes and doors.3. Relocate existing	0	20	C	The Department of Public Health (DPH) has notified the City that it is in Non-compliance with its permit conditions and in violation of the SWTR. The existing Water Treatment Plant consists of three major components for treatment consisting of the headworks, flocculation/sedimentation basin and filtration facilities. The current maximum flow rate, based upon SWTR requirements, is 1440 gpm (2MGD). The Water Treatment Plant has experienced demand in excess of 2MGD during the summer months of 2007 and 2008. The SWTR requires compliance with certain reliability features listed in SWTR Section 64659. The existing Water Treatment Plant does not comply with the reliability features due to the SWTR requirement of redundant filter capacity to offset the loss of filter capacity due to backwash or maintenance. The treatment plant currently utilizes three 8' diameter X 30' long filters to produce treated water. Section 64659 of the SWTR will requires a total of four filters (1 redundant). DPH is requiring the City to add a fourth filter or perform a filter loading study to justify higher flow rates. Addition of the fourth filter will increase the plant capacity to 2160 gpm (3MGD). As part of the Water Treatment Plant improvement project constructed in 2001, provisions were made in both piping and control systems to facilitate the addition of the fourth filter at a future date. The work proposed for	1,600,000	1,773	3,441 10	Calaveras	11	2009
3565 1310003	1310003-004	GSWC, Calipatria	GSWC-Calipatria System- Holabird Treatment Plant, Wash Recycling Project	Project scope includes the construction of a second wastewater basin including over excavation, re- compaction, and sub grade preparation; New packaged above-grade duplex pump station; New incline plate clarifier; New precast junction box with slide gates; New piping, suction lines, caisson foundations for equipment electrical controls and other appurtenances. The plans for the project are completed and the estimated construction start date will be in August of 2009.	0	20	С	The current retention ponds at the Holabird Treatment Plant are not large enough to handle the current backwash flows being generated during plant operation. The up flow clarifiers are also too small. The Washwater recycling project at the Holabird treatment plant is intended to increase the capacity of the plant equipment, ponds, and up flow clarifiers.	1,871,514	873	4,040 14	Imperial	v	2009

3566 2410002	2410002-004	DOS PALOS-CITY	Water Meter replacement proejct	The project would be to replace all the existing meters with new radio read meters. This would provide for correct accounting of the water useage for each customer and will reduce employee time for the readin of the meters. The existing meter boxes will stay in place with the Contractor removing the existing meter and installation the new meter in the existing location. City staff will be trained on the radio read equipment and software to operate the new system.	g	20	С	The water metering system fo rthe community was put inplace to aid in the conservation of water supply and meter the flow of water to customers. The existing meters have aged and no longer provide calibrated readings of the flow to the customers. The replacement of the existing meters with new meters would account for that portion of the water supply that is presently being lost due to the existing meters being out of calibration.	1,005,000	2,566	4,417 11	Merced	Ш	2009
3567 1710004	1710004-006	Lakeport, City of	Water Distribution System Capacity Improvements	Replace existing 6" main w/ 10" or parallel w/ 8" along Martin Street between Russell and Bevin's;Construct 2 new wells and pumping stations to replace existing wells in creeks;Install 10" main near Clear Lake High School to improve on fire flows.	0	20	c	Potable water availability is compromised during winter months due to restrictions on well operation in Scotts Creek - when creek is flowing, pumping is prohibited. This leaves only two wells available for groundwater. Surface water treatment plant is nonoperational during fall, winter, and spring due to high operating costs. Water availability for fire fighting is limited in the vacinity of Clear Lake High School and Terrace Middle School. Installation of additional water main is needed to ensure adequate fire flows. Water capacity for fire fighting in downtown locations is limited. Increased water main size is needed to ensure adequate fire flows.	2,388,000	2,196	5,200 03	Lake	II	2009
3568 1710004	1710004-007	Lakeport, City of	Security enhancement at well head locations	Install security fence around Scotts Creek well heads to protect from creek debris and vandals; Install security structures and equipment at Green Ranch, including: control station, fence, intruder alarms, security cameras, and flood lights.	0	20	с	Existing well heads are prone to damage from vandals and tresspassers, which threaten water quality and delivery. Well heads located in Scotts Creek are also at risk of damage by floating debris.	135,000	2,196	5,200 03	Lake	II	2009
3569 1710004	1710004-001	Lakeport, City of		Increase CT at well facilities by increasing storage.	0	20	С	CT compliance difficult for wells under the influence of surface water	600,000	2,196	5,200 03	Lake	Ш	1998
3570 1710004	1710004-008	Lakeport, City of	Electronic Water Meter Installation	City-wide installation of new electronic water meters.	O	20	С	Outdated and decaying infrastructure. Water meters, city-wide, are antiquated and beginning to fail. Increasing staff time is needed to maintain existing meters and repair those that have broken. Staff resources are also being stretched beyond limits as reading meters currently requires two full days per month per employee, detracting from other pressing issues at treatment facilities and throughout the distribution system.	1,200,000	2,196	5,200 03	Lake	Π	2009

3571 1510020	1510020-006	TEHACHAPI, CITY OF	Nitrate Treatment	The project consists of constructing a nitrate treatment O plant capable of treating probably around 1000 to 1500 gpm. The City has already prepared a suitable location for the plant at the same site where the City samples for the blending program. The plant and some associated piping should be all that is needed to consistently provide water meeting the nitrate standard to the customers.	20	c	The City water system is feed by 7 potable water wells. One of those wells (Synder Well) consistently produces water with nitrate levels above the MCL (Maximum Contaminant Level) of 45 ppm (parts per millions) with a reading of 51ppm A second well (Dennison) hovers around this MCL of 42 ppm. Both wells, and one other, have shown a trend for increasing nitrate levels over the last several years of record. In response to these issues, the City minimizes the use of these wells. Furthermore, the City, with a blessing from the California Department of Health Services (CDHS), has instituted a 'blending' program. This program requires this contaminated water to be blended with cleaner water before being delivered to the customers. When actively blending, the City has strict and frequent testing requirements to monitor the quality of the water being delivered to customers. The only individual well in violation has been Snyder, although Dennison is clearly getting close.	3,066,000	2,939	7,218 19	Kern	111	2007
3572 1510020	1510020-007	TEHACHAPI, CITY OF	Nitrate Reduction and Irrigation Conversion	The project would cover two areas; irrigation Conversion; the project would extend the existing ag water line, which is owned by Tehachapi Cummings County Water District(TCCWD), approx. 6000 feet west, which would take in both the Jacobsen Middle School campus, the Tehachapi High School football stadium and the Central Park facility. The Central Park facility is operated and maintained by the Tehachapi Valley Recreation and Parks District (TVRPD). The Jacobsen Middle School campus and the Tehachapi High School football stadium are operated and maintained by the Tehachapi High School football stadium are operated and maintained by the Tehachapi Unified School District (TUSD).Nitrate Reduction; along with extending the TCCWD ag water line, the City's Snyder Well would be tied into the TCCWD system. Which would allow the City to reduce the Nitrate level through pumping the well into the TCCWD system. TCCWD would benefit also by obtaining another source to supplement its water deliveries when SWP water deliveries are being cut back. The Snyder Well pumps approx. 700 gpm and if the Nitrate level can be reduced, it would be of distribution system pumping. The Snyder Well pumps directly into the distribution system therefore blending the well in not an option.	20	c	The first problem that is intended to be solved is a reduction in demand for potable water that is used for irrigation at the school campus as well as the park facility. The City of Tehachapi lies within the water adjudication of the Tehachapi Basin. Our current allowable pumping for the year is approx. 1,850 acre-feet. The uasge in 2008 was approx. 2,150 acre-feet. When the allowable pumping is reached and the City has to over-pump the water, the City has to either lease additional water rights(if they are available) or purchase water from the basin watermaster for groundwater recharge at an approx. cost of \$450.00 per acre-foot. So, by converting the school district campus and the park facility to non-potable water, the City could possibly see a reduction in potable water demand of approx. 100 acre-feet per year. Also the school district and the parks district would pay a lower rate for irrigation water. The second problem that is intended to be solved is the lowering of Nitrates in the City's Snyder Well. Currently the Snyder well is in standby and is not operated into the City's distribution system. The Snyder Well exceeds the MCL of 45mg/l for Nitrates.	600,000	2,939	7,218 19	Kern	111	2009
3573 1910160	1910160-001	TRACT 349 MUTUAL WATER CO.		Enlarge our pump stations' pumping capacity and add O new IMG reservoir. Project involves: Design to solve problem. and Construction	20	с	The demand for water in the highly densified area we serve is outpacing our ability to maintain reasonable system pressure.	950,000	908	7,500 07	Los Angeles	IV	1998
3574 1910160	1910160-005	TRACT 349 MUTUAL WATER CO.	Security Perimeter Fence	Construct 8 ft. high block wall perimeter fence topped O with razor tipped barbed wire at 4630 Santa Ana St. facility and 3724 Florence Ave. facility.	20	С	Tract 349 Mutual Water Company have security problem with entry of unauthorized person during after working hours and vandalism. Currently the 6 ft. high chainlink fence is not enough to control or prevent it. One of our facility is next to mobile homes where most unauthorized entry and vandalism are coming from.	200,000	908	7,500 07	Los Angeles	IV	2009

3575 4210020	4210020-007	Santa Ynez River Water Cons. Dist. ID#1	Planning to Address System Reliability and Consolidation	This planning study would address the economic viability of consolidating 5 small water systems within the existing Santa Ynez Water Conservation District, Improvement District No. 1 (ID#1), as well as the long term, critical need of reliability regarding ID#1's infrastructure. These water systems would include the City of Solvang with a population of 5,322, Rancho Marcelino Mutual Water Company with 77 homes, Skyline Park & Service Company with 60 homes, Refugid Mutual with 8 homes and Meadowlark Ranches MWC with approximately 45 homes. Currently, ID#1 provides standby or emergency water to two of these systems. The project will consist of hiring an engineering firm to work with ID#1's staff to analyze the overall system, including supply, distribution, production, cost, rate analysis, water loss, and Nitrate removal. The result of the project will be; a potential consolidation with 5 water systems; an adequate supply to meet demand and comply with regulations, even in critical drought conditions.	0 s	20	c	Currently, the Santa Ynez Water Conservation District, Improvement District No. 1 (D#1) has a number of issues to overcome related to the reliability and delivery of water to its population, as well as the economic viability of bringing its system up to current standards. ID#1 has a service population of 8,298. It additionally provides water to tity of Solvang with a population of 5,322. ID#1 also provides "standby" water for blending to Rancho Marcelino Mutual Water Company for the purpose of Nitrate MCL reduction, so that it may comply with state standards. ID#1 currently supplies 2 to 4 acre feet per month to Rancho Marcelino Mutual Water Company, which has 77 homes located within its development. ID#1 also serves as standby and emergency backup to Refugio Mutual. Within the last fiscal year (2006-07), ID#1 did not need to provide standby or emergency water to Refugio Mutual, but ID#1 has consistently needed to do so for Rancho Marcelino. ID#1's reliability and delivery of water is in jeopardy as source water is decreasing due to production loss, as well as increased drought conditions. Although the system has kept up with demands, it has overriding issues that need to be addressed to ensure reliability for the long term. These issues range from inadequate pressure, corrosive pipes and undersized pipes. ID#1 is	300,000	2,327	8,298 06	Santa Barbara	IV	2007
3576 5210004	5210004-007	City of Red Bluff		Drill and construct a new well near the 3MG reservoir.	0	20	С	Low on source capacity in zone near 3MG reservoir.	200,000	4,336	14,005 21	Tehama	I	1998
3577 1210016	1210016-006	McKinleyville C.S.D.	Back Up Chlorination for North Bank Booster Station	MCSD will install a Sodium Hypochlorite injection system, consisting of a storage/mixing tank, pump, dosage control, residual analyzer and interface to a digital contrl system. A positive displacement feed pump will draw sodium hypochlorite from a storage tank and will inject the chlorine solution at a metered rate proportional to the flow and dosage requirements. The dose will be regulated by a chlorine analyzer and monitored by digital control. Safety and handling equipment will be constructed or installed to meet federal and state regulation.	O	20	с	MCSD purchase its water from a regional supplier chlorinated but must own and maintain backup emergency chlorination equipment.MCSD is not able to provide emergency backup chlorination as required by Califoria Department of Public Health Drinking Water Divission due to unreliable and outdated equipment. MCSD does not have the chlorine residual analyzer necessary to regulate the dosage control nor the interface to it's digital control hardware. MCSDs saferty and handling equipment does not meet state and federal regulation.	30,000	5,042	15,132 01	Humboldt	I	2009
3578 1510019	1510019-002	Shafter, City of		CONSTRUCT NEW WELL TO REPLACE WELL #10. OTHER	t - O	20	с	WATER QUALITY PROBLEMS	250,000	3,863	15,609 12	Kern	Ш	1998
3579 1910169	1910169-003	WALNUT PARK MUTUAL WATER CO.	New Water Well Completion	As previously stated, our new well has been drilled to 12 hundred feet and is caplable to provided needed water. Our deed is to install a new pump, motor shed for use by this well and conection to our electrical computer system and our water tanks.	0	20	с	Funds needed to complete new water well. Since 1914 this company has drilled 11 previous water wells, only two smaller ones are still operable. This new well has already been drilled at a cost of \$1,000,000 our need is to complete this well to ensure furture water dilivery to our customers. This well will provide our primery water supply when we completed and we will be able to use the two smaller wells for emergency. We want to ensure that our costomers can count on our water supply for our future.	750,000	2,801	16,180 07	Los Angeles	IV	2009
3580 1610002	1610002-005	Avenal, City of		INTERIOR AND EXTERIOR SURFACES OF THE WATER STORAGE TANDS WOULD BE SANDBLASTED AND CLEANED WITH EXISTING CATHODIC PROTECTION SYSTEMS WOULD BE INSPECTED AND REPLACED AS NEEDED. OTHER - DESIGN AND CONSTRUCTION	0	20	С	NO INTERIOR OR EXTERIOR COATING REPAIRS ON THE 5 STORAGE TANKS WITHIN THE SYSTEM. THE INTERIOR AND EXTERIOR TANK COATINGS HAVE COME TO THE END OF THEIR DESIGN LIFE.	570,000	1,892	16,737 12	Kings	Ш	1998

3581 3610001	3610001-002	CITY OF ADELANTO	Potable Water Supervisory Control and Data Acquisition (SCADA) Replacement	v SCADA system will incorporate such functions as; wate level indicators, on-off, chlorine disinfection residual, motor/pump failure alarms, alarm handling, manual an automatic operation of the wells and booster stations. Automatic Seismic indicators, alarms and storage tank valve shut-off triggers. Provide records tracking and trending, report generation. Security intrusion alarms and cameras.	r O	20	с	Replace existing 11 year old SCADA computerized system utilized for performance monitoring and operating the City's 15 potable water wells, 3 booster stations and 6 water storage reservoirs. Current system is failing, resulting in false alarms, incorrect water levels, incorrect well operations. Corrective action is to replace said SCADA system with current technology and incorporate security monitoring and alarms at wells, booster stations and reservoirs. Utilize solar electricity power at sites. In Sept 2008, we experienced a break-in into a storage reservoir; no contamination occurred.	800,000	4,862	19,500 13	San Bernardino	V	2009
3582 3610001	3610001-001	CITY OF ADELANTO		Construct SWTP to treat water from the aqueduct	0	20	с	Making transition from wells in overdrafted basin to receiving state project water via the aqueduct	24,000,000	4,862	19,500 13	San Bernardino	V	2001
3583 3610073	3610073-001	HI DESERT WD		Accelerate 12 year replacement plan to 2 years	0	20	С	Old, substandard mainline	10,000,000	9,532	19,696 13	San Bernardino	v	1998
3584 1010024	1010024-002	CWS - Selma		DESIGN AND CONSTRUCT TREATMENT FACILITIES.	0	20	С	WELL 15-01 HAS DBCP AND RADIOACTIVITY CONTAMINATION OVER MCLS. ITS REACTIVATION WOULD INCREASE THE SYSTEM'S SOURCE CAPACITY AND AVOID THE NEED TO CONSTRUCT A NEW WELL.	750,000	6,315	24,307 23	Fresno	Ш	1998
3585 1910011	1910011-009	GSWC - BELL, BELL GARDENS	GSWC – Bell/Bell Gardens Bissell Plant Modifications	- This project was slated to receive funding under CDPH' Proposition 50 Project (project number P50-1910011- 025). The letter of commitment was signed in July 2007. GSWC had just received the draft funding agreement from CDPH when notification was received that Proposition 50 funds had been frozen. Construction has already started on the project, and significant monies have been spent. The project involve abandoning well 1 per DWR standards, constructing well 3, and adding manganese removal treatment at th wellhead. Construction of well 3 commenced in December 2008, and water quality data indicate that manganese removal treatment is required.	s O Is	20	с	Golden State Water Company (GSWC) lost Bissell well 1 as a source of supply due to volatile organic chemcial (VOC) contamination. The company's original intent was to install granular activated carbon (GAC) at the wellhead. However, an investigation showed that the well, which was constructed in 1951, was in poor condition and was nearing the end of its useful like. Therefore, GSWC decided to abandon well 1 and construct a new well, well 3, which would be sealed in the upper zones to avoid VOC contamination. This meant constructing a deeper well which would likely need manganese removal treatment, based on water quality data obtained from an additional onsite well, well 2.	4,149,921	7,488	24,311 15	Los Angeles	IV	2009
3586 1510006	1510006-006	East Niles CSD	Arsenic Treatment for Wel 21	I Install arsenic treatment	0	20	С	Arsenic level in Well 21 exceeds federal MCL of 10 ppb	1,600,000	7,338	25,500 12	Kern	ш	2007
3587 0710004	0710004-015	City of Brentwood		Obtain and install a SCADA system to insure automated notification of system problems/	9 0	20	С	Install a SCADA system for water system automation.	500,000	15,776	45,892 04	Contra Costa	Ш	1998
3588 0710004	0710004-012	City of Brentwood		TV the wells and check for any holes or cracks in the sleeve.	0	20	С	Investigate and rehabilitate Wells 7 & 8 that occasionally have water quality problems.	150,000	15,776	45,892 04	Contra Costa	II	2006
3589 0710004	0710004-019	City of Brentwood		Purchase and install 5 emergency generators at the above locations.	0	20	C	Provide emergency power to the wells.	600,000	15,776	45,892 04	Contra Costa	II	2006
3590 0710004	0710004-014	City of Brentwood		Replace approximately 3500 outdated leaking inaccurate and unreliable meters.	0	20	C	replace old and unreliable water meters with new ones.	1,400,000	15,776	45,892 04	Contra Costa	II	1998
3591 0710004	0710004-007	City of Brentwood		Sealing of shallow wells to eliminate the possibility of contamination.	0	20	С	Abandon the sub-standard private wells that may cause contamination to the aquifer where city uses for domestic water supply.	1,150,000	15,776	45,892 04	Contra Costa	II	1998
3592 5110002	5110002-022	City of Yuba City	A - Street Waterline Replacement	Replace 500 linear feet of badly deteriorated 4-in diameter main distribution pipe on A Street, between Clark Avenue and Cooper Avenue with an 8-inch ductil iron distribution line in order to provide dependable service to our customers.	O e	20	с	This replacement project would qualify as a water conservation project due to the multiple leaks. The 4- inch distribution main on A Street between Clark Avenue and Cooper Avenue is in urgent need of replacement. The existing pipe is over 80 years old and failing, with approximately ten repair clamps to stop leakage in a 500 foot section of pipe. The City standard would require 8-inch pipe to increase water flow. Due to the size and condition of these pipes the City could not meet fire flow demands in the event of an emergency. Constantly repairing these pipes is also a	115,000	13,550	51,504 21	Sutter	I	2009

drain on the City's maintenance budget.

3593 5110002	5110002-018	City of Yuba City	Brown and Fippins Waterline Replacement Project	Construct approximately 1,250 linear feet of water mains and an 8-inch diameter distribution main, 20 water services, and related appurtenances in Brown Avenue from Bridge Street to Kimball Avenue and in Fippins Avenue from Bridge Street to Jones Street and connect house plumbing from back-lot water mains to the new water services.	0	20	C	This area has experienced low water pressure, increased turbidity, and pipe line corrosion. The 8-inch diameter water mains will replace aging 4-inch cast iron back-lot water mains that are in poor condition and do not provide adequate fire flow. The larger size pipe will provide clean, dependable water and improve fire flows to the area. The back-lot location of the pipe and meters makes access for repairs more difficult and creates problems for the meter readers. The new pipe will move everyting to the more accessible in-street location.	375,000	13,550	51,504 21	Sutter	I	2009
3594 5110002	5110002-017	City of Yuba City	Reservoir Repairs & Equipment Upgrades	Replace old inefficient, original equipment pump motors to premium, efficient, energy saving motors, mixers, and VFD as described above. The City will also repair and recoat the steel storage tanks at the Rowe Avenue Reservoir and the Sam Brannon Reservoir.	o	20	c	Green Project - Reservoir Equipment Upgrades and repairs. 1) Upgrading four old inefficient pump motors to premium efficient pump motors would result in considerable energy savings that would result in the reduction in the City's Carbon Footprint:Motor #1: The Water Treatment Facililty's backwash pump;Motor #2: Booster pump motor at Rowe Avenue Booster Station;Motor #3: Booster pump motor at Sam Brannon Street Booster Station;Motor #4: Replace #6 Low Lift pump motor that was originally installed in 1971.2) To eliminate erratic flow and pressure fluctuations in the system that are currently causing false fire alarms and improve electrical efficiency, the City needs to install one Variable Flow Drive (VFD) at the Sam Brannon Reservoir and the Garden Highway Reservoir;3) Installing mixers at both Rowe Avenue Reservoir and the Sam Brannon Reservoir would prevent disinfectant by-product formation in the system.4) Storage tanks at the Rowe Avenue Reservoir and at the Sam Brannon Reservoir are in need of repair to prevent damage due to exposed steel, which could leed to catastrophic failures and result in the City's inability to maintain adequate system pressure and fireflows.	498,000	13,550	51,504 21	Sutter	1	2009
3595 5110002	5110002-031	City of Yuba City	Upgrade One Highlift Pump and Install Hydro Pneumatic Tank	Upgrading a highlift pump to 9 MGD will increase the current pump capacity by 3 MGD, and together with installing a Hydro Pneumatic tank at the WTP will prevent the erratic flow and pressure problems and relieve water hammer.	0	20	С	Community growth and the addition of new storage tanks has resulted in reduced capacity to fill Reservoirs. The system is experiencing water hammer and eratic flow and pressure swings resulting in false fire alarms. Water hammer has resulted in increased pipe failures and leaks in the distribution system. Installing a Hydro Pneumatic tank at the WTP and upgrading the existing 6 MGD highlift pump to 9 MGD will allow for a smoother change when pumps are started and reduce water hammer and pressure swings throughout the system. I	425,000	13,550	51,504 21	Sutter	I	2009
3596 5110002	5110002-020	City of Yuba City	C - Street 10-inch Waterline Replacement	Remove 700 linear feet of current, unrelaible 4-inch cas iron water main and replace with 10-inch diameter ductile iron distribution main and related appurtenances on C Street between McRae Way and Second Street in order to bring water system up to current City standards.	st O	20	С	Water quality is compromised in this area due to deteriated condition of the 80+ year old pipes. Providing a more dependable water service should encourage commercial development in the area and provide new jobs. C Street and Second Street are located in the historic down town shopping district. This area has experienced low water pressure, increased turbidity, and pipe line corrosion. A 10-inch diameter water main will repalce aging and inadequate 4-inch cast iron water mains that are in poor condition and do not provide adequate fire flow. The larger size pipe will provide clean, dependable water and improve fire flows to the area.	189,000	13,550	51,504 21	Sutter	I	2009

3597 5110002	5110002-027	City of Yuba City	Woodbridge Avenue Waterline Replacement	Construct 275 linear feet of 8-inch diameter ductile iron O distribution main and related appurtenances on Woodbridge Avenue between Montery Avenue and Franklin Avenue and remove failing existing 4-inch pipe in order to provide our customers with a dependable water supply and meet the fire flow demands in the event of an emergency.	20	с	This pipe replacement would qualify as a water conservation project due to the repeated leaks. The aging 4-inch cast iron water main on the section of Woodbridge Avenue, between Monterey Avenue and Franklin Avenue is in very poor condition. Several leaks in this area have been repaired. The pipe needs to be replaced before it completely fails. Replacement of these old pipes in various areas would greatly decrease the City's maintenance costs.	63,250	13,550	51,504 21	Sutter	I	2009
3598 5110002	5110002-021	City of Yuba City	Forbes Avenue 14-inch Waterline Replacement	Replace 2,000 linear feet of 8-inch diameter pipe with a O 14-inch diameter distribution main to relieve velocity issues, and provide residences and businesses on Forbes Avenue between Cooper Avenue and Plumas Street with a dependable water source.	20	с	This area of Forbes Avenue provides a vital loop for the downtown business area fire flow. However, this area experiences low pressure during peak day and peak hour events, especially during the summer months. Bringing this 8-inch diameter main line up to the City standard of 14-inch diameter pipe would encourage commercial development and provide needed jobs due to the City's ability to provide dependable water pressure year round, especially in the event of a fire. The Yuba City Water Master Plan identified the need for a 14-inch diameter pipe due to the existing pipeline of 8-inch diameter pipe having flow velocities that exceed design standards of seven feet per second.	480,000	13,550	51,504 21	Sutter	1	2009
3599 5110002	5110002-032	City of Yuba City	Water Treatment Plant Solar Panels	Install solar panels for the purpose of providing clean O electricty for the operation of the Water Treatment Facility.	20	С	Green Project - Solar panels at the water treatment facility would improve electrical reliability and reduce demand during peak energy periods, reducing demand on the PG&E grid. This project would reduce the City's dependance on traditional sources of electricity and would reduce the City's carbon footprint. The City could install the panels in the sedimentation basins, which would reduce algae growth and improve problem the City sometimes has with drinking water having an unpleasant taste and odor.	600,000	13,550	51,504 21	Sutter	I	2009
3600 5710001	5710001-008	City of Davis	City of Davis Treated Surface Water Distributio Facilities (Cr+6)	Design and construct local facilities to distribute treated O n surface water supplies delivered by the regional WDCWA to city customers. The distribution system improvements will include: 46,000 feet of transmission and distribution pipelines (varying in size from 12 to 42 inch diameter), one 4- million gallon terminal water storage tank to dampen regional surface water deliveries into the city water system, new booster pump facilities to pressurize surface water deliveries into the distribution system, SCADA system control improvements, and deployment of an advanced metering system (AMR/AMI) to better manage, monitor, and report system-wide water use and reduce peak demands. These improvements will transition the city from total reliance on local groundwater supplies to a conjunctive use operation with year-round treated surface water supplies augmented by groundwater during peak demand periods. The City of Davis was established in 1917, meaning some of the existing water distribution system will serve two purposes: (1) upgrade old infrastructure, and (2) facilitate efficient distribution of treated surface water deliveries to city customers.	20	С	Replace old well capacity (high in: total dissolved solids, nitrate, total and hexavalent chromium, selenium, manganese, boron, and other constituents) with a new treated surface water source to comply with water quality regulations, provide water that is more aesthetically acceptable to customers, and improve future water supply reliability. The city has identified that a conjunctive use water supply portfolio represents the least costly alternative to: (1) provide potable water supplies that meet all current and future water quality regulations; (2) meet all of the city's wastewater discharge requirements issued by the RWQCB (including elimination or reduction of salts and other constituent levels), (3) provide customers with water quality that does not require water softeners and/or home treatment devices, and (4) diversify water supplies so that the City does not rely 100% on local groundwater resources which have declining water quality, and are not able to meet current and future water quality regulations or demands, and will cause long term subsidence effects.	22,000,000	16,339	68,420 09	Yolo	I	2012

3601 0410002	0410002-001	Cal-Water Service CoChico	City water conservation program.	The city wide water conservation project has two elements.a. Indoor: CWSC will replace / retrofit 40,323 bathrooms and the projected water savings is 1,237 acre feet per year.b. Outdoor: CWSC will replace 6,721 ET controllers and the projected water savings is 206 acre feet per year.	0	20	С	CWSC intends to reduce the district water consumption to match long term supply.	19,213,050	26,882	100,086 21	Butte	I	2009
3602 1910036	1910036-008	CALIFORNIA WATER SERVICE CO ELA	East L.A. "City Wide" Water Conservation Program.	The program has two "full service" elements that encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 19,979 residential homes / 39,959 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 1,226 acre feet per year. Element B. A team of specialist will retrofit 6,660 residential yards with modern ET controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 204 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 months or less. The program will employ 75 to 100 people for 12 months.	O t	20	C	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply and MWD is requesting that we reduce our consumption by 20 percent. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 1,430 acre feet per year or 50.0 / 75.0 gallons per day, per person.	19,379,873	26,639	151,300 22	Los Angeles	IV	2009
3603 3610039	3610039-035	SAN BERNARDINO CITY	Construct Devil Canyon Well No. 8	The project consists of the development of a new groundwater production well in the Devil Canyon portion of the SBMWD service area. The well is anticipated to produce water at a rate in the range of 1,500 gpm to 2,000 gpm, and it will be approximately 700 feet deep and equipped with on-site chlorination facilities. Water quality in the vicinity, and up-gradient, is generally good, and the SBMWD does not anticipate water quality to be an issue with this well. The well site is near the San Bernardino County Flood Control District's Devil Canyon spreading basins. These basins effectively capture natural runoff from Devils Creek and State Water Project water purchased by SBMWD for direct recharge of the surrounding aquifer. The combination deal the surrounding aquifer the spreading basins and good water quality make the proposed location ideal. The well will be constructed on a site currently owned by SBMWD to the standards of AWWA, the State of California , Department of Water Resources, and the State VDH District Engineer and has received their support for this project. An existing pipeline fronts the property and so no new pipelines are included in this project. Construction is expected to last approximately 1 year and will generate approximately 30 full and part time jobs during that duration.	0	20	C	Construct Devils Canyon Well #8Setting: The City of San Bernardino Municipal Water Department's (SBMWD) service area is located at the crossroads of the Interstate 215 and Interstate 10 freeways. The City of San Bernardino is the county seat of San Bernardino County and has an estimated population of 205,010, making it the 18th largest city in California and the 101st largest city in the United States. In addition, the City of San Bernardino is part of the Riverside-Ontario- San Bernardino Metropolitan area, the 14th largest in the nation, commonly referred to as the "Inland Empire". According to 2007 census information, the average San Bernardino family household is 3.83, with a median family income of \$41,010, which is \$19,364 below the 2007 national average and less than the statewide MHI. Approximately 25% of City residents are considered to be at or below the poverty level. SBMWD's service area encompasses approximately 45 square miles. The SBMWD serves most of the City of San Bernardino, portions of Loma Linda and Redlands as well as unincorporated areas of the County. SBMWD produces its water supply from 57 groundwater production wells located throughout its service area. The wells range from 50 to 1,300 feet deep and have production capacities of 50 to 3,500 gallons per minute (gpm). Water is delivered to SBMWD customers with a series of pump stations, storage reservoirs with a total	1,500,000	42,301	173,359 13	San Bernardino	v	2009
3604 2500514	2500514-001	MJUSD-South Fork Elementary School		Redesign and build wellhead to raise it above grade to reduce potential for contamination. Add water treatment to system to remove hard water and eliminate calcium deposits.	0	20	Ρ	The wellhead is presently below grade, producing the potential for contamination. Hard water results in calcium deposits on fixtures.	21,895	1	35 01	Modoc	I	1998
3605 1502753	1502753-001	TEHACHAPI CHURCH OF THE NAZARENE		Interconnect to another public water system or provide adequate disinfection contact time.	0	20	Р	Coliform contamination of well. Unconfirmed E. coli.	100,000	1	119 19	Kern	Ш	1999

3606 2100538	2100538-002	TOMALES HIGH SCHOOL	Shoreline Unified School District- Tomales High School	Research, design, install a new distribution system. Project will include engineering, design, installation or treatment and control systems, installation of new distribution system and monitoring. Project to include approximately 5,000 feet of 8 inch water line.	0	20	Ρ	Research the feasibility of consolidating three of the school district's public water systems; Tomales High School (2100538), Tomales Elementary School (2100577). Consolidate and develop new sources, and install new storage tanks. Consolidation is considered to solve the following problems: general inadequacy of water availability, Tomales High School: high sulfur levels complicate chlorine residual monitoring and aesthetic issues, Tomales Elementary School: possible compromised well or well seal masked by preventative chlorination, Shoreline School Dist. Bus Garage: maintenance on severely worn distribution facilities including historic redwood tank, rusting pressure tank and valving and lines. Consolidating with the Bus Garage will require crossing Shoreline Highway (Hwy. 1) at the town of Tomales. Secondary MCL's are violated in the primary wells at the high school. Sulfur creates aesthetic problems and difficulties in maintaining adequate chlorine residuals in the distribution system. The LPA supports consolidating either two or all three of the water systems.	750,000	1	227 18	Marin	I	2007
3607 3600602	3600602-002	Alpine Covenant Conf. Centre	Alpine Camp and Conference Center Water System Improvements	The SCADA system to be installed will provide complete control over Alpine Camp and Conference Center water system. Wells will be turned on and off based on the level of water in the reservoir or other system parameters. When properly instrumented, other syster peremeters such as well flow and well water depth can be monitored and historically recorded to provide a graphical representation over time. The computer system and software will allow the operator to make changes in the system operations and control the flow of information to the Lake Arrowhead Community Services District.In addition, replacement of plumbing in the distribution system will improve efficiency and enhance conservation efforts.	e O r n	20	Ρ	This project is purposed to resolve storage monitoring and regulation problems inherent in our present system. A new SCADA system is needed to resolve this problem. Current methods require visual monitoring and hand controlled regulation of wells and reservoirs.Furthermore, water distribution is compromised by archaic plumbing that frequently ruptures. Current water system plumbing is in need of replacement and upgrading for efficient distribution and conservation.	108,862	1	250 13	San Bernardino	v	2011
3608 4900694 3609 1300549	4900694-001 1300549-001	Wright Elementary School IMPERIAL VALLEY COLLEGE	Consolidation Imperial Valley College Water Pipeline	Connect This project will include the construction of approximately 19,000 linear feet of 18-inch water pipeline along Aten Road in the City of Imperial. The project, once completed, will permanently intertie the Imperial Valley College with the City of Imperial. This project will result in the consolidation of water system CA1300549 in to CA1310006. The consolidation will result in the decommissioning of the Imperial Valley College water treatment facility.	0	20 20	P P	Small school wants to connect to City This project will consolidate the Imperial Valley College water system into the City of Imperial's water distribution system. Imperial Valley College's water treatment facility will soon need significant upgrades in order to adequately supply water to the College. The College lacks the means to generate funding to upgrade and maintain its system. In addition, the College lacks the available space required to expand its treatment facility. Consolidation into the City system will provide the following benefits 1) eliminate the College as the water treatment provider, 2) Increase system reliability, 3) Enhance fire protection. The proposed project includes installing approximately 19,000 linear feet of 18-inch waterline along Aten Road. The waterline will connect to the City's water distribution system at the intersection of Aten Road and Legakas Road. The pipeline will terminate at the College. The City has recently constructed a 2 MG reservoir and booster station near the connection point.	400,000 3,000,000	11 23	441 18 5,000 14	Sonoma Imperial	II V	2002 2009

3610 0202519	0202519-001	TURTLE ROCK COUNTY PARK		Design and install a new 15,000 gallon steel tank meeting current AWWA standards	0	20	Ν	Replace old leaking tank.	24,000	15	25 09	Alpine	I	1998
3611 4100536	4100536-001	SAN MATEO COUNTY MEMORIAL PARK		Construct new water main. Feasibility study to	0	20	Ν	Wishes to take over a system that has unfiltered surface water with coliform bacteria present	100,000	5	25 17	San Mateo	Ш	1998
3612 4700517	4700517-001	Sawyers Bar County Water District		Rebuild intake.	0	20	Ν	Water intake at Jessup's Gulch is old and deteriorated.	10,000	1	100 01	Siskiyou	I	1998
3613 3400359	3400359-001	HAMILTON STREET PARK		replace with submersible pump	0	20	Ν	Turbine pump is worn and needs to be replaced; installed in 1977: rated 49 percent efficiency	15,000	1	100 09	Sacramento	I	2004
3614 1510040	1510040-001	Kern County Water Agency		INCREASE CAPACITY OF EXISTING PIPELINE BY REDUCING PUMPING HEAD.	0	15	С	DISTRICT WILL REDUCE GROUNDWATER PUMPING BY REPLACING WITH SURFACE TREATED WATER. THIS IS AN IN-LIEU PROJECT TO PROTECT OUR GROUNDWATER.	750,000	3	0 12	Kern	ш	1998
3615 1500344	1500344-001	SOUTH KERN MUTUAL WATER COMPANY		Call S.A. Camp Pump Co. and have them fix it. OTHER - Design and Construction	0	15	С	Future replacement of all or part of system as the result of a natural or man made disaster or unseen problem.	250,000	14	35 19	Kern	Ш	1998
3616 5301104	5301104-001	Covington Mill MWC-Division B		Drill an additional well and have additional storage facility.	0	15	с	Need larger facilities to accommodate full time residents and expansion.	150,000	99	40 01	Trinity	I	1998
3617 2300506	2300506-002	Meadow Estates Mutual	Security Fencing	We propose to erect a 6 ft/9 gauge chain link fence with razor wire top on the perimeter of the property. Posts would be set in concrete with appropriate gates and locks installed.	h O	15	с	The Water Company has no perimeter fencing. To date there have been only minor acts of vandalism to the system facilities. However, a fence is necessary to protect planned upgrades to the system and ensure our ability to provide safe drinking water to the system.	30,000	35	85 03	Mendocino	II	2009
3618 1000004	1000004-001	BELMONT WATER CORPORATION		Deepen the existing well or drill a new well.	0	15	С	DBCP levels exceed the MCL. Backup well occasionally has high levels of coliform.	30,000	33	86 23	Fresno	Ш	1998
3619 5400805	5400805-001	SOULTS MUTUAL WATER CO.	Soults MWC Distribution System	REPLACE DISTRIBUTION SYSTEM. OTHER - DESIGN AND CONSTRUCTION	0	15	С	WELL CONTAMINATED WITH COLIFORM., LEAKING DISTRIBUTION SYSTEM, LOW WATER PRESSURE.	75,000	36	100 12	Tulare	Ш	2006
3620 4900603	4900603-001	Riebli Mutual Water Company		Replace chlorinators with UV.	0	15	С	Current method of purification is by chlorination which leaves an undesirable taste.	60,000	47	100 18	Sonoma	Ш	1998
3621 3210002	3210002-002	Plumas County Flood Control	Lake Davis Water Treatment Plant Project, Phase II	Perimeter security fencing and gates \$35,000Site hard surface asphalt paving \$54,000Backwash wastewater on-site sprinkler disposal system \$13,000Replacement 250,000 gallon finished waster storage reservoir \$380,000SCADA interfacing with City of Portola \$4,000Engineering, Contract Admin and Contingencies \$194,000		15	c	Perimeter fencing is critically needed because of the need to address Homeland Security Act Protection of vulnerable community potable water supplies. The only access roadway and site work area surfacing is compacted aggregate base. A hard surface provided by asphalt will allow for more effective snow removal and provide all weather access. As the water treatment plant is relied upon during winter months to provide more of the City's water supply, more expedient and continuous access to prevent any possible interruption to water supply operations is needed. A sprinkler irrigation system is needed to dispose of excess backwash waste water by installing either a permanent or a movable set irrigation system on the adjacent parcel (which is owned by Plumas County) below the plant. A replacement 250,000 gallon finished waster storage reservoir is needed. This scope of work includes expansion of the plant SCADA System, supplementing the single data logger and dialup system with the capability of accessing all real-time operating data as well as historical archived information through a Virtual Private Network feature. Software and hardware additions are needed and a DSL or other high-speed phone connection to the City offices from the water treatment plant is required. The above proposed additions are all necessary to insure the safety of the water supply and facilitate reliable performance and Well wares are of and detoricirected and anot the ord	680,000	2	100 02	Plumas		2009
3622 4700803	4700803-001	Shadow Mountain MHP		Replace old well pumps with new pumps.	0	15	c	Well pumps are old and deteriorated and near the end of their useful life.	20,000	85	100 01	Siskiyou	I V	1998
3023 3700422	3700422-001			Inite illerised contractor after bidding process.	0	15	c	asbestos pipes and pump house.	10,000	3/	100 14	San Diego	v	1000
3624 0500019	0500019-004			INSTALL TELEVIETRY TO LINK TANK WITH PUMP CONTROLS	0	15	c c		10,000	24	125 10	Calaveras		1998
2052 0200018	0200013-001	WINERAL WOUNTAIN MUTUAL WATER		SYSTEM	0	12	L	STSTEW FEELS IT NEEDS A NEW WELL	12,500	24	125 10	Calaveras	ш	1998

3626 5400881	5400881-001	SUNRISE MUTUAL WATER CO.		INSTALLATION OF A LARGER CAPACITY STORAGE UNIT AND LABOR SIZE MORE MODERN MAIN LINES AND IMPROVED SERVICE LINES	0	15	С	LACK OF SUFICIENT WAER PRESSURE TO ALL OUTLETS ON A CONSTANTS BASIS.	185,000	39	140 12	Tulare	Ш	1998
3627 1000005	1000005-002	BIG CREEK COMMUNITY SERV DIST	Water Main Replacement	Replace approximately 5000 feet of distribution main pipeline.	0	15	С	Water mains are old and antiquated. System has experienced maior leaks.	40,000	65	150 23	Fresno	Ш	2006
3628 0600005	0600005-003	Colusa Co. Service Area #2-Stonyford	Csa 2 Stonyford Water Line Upgrade	The proposed poject is intended to eliminate a restriction in the existing water syseem. This will be achieved by replacing 2000 feet of existing 4" water line with 2000' feet of 8" line.	0	15	С	Inadequate main line size has resulted in substandard water pressure to customers.	141,000	66	200 21	Colusa	I	2009
3629 1000267	1000267-002	KINGS CANYON MOBILE HOME PARK	Arsenic and Uranium Stud	y Funding is needed to initiate a planning study to identifiappropriate solutions to bring the arsenic and uranium concentrations into compliance with applicable statues and regulations.	y 0	15	с	Limited sampling and testing has indicated that Arsenic and Uranium are present at values in exceedance of the respective MCLs.	250,000	60	200 23	Fresno	Ш	2011
3630 4600018	4600018-006	Sierraville P.U.D.	Sierraville Public Utility District drinking water tank installation	Removal of abandoned bolted steel water tank. Construction of new pad and a 200,000 gallon welded steel water tank, including piping. Drilling of a groundwater well and associated piping to integrate into the distribution system. Possible land acquisition for new well.	o	15	c	The District needs a new drinking water storage tank to offset demand during peak water usage periods, to handle normal use during drought years, and to keep pace with population growth. The District has had three new hookups within the past year, and anticipates a spurt of growth in the next few years. The growth will be overflow population from the Town of Truckee, 25 miles away, where median home prices hovering around \$500,000 have outpaced the incomes of middle class families. The additional tank also would allow much-needed repairs to be made to the existing tank. As for the well, the district is functioning solely off of a spring, and there is a danger of contamination and a possibility that it would reduce production. For the safety of our customers, we would like to develop an alternate, reliable source.	800,000	102	200 02	Sierra	1	2009
3631 2900530	2900530-001	ROUGH & READY MHP WATER SYSTEM		Construct new distribution system and well.	0	15	с	Needs storage, needs new distribution system and well.	75,000	62	200 21	Nevada	I	1998
3632 1100404	1100404-001	Black Butte Water Co.		Drill an additional well and install related support equipment.	0	15	с	One single well. There is a need for fire protection by increasing water volume availability.	55,000	83	249 21	Glenn	I	2002
3633 0910007	0910007-004	Lukins Brothers Water Company		Install tank with supply pump and generator at Well 4.	0	15	С	No backup storage.	400,000	905	250 09	El Dorado	I	1998
3634 0910007	0910007-002	Lukins Brothers Water Company		Install new lines.	0	15	с	Old pipes for water main.	4,500,000	905	250 09	El Dorado	1	1998
3635 0310015	0310015-001	Rabb Park Community Ser. Dist.		INSTALL NEW PIPELINES, HYDRANTS AND FLOW METERS. OTHER = DESIGN AND CONSTRUCTION	0	15	С	LOW PRESSURE, INADEQUATE FIRE FLOW, NO METERS.	100,000	107	268 10	Amador	Ш	1998
3636 3301630	3301630-002	Blythe - Hidden Beaches	Hidden Beaches Reservoir Rehabilitation & Lining Project	This is a 350,000-gallon bolted steel reservoir that has been in service for over ten years. Recent issues are corrosion of interior panels and seams which will lead th water quality issues, water loss, and potential failure of the tank leaving the community without adequate water storage capacity and serious health issues. The reservoir is currently experiencing several leaking seams resulting in panel corrosion and pending loss of structural integrity. Because this is a non-redundant water storage system, the project scope will require temporary storage means during the rehabilitation process.	0	15	c	This is a 350,000-gallon bolted steel reservoir that has been in service for over ten years. Recent issues are corrosion of interior panels and seems which will leading to water quality issues, water loss, and potential failure of the tank leaving the community without adequate water storage capacity and serious health issues. The reservoir is currently experiencing several leaking seams resulting in panel corrosion and pending loss of structural integrity.	151,800	104	300 20	Riverside	v	2009
3637 1400005	1400005-003	Owens Valley Water Company		Install sand separator	0	15	с	Sand in drinking water	10,000	111	300 13	Inyo	v	2000
3638 1400005	140005-002	Owens Valley Water Company		Construct new chain link fence to protect water system facilities from vandalism	U	15	C	unapidated wooden fence surrounding water system facilities leaving them vulnerable to vandalism	10,000	111	300 13	Inyo	v	2000
3639 2000293	2000293-001	MD#46 AHWAHNEE RESORTS		INSTALL TWO NEW WELLS AND A TELEMETRY SYSTEM.	0	15	с	THE SYSTEM MUST BE CHLORINATED TO MEET THE TCR. ITS RELIABILITY COULD BE IMPROVED BY THE INSTALLATION OF TWO NEW WELLS AND A TELEMETRY SYSTEM.	130,000	90	300 11	Madera	Ш	1998
3640 2300591	2300591-002	Pine Mountain Mutual Water Co.		Install approved filter and monitoring systems for these water sources.	2 0	15	С	Some sources not currently being used are subject to seasonal surface infiltration (wells 1,2,4 and spring). These are unapproved sources.	28,000	130	310 03	Mendocino	Ш	1998

3641 2300591	2300591-003	Pine Mountain Mutual Water Co.		Hire engineer to conduct studies and surveys.	0	15	С	System needs engineering studies for future construction and maintenance and compliance with DOHS requirements.	14,000	130	310 03	Mendocino	II	1998
3642 3900831	3900831-002	ARBOR MOBILE HOME PARK		BUILD 80,000 GALLON STORAGE TANK. OTHER = DESIGN AND CONSTRUCTION	0	15	С	SYSTEM LACKS FIRE FLOW DESIRED BY FIRE DEPARTMENT	100,000	173	340 10	San Joaquin	Ш	1998
3643 4000568	4000568-001	SAN SIMEON CSD		Additional wells and Desal Plant	0	15	С	Sea water intrusion from over pumping of ground water.	1,000,000	206	499 06	San Luis Obispo	IV	1998
3644 4000568	4000568-003	SAN SIMEON CSD	New main installation	Construct 2400' upgraded parallel line.	0	15	с	Existing 8" line too small. Insufficient pressure and flow to customers	280,000	206	499 06	San Luis Obispo	IV	2003
3645 4000568	4000568-004	SAN SIMEON CSD	New Storage Tanks	construct and add storage tank for the fire flow requirements	0	15	С	Additional storage is required to meet fire flow requirements	600,000	206	499 06	San Luis Obispo	IV	2007
3646 4210009	4210009-003	Cuyama Community Services District		New water lines need to be put in to replace the old lines.	0	15	С	Water lines are old, corroded and deteriorating. Leaks are frequent.	2,000,000	253	820 06	Santa Barbara	IV	2001
3647 1510051	1510051-007	LEBEC COUNTY WATER DISTRICT	Upgrade Water Mains in Commercial Areas	The existing 6-inch main can be parralleled by 3,500 lineal feet of 8-inch pipe. The project includes analysis of the existing pipe network and construction of new mains as required to deliver adequate fire supply	0	15	С	Water capacity in the commercial areas of the District is limited by a single 6-inch diameter pipe. Current Kern County Development Standards require that pipe sizes be 8-inch diameter or greater for stubs longer than 800 feet.	400,000	243	830 19	Kern	Ш	2009
3648 4110028	4110028-002	Pillar Ridge MHP (Former El Granada MHP)	Pillar Ridge Water Treatment Improvements	The proposed project will include installtion of iron and manganese removal systems both at the existing groundwater treatment facilities. The project will also include remediation work to the wells, and in-situ treatment at each wellhead. Mainlines in the distribution system will also be rehabbed to remove an iron bacteria growth present.	y	15	с	The water system has experienced high levels of iron and manganese in the water distribution system and groundwater supply wells. Iron has been regularly sampled to be over 10 times the MCL of 300 ppb while Manganese has often reached levels over 5 times the MCL of 50 ppb. These levels are in violation of the California Code of Regulations, Title 22, Chapter 15, Section 64449-(a).	500,000	228	1,000 17	San Mateo	Π	2011
3649 2310010	2310010-003	Hopland Public Utility District		Add additional storage tanks and force main to reservation.	0	15	С	Need additional storage to connect to and serve the Pomo Indian Reservation which approx. 4 miles east of Hopland.	3,000,000	479	1,020 03	Mendocino	II	1998
3650 2310010	2310010-002	Hopland Public Utility District		Replace old distribution lines.	0	15	С	Approx 60% of main lines are steel lines which have been in the ground since 1950.	1,000,000	479	1,020 03	Mendocino	Ш	1998
3651 1910050	1910050-001	COMMERCE-CITY, WATER DEPT.	CITY OF COMMERCE - WATER SYSTEM IMPROVEMENT	Here are the major aspects of this project:1. Acquire property for new well, booster station & reservoir \$750K to \$1.0mil (City match)2. Construct one new potable well & install 100gpm oump & discharge piping \$1.5mil.3. Construct treatment facilities (if necessary) \$1.5mil.4. Construct one new 1-million gallon reservoir complete with new booster station, electrical panel and controls \$2.5mil5. Abandon two existing wells, demolisi reservoir and sell off property \$500mil (or convert to other municipal uses).	O S h	15	c	The goal of the project are: replacement of 2 obsolete and non-operating stations in the Commerce Water System, construc/install/operate 2 new wells, increase storage capacity and reduce dependence on imported water. Reducing our reliance on imported water will add additional water supply to Southern California Region and other cities which depend on such water to meet their increasing residential/commercial demands.The above project will allow us to be somewhat selfs-sufficient and have a reliable supply of water, utilize existing adjudicated water rights, and minimize (if not eliminate) the need for purchaing MWD water. Again, allow other communities in greater need or reliance on imported water to avail themselve of MWD water, especially under the current and prolong water shortage (and proposed water rationing).	6,000,000	974	1,333 22	Los Angeles	IV	2009
3652 5410033	5410033-001	Pratt Mutual Water Co		INSTALL WATER METERS. OTHER -DESIGN AND CONSTRUCTION	0	15	С	WATER METERS	180,000	277	1,500 12	Tulare	ш	1998
3653 1710010	1710010-004	Lower Lake County Water District		Replace clearwell with 100K steel tank with bolted and locked lids.	0	15	С	20 year old redwood tank at cache Creek plant. Relocated from another site and never sealed with use. Security risk.	70,000	886	2,025 03	Lake	II	1998
3654 1010039	1010039-004	Caruthers Comm Serv Dist		INSTALL WATER STORAGE TANK. OTHER - DESIGN AND CONSTRUCTION	0	15	С	INADEQUATE SUPPLY DURING SUMMER MONTHS	450,000	672	2,103 23	Fresno	Ш	1998
3655 4510002	4510002-001	Mountain Gate C.S.D.		Install filter vessel; Chlorinate at source pumps, and upgrade existing pump controls.	0	15	С	Need increased filter capacity; need pre-filtration Chlorination; and need system control.	1,750,000	664	2,500 02	Shasta	I	1998
3656 4510002	4510002-004	Mountain Gate C.S.D.	clear well replacement	replace 3 warnout corroded and unrepairable water storage tanks with 1 larger one in their place .remove and scrap the old ones.	0	15	С	2007 master plan shows 4 0f the districts water storage tanks are past their usefull life and unrepairable.the loss of 1 tank will make it impssible to maintain required reserves or mintain adiquate contact time for disenfection	1,200,000	664	2,500 02	Shasta	I	2009

3657 3710036	3710036-002	Borrego WD	Pump house rehabilitation and facilities surveillance project	The pump house rehabilitation and facilities surveillance O project proposes to replace eleven dilapidated pump house buildings, oleander hedges and chain link fences with modern, tightly sealed metal structures surrounded by security fencing and desert native landscaping. The new buildings will be expanded to include all electrical panels and mechanical valves associated with the pump operation into one tighly sealed, insulated structure. The new security fencing will feature an enclosed area large enough to provide adequate space for pump maintenance and portray a sense of safe and secure water to our customers. The facilites will also be equipped with state-of-the-art video surveillance devices which will be tied into the District's existing SCADA system. In addition to the eleven well locations, the project will include fencing and surveillance for two booster stations and six reservoir facilities. The 2000 census report for the geographic area of Borrego Springs reflects a median household income of \$37,045 which is below 80 percent of the statewide Median Household Income and therefore qualifies the entire Borrego Springs area as a disadvantaged community.	15	C	Security Project	886,584	2,017	2,535 14	San Diego	v	2007
3658 3710036	3710036-006	Borrego WD	Borrego Springs Water Supply Augmentation Project	The project consists of constructing a well field, a O booster station and a transmission system in an adjacent groundwater basin for the purpose of extracting and delivering a new water supply for the water district's customers. Four production wells, each with a capacity of about 250 gpm, will be constructed into a shallow aquifer with a total depth of each well of about 200 feet. Additionally, two groundwater monitoring wells will be constructed in the shallow aquifer to evaluate the long-term impacts of pumping from the shallow aquifer. The extracted water will be delivered into the water district's existing distribution system, a distance of about 9 miles, via 12-inch and 6- inch diameter transmission pipelines.	15	с	The community's sole source aquifer has been in a constant state of depletion since 1945. The rate of declining groundwater levels in the basin has more recently increased to about 3 ft/yr. The continued depletion will ventually result in a significant water shortage and a disruption to the economically disadvantaged community. The continued depletion could also lead to the introduction into the district's wells of groundwaters containing nitrate and salinity concentrations that exceed primary and secondary drinking water standards.	7,775,000	2,017	2,535 14	San Diego	v	2009

3659 2910002	2910002-006	City of Nevada City	Water Storage Tanks Upgrade	The three welded steel storage tanks provide a total of 3.03 million gallons (full) of treated water, which well exceeds the minimum recommended quantity of 700,000 gallons for this system size. All tanks are on the same hydraulic gradient and float off the main system. The Canada Hill tank of 1.14 MG is located near the water treatment plant southeast of the City. The largest Sugarloaf tank of 1.38 MG capacity is located in the north central part of the City. A smaller forestry tank of 0.51 MG capacity is located in the southwest area of the City. All of the tanks are in serious need of level controls, such as altitude valves, and remote sensing and reporting devices for effective reliability, operations, and security. In addition, all of the tanks are in need correction of corrosion problems. These improvemts will consist of constructing altitude valves to control stored water levels and to eliminate spillage of chlorinated finished water into nearby drainages; to construct SCADA (system control and data analysis) systems to monitor tank conditions and to transmit control data to the water treatment plant for operator information; and to drain, clean and repaint to correct corrosion damage to the tank interiors. The tanks were constructed in 1978, and are in need of upgrading/rehabilitation.	o r	15	c	The City distribution system is supplied by the water treatment plant, which supplies the three steel storage tanks, upon which the distribution system relies for pressure and stored finished water. The CDPH annual Inspection Report has recognized deficiencies of all three storage tanks, and has required upgrades. Deficiencies include lack of automated level controls, which allows spillage of chlorinated water outside the tanks, lack of automated monitoring of tank levels and security, need for correction of corrosion of the steel tanks.	362,000	1,205	3,001 21	Nevada	I	2009
3660 5310001	5310001-006	Weaverville C.S.D.		Replace water mains.	0	15	С	Miscellaneous water mains in distribution system are old and deteriorated.	446,000	1,577	3,554 01	Trinity	I	1998
3661 5310001	5310001-004	Weaverville C.S.D.		Replace the open ditch with approximately 5,500 feet o 8-inch water main.	of O	15	С	Open ditch that supplies water to West Weaver Treatment Plant is vulnerable to contamination.	220,000	1,577	3,554 01	Trinity	I	1998
3662 2310009	2310009-002	Brooktrails Township CSD	Backwash Water Recycle	Build Backwas Pond's recycle backwash water to Lake Ada Rose or plumb backwash water into sewer.	0	15	С	Backwash water flows into Willits Creek	130,000	1,553	3,800 03	Mendocino	II	2002
3663 3410045	3410045-001	CalAm - Arden		Connect Ethan Way to City of Sacramento. Involves design and construction.	0	15	С	General system improvement. Lack of supply reliability with largest source out of production.	250,000	1,202	4,069 09	Sacramento	I	1998
3664 0910003	0910003-006	Placerville, City of - Main	City of Placerville Northside Waterline Replacement Project	Construction of approximately 5,000 feet of 6- and 8- inch replacement pipeline constructed in accordance with current California Waterworks Standards.	0	15	С	In many areas within the older portions of Placerville, customers are served from old 2-, 3-, and 4-inch iron distribution pipelines that are approximately 70 to 100 years old and were not constructed in accordance with current California Waterworks Standards.	1,000,000	3,399	4,926 09	El Dorado	I	2009
3665 0910003	0910003-007	Placerville, City of - Main	Country Club Drive Hydropneumatic Pump Station Bypass Project	Construction of approximately 1,000 feet of new 6-inch pipeline (along with the associated valves, metering, and other appurtenances) necessary to serve the existing ridge-top customers from an intertie with the E Dorado Irrigation District (EID) potable water system. The intertie would be located upstream of an existing EID pressure reducing station.	0 1	15	с	The City currently uses a hydropneumatic pump station to serve existing customers located on the top of a ridge. The hydropneumatic pump station is old and in a deteriorated condition.	300,000	3,399	4,926 09	El Dorado	I	2009

3666 0610004	0610004-007	City of Williams	Williams Ground Storage Tank	The City proposes building a single one million gallon O ground storage tank with a booster pumps with enclosed building, plus associated piping, to be tied to our distribution system allowing for treatment, pressure equilization and fire protection.	15	С	The City of Williams is required to reduce excessive levels of Manganese and Iron in order to comply with State and Federal regulations allowing our water system to obtain permits for several of our water wells. To do so, we need to add filtration treatment, currently this will require filtration at each of our wells due to the current layout of our distribution system. At this time the City has just one storage tank of 100,000 gallons which also serves as our sole ability to regulate distribution system pressure, as well as fire protection capacity which is greatly needed. It is also believed that the City can reduce it's energy demand and stress on the wells due to the ability to utilize smaller, more efficient motors, rather than the large 100 horsepower ones currently in use. A large storage tank will also allow the City to "blend" water from several sources.	2,530,000	1,324	5,250 21	Colusa	1	2009
3667 0610004	0610004-005	City of Williams	Williams Water Well	Project will cover drilling of test well to insure volume and quality. New production well with pump, motor , variable speed drive unit, radio telemetry, and SCADA control. About a three hundred square foot building to encompass controls and chemical/ disinfection equipment. Necessary Safety equipment for handlers and public. Iron and Manganese filtration will be required by the Dept. of Public Health due to groundwater supplies containing excessive levels of these contaminates. Permit of approved supply requirement.	15	С	Install new water well and appurtenances along with Iron and Manganese treatment in an effort to obtain a higher quality and quanity of water to meetState and Federal standards, and insure greater level of fire protection than current supplies afford.	1,400,000	1,324	5,250 21	Colusa	I	2009
3668 0610004	0610004-006	City of Williams	City of Williams SCADA system	This project will apply SCADA system to three of our five O water wells, single elevated storage tank and proposed ground storage tank with booster station, so that they may be monitored for such parameters as flow, pressure, chlorine (to reduce TTHM and DBP) well pump motor operation, filtration, and unauthorised entry. Additionaly, This will be used for monitoring data collection.	15	С	The City's growing water system requires additional treatment for removal of very high levels of Manganese and Iron which exceed State regulatory MCL's. More oversite and control are required to properly monitor filter processes, along with the ability to collect data for CDPH regulatory permit requirements. Currently, the water system relies on constant attention that staff cannot perform due to a lack of personel the City can employ. Should we aquire a much needed filtration system, SCADA control will be a necessity. The SCADA would also be tied with video and motion alarms to help meet Homeland security needs and reduce vandalism.	61,000	1,324	5,250 21	Colusa	I	2009

3669 3110003	3110003-001	Foresthill Public Utility Dist	Foresthill Public Utility District Water Supply Reliability Project	The Foresthill PUD is located in the rural community of Foresthill CA, along the Foresthill Divide. The community's sole water supply is from the District's water treatment plant (WTP). The treated water is stored in three tanks totaling 1.3 million gallons of available storage at the WTP. Current maximum day demands exceed 2.3 million gallons per day. In the even of a problem at the WTP that interrupts water production, the District staff must instigate emergency measures to curb demands and conserve water until the problem is solved. The threat of wildland fires within the service area further increases the threat to the water supply. Additional treatment and storage capacity would increase the system's reliability and also enable fire fighting forces to minimize the size of wildland fires and minimize the loss of property and damage to the American River Watershed. The proposes project includes the addition of a 2 million gallon storage tank and addition of a redundant filter at the WTP.	O t	15	C	FHPUD serves approximately 2,200 customers with treated water of which 2,100 are residential and about 90 are commerical customers. The project is needed to address water supply reliability and to ensure compliance with Safe Drinking Water Act drinking water standards. Additional water filtration is needed to ensure water quality is maintained during buildout in the District service area.	6,000,000	1,919	5,500 02	Placer	1	2009
3670 2310006	2310006-001	Millview County Water District		Drill new wells and raw water river crossing.	0	15	с	District's raw water source drys up in summer. Supplementary raw water intake from river is in poor location.	200,000	1,489	5,500 03	Mendocino	II	1998
3671 2410006	2410006-003	DELHI CWD		INSTALL WELL HEAD TREATMENT TO REMOVE NITRATES.	0	15	С	ONE OF THE DISTRICT'S FIVE WELLS HAD A HIGH NITRATE RESULT IN 1996.	400,000	2,254	5,548 11	Merced	Ш	1998
3672 2310001	2310001-002	Fort Bragg, City of		Replace 4000 L.F. of raw water transmission line and upgrade pumps and pumping station.	0	15	С	Deteriorating main transmission line (raw water), inefficient pumping system.	540,000	2,791	6,963 03	Mendocino	Ш	1998
3673 3610053	3610053-001	WESTERN HEIGHTS WATER COMPANY		Construct new well	0	15	С	Two inactive high nitrate wells, and one old inactive well in water system	765,335	2,225	7,120 13	San Bernardino	V	2001
3674 1510041	1510041-001	North of the River MWD		A new water line to transport this water to a point where it can be blended with better quality water. OTHER- Design and Construction.	0	15	С	Some water supply wells have unacceptably high nitrate and TDS. Well-head treatment is too expensive.	1,600,000	2,025	7,500 12	Kern	Ш	1998
3675 4010005	4010005-001	OCEANO COMM SERVICES DIST.	SELENIUM	Drill a new well in another area of the District	0	15	с	2 wells exceed the selenium MCL but are blended to comply with the standards.	920,000	1,987	7,600 06	San Luis Obispo	IV	2006
3676 3610044	3610044-003	DWP - BIG BEAR LAKE/MOONRIDGE	Menlo Drive Mainline Replacement	The Menlo Drive mainline replacement involves replacing 3,400' of 4" and 6" existing mainline with 8" mainline to increase fire-flow in this portion of our service area. Big Bear Lake and vicinity is prone to wildfires and recent increases in fire-flow requirements have left many portions of our water system with deficient fire-flow. This is one of many pipeline replacement projects we have planned to correct this situation.	0	15	с	Menlo Drive mainline is inadequate to meet current fire- flow standards. This project will replace the existing four and six inch mainline with an eight inch mainline increasing fire-flow in this section of our service area. No public notification was required.	347,820	10,366	8,839 13	San Bernardino	V	2009
3677 4010011	4010011-008	MORRO BAY WATER DEPARTMENT	Morro Bay City Water Meter Replacement Program	The proposed water meter replacement project will replace aging water meters throughout the water system to reduce water losses. This project will help reduce wasted water as well as reduce costs of operating the distribution system by accurately metering delivered water.	0	15	с	The City of Morro Bay distributes water to about 5400 service connections and the total metered water collected from the service meters is less than the total water production from the City's water sources. Total water loss exceeds 10%, much of this loss has been attributed mainly to inaccurate water meters.	3,000,000	5,425	10,270 06	San Luis Obispo	IV	2009
3678 2910006	2910006-006	Nevada ID - Loma Rica		Add 3.0 MG storage tank. Involves design and construction	0	15	с	Inadequate system storage for diurnal demands and	1,800,000	4,783	11,814 21	Nevada	I	1998
3679 2910006	2910006-004	Nevada ID - Loma Rica		Add second transmission main through Cedar Ridge.	0	15	С	Inadequate system reliability due to lack of looped transmission facilities	740,000	4,783	11,814 21	Nevada	I	1998
3680 2910006	2910006-002	Nevada ID - Loma Rica		Replace existing equipment with new dual-feed lime sile and spill contaminant wall. Involves design and construction.	D 0	15	с	Treatment process and water quality adversely affected by difficlult and inaccurate pH adjustments due to inadequate lime feed equipment.	190,000	4,783	11,814 21	Nevada	I	1998
3681 2910006	2910006-003	Nevada ID - Loma Rica		Replace faulty material with standard waterworks pipeline. Involves design and construction.	0	15	с	Inadequate distribution system reliability due to routine failure of substandard pipeline material. Two phases.	895,000	4,783	11,814 21	Nevada	I	1998

3682 2910006	2910006-009	Nevada ID - Loma Rica		Rehabilitate pump station and add redundancy. Involves design and construction.	0	15	С	Inadequate pumping capacity and reliability due to dilapidated mechanical and electrical equipment.	120,000	4,783	11,814 21	Nevada	I	1998
3683 2910006	2910006-005	Nevada ID - Loma Rica		Replace with standard water main materials. Involves design and construction.	0	15	С	Degradation of water quality due to substandard pipeline materials (ABS) and dilapidated steel pipeline.	80,000	4,783	11,814 21	Nevada	I	1998
3684 2910004	2910004-004	Nevada ID - E. George, Banner Mountain		Add second transmission main into the Oaks area.	0	15	С	Inadequate system reliability due to lack of looped transmission facilities.	210,000	5,238	12,939 21	Nevada	I	1998
3685 2910004	2910004-003	Nevada ID - E. George, Banner Mountain		Replace distribution system and service line with standard waterworks materials.	0	15	С	Degradation of water quality due to deteriorated water mains and service lines(unlined steel).	390,000	5,238	12,939 21	Nevada	I	1998
3686 2710009	2710009-002	CWSC King City	King City "City Wide" Water Conservation Program	The city wide water conservation program has two elements. A. Indoor: CWSC intends to replace 3,150 bathroom fixtures (Toilets and Showerheads). This will save 97 acre feet of water per year. b. Outdoor: CWCS intends to replace 528 ET units. This will save 18 acre feet of water per year.	0	15	C	CWSC intends to reduce the district total water consumption to match the long term water supply.	1,527,750	2,172	14,781 05	Monterey	Ι	2009
3687 3410704	3410704-002	SCWA Mather-Sunrise		Replace service lines.	0	15	С	Poor service lines.	250,000	4,330	15,903 09	Sacramento	1	1998
3688 3410704	3410704-015	SCWA Mather-Sunrise		Rehabilitate water system mechanical and electrical facilities.	0	15	С	Poor water system mechanical and electrical facilities.	85,000	4,330	15,903 09	Sacramento	I	1998
3689 3410704	3410704-001	SCWA Mather-Sunrise		Install additional distribution main to provide adequate fire flow capacity to the northeast part of the service area.	2 0	15	С	A well was abandoned and one was shut down. Also, all mechanical and electrical systems need rehab work. Many fire hydrants and distribution system valves are in poor repair and service line main connections are badly corroded.	165,000	4,330	15,903 09	Sacramento	I	1998
3690 3410704	3410704-005	SCWA Mather-Sunrise		Rehabilitate treatment facility.	0	15	С	Inadequate mechanical and electrical system.	300,000	4,330	15,903 09	Sacramento	I.	1998
5051 1310021	1510021-003		Metred Service Connections	The city's requesting 31,105,025 in Sale City's requesting 31,105,025 in Sale City's requesting 31,105,025 in Sale City's	n V or n	в		supplying water to 19,126 residents (CA DDF, 2009) via 5,504 service connections. The utility lacks an efficient means of controlling water usage. Every month, water service must be manually shut off or restarted at roughly 300 connections. One employee and vehicle are dedicated full-time to complete this task. In the coming weeks, the City will launch a metering project to bring it in compliance with California Water Code Section 526 (a) (1). The project will install 3,800 water meters at existing non-metered residential service connections. Each meter will include a meter interface unit (MIU) to continually collect data for billing and monitoring purposes. The final phase of the project will equip each meter with a remote service valve (RSV). The RSV can automatically turn off, turn on, or restrict water flow at specific service connections without dispatching field staff to do the job. Engineering studies conducted for the water meter project found that meters equipped with an RSV yield the highest energy efficiency, the least air pollution, and the lowest operating cost compared to systems that are not fully automated. The City of Wasco lacks the funds needed to purchase and install the remote service valves. We are a disadvantaged community with a median household income (MHI) of \$38,535 (City-Data.com).	1,103,023	٥٥ <i>٦,</i> ٩	13,440 12	Kelli		2009
3692 5010018	5010018-001	Riverbank, City of		DRILL NEW WELL(S) ON REMOTE SITE AND CONSTRUCT	то	15	с	NEED ADDITIONAL WELLS AND STORAGE TO MEET PEAK DEMANDS.	1,500,000	6,428	21,215 10	Stanislaus	Ш	1998
3693 1010024	1010024-003	CWS - Selma	Selma "City Water" Water Conservation Project	The city wide water conservation program has two elements.a. Indoor: CWSC intends to replace / retrofit 8,700 bathrooms and the estimated water savings is 267 acre feet per year. b. Outdoor: CWSC intends to replace 1,575 ET units and the estimated water savings is 48 acre feet per year.	0	15	С	CWSC intends to reduce the district total water consumption to match long term water supply.	4,400,000	6,315	24,307 23	Fresno	Ш	2009

3694 3610008	3610008-007	BIG BEAR CITY CSD	CSD DWP Division Drive Emergency Interconnect	This project includes installing several pumps, a standb generator, constructing a pumphouse, and installing th piping necessary to tie the interconnect to both agencies.	y O e	15	с	The current emergency interconnection between the Big Bear Lake DWP and the Big Bear City CSD is not adeqaute to provide large quantities of water to be transferred. This project is needed in the event any natural or manmade disaster or emergency disrupts the ability of either of the agencies to continue to provide adequate water to its customers.	500,000	6,356	25,000 13	San Bernardino	v	2009
3695 3610055	3610055-006	YUCAIPA VALLEY WD ID-A&2	standby well nitrate - replace well	Drill replacement well	0	15	с	Standby well has nitrate levels 1/2 MCL. Well is not used as a potable water source.	225,000	2,312	40,654 13	San Bernardino	v	2001
3696 3610055	3610055-013	YUCAIPA VALLEY WD ID-A&2	reservoir replacement ID 1	replace reservoir	0	15	С	structural integrity of reservoir questionable	2,452,500	2,312	40,654 13	San Bernardino	v	2000
3697 1610003	1610003-001	Hanford, City of		CONSTRUCT FILTER SYSTEM AT WELL HEAD	0	15	c	COLORED WATER IN WELL NO. 17	350.000	14.557	53,320,12	Kings	ш	1998
3698 1910105	1910105-002	PARAMOUNT - CITY, WATER DEPT.	Water Well 15 Aresnic and Manganese Treatment Plant Project	We are seeking to build a wellhead treatment plant for the new well that will treat groundwater in order to meet state and federal standards for Iron, Aresnic, and Manganese. Based on the final well design memo generated for the development of the new well elevated concentrations of iron (Fe), manganese (Mn) and arsenic (As) were detected. The respective MCLs for Fe, Mn and As were variously exceeded in groundwater samples from Zone Nos. 1 through 5.	0	15	c	The City of Paramount had initiated the constuction of a new water well to better meet the community's water supply needs. Currently, this economically disadvantaged community is only able to pump 76% of its groundwater rights. Well drilling has been completed and water quality samples indicated that the new well was yielding water that exceeded the MCL for lron, Manganese, and Aresnic. The design memo for the new well is recomending that a secondary treatment plant be built in conjunction with the new well to address the water quality issues.	3,000,000	7,454	58,087 07	Los Angeles	IV	2009
3699 1910146	1910146-006	SANTA MONICA-CITY, WATER DIVISION		Aquire land and design/construct new 5 MG reservoir.	0	15	с	Inadequate storage supply.	4,300,000	17,098	84,184 16	Los Angeles	IV	2006
3700 1910146	1910146-002	SANTA MONICA-CITY, WATER DIVISION		Design/construct new pumping facility.	0	15	с	Pressure to the system not sufficient when nearby reservoirs are low in supply.	627,000	17,098	84,184 16	Los Angeles	IV	2006
3701 4510005	4510005-003	City of Redding	Inter-tie with Shasta CSD	System inter-tie with Shast Community Services District	t. O	15	С	No additional or backup water source for Keswick Dam Area.	500,000	26,080	85,703 02	Shasta	I	2007
3702 4510005	4510005-010	City of Redding	City of Redding - SCADA Upgrades	Obtain a licensed radio frequency and upgrade the existing SCADA system.	0	15	С	Security Project	1,200,000	26,080	85,703 02	Shasta	I	2007
3703 4510005	4510005-002	City of Redding	Licensed Radio Communications	Licensed radio frequency communications via South Fork Mountain, and related SCADA upgrades.	0	15	С	Impacts to SCADA, and temporary of system controls resulting in a loss of security software upgrades.	3,000,000	26,080	85,703 02	Shasta	I	2007
3704 4510005	4510005-004	City of Redding	Arsenic Removal at Wells	Arsenic removal at each well location.	0	15	С	Two potentially three wells with arsenic above acceptable levels (EPA MCL).	7,500,000	26,080	85,703 02	Shasta	I	2007
3705 1910152	1910152-005	SOUTH GATE-CITY, WATER DEPT.	Water Reservoir and Booster Station at Well 28	The City will construct a 2.8 MG capacity above ground steel welded reservoir with four booster pumps and building. This project is important to the local community as it will provide the source to provide additional water storage and chlorine contact time and provide fire flow capacity to the northeast portion of the City. The reservoir will serve an area in the City tha has a high density of residential homes. The City is requesting full funding of this projects as other venues of funding have been exhausted.	0 t	15	с	The City will construct a 2.8 MG capacity above ground welded steel reservoir, including four energy efficient booster pumps and building.	6,000,000	16,500	96,375 22	Los Angeles	IV	2009
3706 1910152	1910152-001	SOUTH GATE-CITY, WATER DEPT.	Well 13, 14, 18, 24, 25 Rehabilitation	Water supply production of these wells has decreased dramatically since installation, thus requiring rehabilitation. Work includes cleaning the well perforation and replacement pump motors to a high efficiency pump motor. Therefore increasing water supply and decreasing energy consumption.	0	15	C	Wells are approximately 50 years old and require cleaning, rehabilitation, and replacement of pump motors.	7,500,000	16,500	96,375 22	Los Angeles	IV	2009

3707 1910152	1910152-004	SOUTH GATE-CITY, WATER DEPT.	Manganese Filtration Facility - Well 13 and 27	These two wells are major water suppliers for the City and both have reached manganese levels above the maximum contaminant level. These levels need to be reduced to meet state and federal regulations. This project is essential to health and public safety and to ensure fire suppression capabilities. Without treatment these wells will need to be placed on inactive status. These wells supply water to approximately 105,000 residents in South Gate. This project requires full funding.	0	15	с	These two wells are major water suppliers for the City and both have reached manganese levels above the maximum contaminant level. Without treatment these wells will need to be placed on inactive status.	5,000,000	16,500	96,375 22	Los Angeles	IV	2009
3708 1910034	1910034-007	DOWNEY - CITY, WATER DEPT.	Downey Groundwater Wells	The City of Downey overlies the Central Groundwater Basin (Central Basin). The Central Basin is located in the southeast (Gateway) region of Los Angeles County which covers over 227 square miles and includes 23 incorporated cities, and includes a population of 2 million people. This adjudicated groundwater basin has 72 active pumpers, 307 active extraction wells, with a five year average annual groundwater production of 194,800 acre-feet. The Project consists of the design and construction of three deep aquifer storage and recovery (ASR) groundwater wells and associated treatment processes, pipelines and appurtenances. The wells will be constructed on city-owned property previously identified, analyzed, and selected as part of the City's 2003 Groundwater Master Plan. The sites will conform to all EPA and Department of Health Services requirements. The new wells will be equipped with variable drive motor/pump assemblies and result in significant reduction in the carbon footprint required to power the wells. These new deep aquifer wells will also provide a reliable source of drinking water that will be free of harmful contaminants. The three new aquifer, storage and recovery wells will also include the ability to inject high quality water into the wells at times when excess imported water supplies are available. The ASR wells will be designed to produce over 3,000 galons of	O	15	c	The City of Downey currently produces and serves an average of 15.1 million gallons of groundwater per day to a population of 111,607 people. Groundwater is the only source of drinking water currently utilized by the City. The groundwater is produced through twenty wells, many of which were constructed during the 1940s and 1950s and have lost significant production capacity and efficiency due to their age, motor/pump configurations, and the electrical equipment installed at the time of their construction. The City is spending significant sums of money on maintenance and rehabilitation of these wells, to little avail as the age of the wells has made such efforts increasingly futile. Furthermore, although the groundwater is of high quality and does not require any type of treatment prior to distribution, the older wells that pump from the shallower aquifers are potentially threatened by near-surface groundwater contamination which may lead to their closure and/or to require the installation of wellhead treatment. The appearance of man-made contaminants in the upper groundwater aquifers, and the current and forecast reductions in the maximum contaminant concentration levels set by the EPA led to the inactivation of one well, and the City to develop the Groundwater Master Plan (Plan). The Plan identified 13 of 20 wells that were susceptible to future surface and shallow aquifer contamination. Contaminant sources	11,750,000	22,332	113,379 16	Los Angeles	IV	2009
3709 5410016	5410016-003	CWS - Visalia	Visalia City Wide Water Conservation Project	The program has two elements. a. Indoor: Replace and upgrade 62,301 bathrooms with water savings products (toilets & showerheads) and this will save 1,911 acre feet per year. b. Outdoor: Replace 10,384 ET controllers and this will save 319 acre feet per year.	0	15	С	CWSC intends to reduce water consumption to match long term water supply.	29,592,975	39,379	133,749 12	Tulare	Ш	2009
3710 1910070	1910070-008	LOS ANGELES CO WW DIST 4 & 34-LANCAS	STI	Construction of approximately 10,600 L.F.36-inch steel	0	15	с	Large pressure fluctuations due to aged and undersized	2,260,000	46,878	144,215 16	Los Angeles	IV	2004
3711 1910070	1910070-009	LOS ANGELES CO WW DIST 4 & 34-LANCAS	STI Tank sites modification	Water main Modify various tank sites with water diverting system to control the flow of water in the event of a tank rupture	0	15	С	pipennes Two tank sites lack proper drainage courses and storm drains to convey water flow in the event of a tank ranture	321,000	46,878	144,215 16	Los Angeles	IV	2004
3712 1910070	1910070-007	LOS ANGELES CO WW DIST 4 & 34-LANCAS	STI New 36" water main – 8,000 LF	Construction a new water main approximately 8000 lineal feet of 36-inch diameter steel water main.	0	15	С	Part of the existing water supply system un-even pressure flow	2,670,000	46,878	144,215 16	Los Angeles	IV	2004
3713 1510003	1510003-001	CWS - Bakersfield		Design and construct a Hydrogen Sulfide treatment facility on the new well scheduled to be constructed in this area. Other - Design/Construction	0	15	с	The district is growing at approximately 700 services per year, w/ the majority of this growth occurring in a region hwere the groundwater contains high levels of Hydrogen Sulfide	260,000	63,641	208,867 12	Kern	Ш	1998
3714 1510003	1510003-002	CWS - Bakersfield		INSTALL GAC ADSORPTION VESSEL ON THIS WELL. OTHER - DESIGN AND CONSTRUCTION	0	15	С	FIVE WELLS ARE IMPACTED BY TCE CONTAMINATION- CURRENTLY INACTIVE WELLS	400,000	63,641	208,867 12	Kern	Ш	1998

3715 3310001	3310001-001	Coachella VWD: Cove Community Ge Dri Ma	erald Ford-Date Palm ive Water Transmission ain	The Gerald Ford Drive-Date Palm Drive Water Transmission Main project includes the installation of approximately 4,000 feet of 18-inch ductile iron pipe in Gerald Ford Drive from Plumley Road to Date Palm Drive and in Date Palm Drive from Gerald Ford Drive to Converse Road including valves, services, hydrants and related appurtenances. The project is located in the City of Cathedral City. This project is categorically exempt under Article 18, Section 15282 of the CEQA Guidelines. A Categorical Exemption will be prepared for this project per CEQA guidelines and a Notice of Exemption will be filed with Riverside County prior to construction.	0	15	C	CVWD's Cove Community System serves nearly 250,000 people with 18 interconnected pressure zones. Recent commercial and residential development in the Sky Mountain Pressure Zone has placed additional demands on CVWD's infrastructure. Pipelines to be replaced were installed in the early 1970's and are of inadequate size for current domestic and fireflow demands. The Gerald Ford-Date Palm Drive Water Transmission Main project will improve domestic water service and fire flow in the Sky Mountain Pressure Zone.	1,000,000	97,789	244,472 20	Riverside	v	2009
3716 1010007	1010007-005	FRESNO, CITY OF		CONSTRUCT IMPROVEMENTS TO THE RAW WATER CONVEYANCE TO PROVIDE SOURCE WATER PROTECTION.	0	15	С	GROUNDWATER OVERDRAFT AND DECLINING WATER TABLE HAVE DICTATED THE PROPOSED CONSTRUCTION OF A 20 MGD SURFACE WATER TREATMENT PLANT. THE RAW WATER CANAL TO THE PLANT IS EXPOSED TO SIGNIFICANT CONTAMINATION HAZARDS.	4,000,000	128,152	457,511 11	Fresno	Ш	1998
3717 1910067	1910067-024	LOS ANGELES-CITY, DEPT. OF WATER & POW Cit	ty T/L South Unit 4	(DRAFT for PM Review)City Trunk Line South Unit 4 (CTLS 4) is one of 6 units of the City Trunk Line South (CTLS), which is needed to replace the existing City Trunk Line. CTLS is 8,805 feet of 54" and 60" diameter welded steel pipe. The project route is along Magnolia Boulevard between Coldwater Canyon and Whitsett Avenue, along Whitsett Avenue between Magnolia Boulevard and Moorpark Street. This project includes the installation of the following: 1 vault, 10 butterfly valves, and 2 jacks/tunnels. The jacks/tunnels account for 1,600 feet of the total project length. This project does not include any connections.	0	15	C	The City Trunk Line South (CTLS) was identified in the Trunk Line Condition Assessment Program in 1996 as a high priority trunk line, at risk and in need of replacement fo the following reasons:CTLS is an old pipeline that has a history of leaks, breaks and soon will be exposed to higher pressures. Trunk line breaks are disruptive to customer service and costly to repair, and the potential for future failures increase annually as the pipe gets older and its condition degrades. The pipeline needs to be replaced to ensure a reliable water supply for the City. The Department of Water and Power will be able to move water between the Stone Canyon Inlet Line and the Franklin Reservoir Inlet using the Magnolia Trunk Line. The CTLS allows for continous supply to Stone Canyon during a planned or an emergency pipe outage.	53,209,000	686,422 4	071,873 15	Los Angeles	IV	2009
3718 1910067	1910067-029	LOS ANGELES-CITY, DEPT. OF WATER & POW WA Up Far	ater System Security ogrades Project: Type B cilities	LADWP is seeking funding support for security upgrades at its Type B facilities. The objectives of these security upgrades are to (1) prevent or restrict unauthorized access to critical points or facilities in the water supply system and (2) to enable security staff to effectively and promptly respond to possible access threats. LADWP management has identified 97 Type B facilities. The list of facilities includes tanks, chlorination stations, fluoridation stations, reservoirs, and other miscellaneous facilities. Planned security upgrades consist of a combination of video camera installation, access control and intrusion detection, and physical hardening. Each Type B facility will be outfitted with a network video system and access control and intrusion detection. A typical installation, would involve an intrusion alarm with video, which would include sensors for tank level, hatch intrusion, video surveillance, and perimeter intrusion sensors. The data that is collected would be transmitted to the Los Angeles Water System Data Access and Control (LAWSDAC) security center. LAWSDAC is the LADWP's remote monitoring system. Sites will be linked to LAWSDAC via a wireless, encrypted radio link to the nearest LADWP facility access to the Supervisory Control and Data Acquisition (SCADA) network and a wireless, Internet link to the nearest LADWP facility with a corporate network for video. Equipment for the typical installation includes 4		15	C	As the financial center of the Western United States, the worldwide hub of the entertainment industry, a center of national and international tourism, and home to one of the world's largest and busiest airport and port complexes, the City of Los Angeles (City) and its water infrastructure are high visibility targets for potential acts of terrorism. The Los Angeles Department of Water and Power (LADWP) provides essential water services to thousands of business, residential, governmental, and cultural locations with an infrastructure system spread throughout Los Angeles, Invo, and Mono Counties. The LADWP water distribution system, which serves roughly 4 million people, encompasses a service area of more than 464 square miles; over 250 pumping plants, wells, tanks, reservoirs, and treatment facilities; 300 pressure- regulating stations; a 400-mile-long Aqueduct system with associated watershed; over 7,100 miles of distribution piping; and over 58,000 fire hydrants. Following the terrorist attacks of September 11, 2001, the LADWP retained a private consultant to prepare an in-depth security vulnerability analysis on all aspects of its facilities and operations. The LADWP Roport on Security & Terrorism Threat Assessment (S&TTA) identified security strengths and weaknesses, deficiencies, and possible security improvements that could be made to better secure the City's water system.	11,949,491	686,422 4	071,873 15	Los Angeles	IV.	2009

3719 1910067	1910067-025	LOS ANGELES-CITY, DEPT. OF WATER & POW City T/L South Unit 5	(Draft for PM Review)City Trunk Line South Unit 5 (CTLS O 5) is one of 6 units of the City Trunk Line South (CTLS), which is needed to replace the existing City Trunk Line. CTLS 5 is 7,289 feet of 60" diameter welded steel pipe.(This footage includes both Trunk Line Construction work as well as contractor work). The project route is along Moorpark St. between Beeman St. and Coldwater Canyon Boulevard; along Coldwater Canyon Blvd. between Moorpark St. and North of Hacienda Blvd. This project includes the installation of the following: 6 butterfly valves, and 2 jacks/tunnels, and one pipe hanging. The jacks/tunnels account for 865 feet of the total project length. This project includes two connections, one to the City Trunk Line South Unit 4 and another to the existing City Trunk Line.	15	С	The City Trunk Line South (CTLS) was identified in the Trunk Line Condition Assessment Program in 1996 as a high priority trunk line, at risk and in need of replacement fo the following reasons:CTLS is an old pipeline that has a history of leaks, breaks and soon will be exposed to higher pressures. Trunk line breaks are disruptive to customer service and costly to repair, and the potential for future failures increase annually as the pipe gets older and its condition degrades. The pipeline needs to be replaced to ensure a reliable water supply for the City. The Department of Water and Power will be able to move water between the Stone Canyon Inlet Line and the Franklin Reservoir Inlet using the Magnolia Trunk Line. The CTLS allows for continous supply to Stone Canyon during a planned or an emergency pipe outage.	34,793,200	686,422 4,071,873 15	Los Angeles	IV	2009
3720 1910067	1910067-027	LOS ANGELES-CITY, DEPT. OF WATER & POW MWD LA-30 Connection (Venice)	Construction of approximately 1,400 feet of 48-inch- diameter welded steel pipe and appurtenances, using both open trench and pipe jacking construction methods, in Sepulveda Blvd between Venice Blvd and approximately 420 feet south of Venice Blvd, in Venice Blvd between Sepulveda Blvd and approximately 190 feet east of Bentley Ave, and in Bentley Ave immediately north and south of Venice Blvd. The project will include construction of a regulator station and modifications to an existing valve for pressure regulating capabilities; both will include pressure relief systems.	15	С	Installation of a connection to the Metropolitan Water District's Sepulveda Feeder to supply water to western portions of the City of Los Angeles during an emergency or planned outage.	10,000,000	686,422 4,071,873 15	Los Angeles	IV	2009
3721 1910067	1910067-026	LOS ANGELES-CITY, DEPT. OF WATER & POW Tujunga Well Field Treatment Project	In May 2008, Mayor Antonio R. Villaraigosa released a oreport titled "Securing L.A.'s Water Supply." This plan described a multi-faceted approach for creating sustainable water sources in the City of Los Angeles. Among the long-term strategies identified in the report was accelerated clean-up of contaminated groundwater basins. The Tujunga Well Field Treatment Project (Project) was specifically identified as a component of that strategy. As previously mentioned, contaminant plumes have drastically curtailed production capacity at the Tujunga Well Field of the system's twelve wells, only two to three are currently operational. Though some wells contain a mixture of difficult-to-remove contaminants, two wells that are currently out of service lend themselves to treatment by granular activated carbon (GAC) adsorption. Furthermore, the treatment of these wells may have a positive influence on water quality and allow additional wells to be brought on-line. The Project will use GAC adsorption in order to bring the aforementioned two wells on-line. It consists of the installation of sand separators and approximately twenty GAC vessels which measure twelve feit in diameter and 16 feet in height. The Project, the first phase of an overall initiative to bring the Tujunga Well Field back into service, will produce between twenty-four and thirty-six thousand acre-feet (AF) of water annually, with deliveries scheduled to	15	C	The San Fernando Valley Groundwater Basin (Basin) is the City of Los Angeles' primary local water source. However, groundwater contamination in the Basin has reduced the Los Angeles Department of Water and Power's (LADWP) ability to fully utilize this resource. Over forty-seven percent of the LADWP's production wells in the Basin are now out of service due to poor water quality. The primary contaminants in the Basin include the industrial solvents trichloroethylene (TCE) and perchloroethylene (PCE), as well as other contaminants from historical agricultural or industrial practices such as nitrate and perchlorate. The Project site, the Tujunga Well Field, is located in the Basin near the intersection of Interstate I-5 and State Highway 170. The system includes 12 permitted production wells and associated facilities to provide up to 100 cubic feet per year) for distribution within Los Angeles. Contaminant plumes have curtailed production in the Tujunga Well Field to two to three wells. Contaminatin prompted the issuance of a public notice for Exceedance of a Chemical MCL, specifically noncompliance with the Volatile Organic Compound Primary Drinking Water Standard.	6,500,000	686,422 4,071,873 15	Los Angeles	IV	2009

3722 1910067	1910067-020	LOS ANGELES-CITY, DEPT. OF WATER & POW FC Lii	ormosa Avenue Trunk ine	The Formosa Avenue Trunk Line will provide supply and system reliability, and redundancy necessary for operations. The project will install approximately 10,600 feet of 36-inch diameter trunk line. The proposed trunk line will provide supply to the Sunset Boulevard Trunk Line between Cahuenga Boulevard and Cynthia Street when rehabilitated or replaced. Additionally, the proposed trunk line will improve the water system by providing an additional distribution loop.	0	15	с	Drinking water standards require adequate supply and redundancy to maintain pressurized flow in peak and emergency conditions. An existing transmission line, built in 1916, is scheduled for reconstruction. In advance of this reconstruction, the proposed project will add the necessary alternate supply to provide both short term and long term peak, emergency supply during construction at the transmission line, and as a permanent redundancy.	20,397,200	686,422	4,071,873 15	Los Angeles	IV	2009
2722 2400065	2400065-001				0	15	D		40.000	1	100 11	Marcad		1008
3724 0600041	0600041-002	Fouts Springs Youth Facility Pi	ipeline Replacement	Replace Pipeline	0	15	P	Leaking Pipeline	450.000	1	120 21	Colusa	1	2002
3725 2400097	2400097-001	CRESSEY SCHOOL		CONSTRUCT A NEW DEEPER WELL.	0	15	Ρ	THE WELL HAD A DETECTABLE LEVEL OF DBCP (0.03 PPB) IN 1995. A SAMPLE COLLECTED IN 1997 WAS ND FOR DBCP.	25,000	1	155 11	Merced	ш	1998
3726 1800573	1800573-001	Richmond Elementary School		Improve minor system deficiencies.	0	15	Р	Miscellaneous minor water system improvements.	100,000	1	247 02	Lassen	I	1998
3727 3400104	3400104-001	CAVANAUGH GOLF COURSE		Replace gavanized casing with stainless steel.	0	15	Р	Current galvanized casing of well will corrode and needs to be replaced.	80,000	3	500 09	Sacramento	I	1998
3728 5000101	5000101-001	CHATOM SCHOOL (EH)		REPLACE WATER TANK.	0	15	Р	WATER TANK BADLY CORRODED	195,000	6	500 10	Stanislaus	III	1998
3729 1300554	1300554-001	MEADOWS UNION SCHOOL		Replace with new water system, 10K. Storage with a minimum of 10GM.	0	15	Р	Age of our system is a concern. It was built in the early 50's. Would like to be able to up grade our small water system.	75,000	8	550 14	Imperial	V	1998
3730 5000164	5000164-001	MODESTO RESERVOIR		RE-DEVELOP OR RELOCATE WELL AND INSTALL FILTERING SYSTEM. OTHER = STUDY, DESIGN AND CONSTRUCTION.	0	15	Ν	SAND IN SYSTEM	35,000	1	25 10	Stanislaus	Ш	1998
3731 3301557	3301557-001	EOC WELL - PALM SPRINGS		Necessity to correct fractures to well system caused by natural disaster	0	15	Ν	Still active system, project is to install treatment on a well 7 pres tk system to supply Palm Springs City Hall EOC in an emergency. Well violates seondary Mn Standard.	40,000	1	25 20	Riverside	v	1998
3732 2600503	2600503-001	CROWLEY LAKE CAMPLAND		Construct new 120k gal tank, improve well production	0	15	Ν	Peak hourly flow inadequate	110,000	7	25 13	Mono	v	1998
3733 4500283	4500283-001	Caltrans-Hillcrest SRRA		Install commercial filtration system.	0	15	Ν	No filtering system. There is dirt in drinking fountains and clogged faucets. In addition, there are stains on urinals and toilets.	20,000	1	2,500 02	Shasta	I	1998
3734 4010022	4010022-007	LOPEZ PROJECT LC W	opez WTP - Filtered /ater Standpipe	The Filtered Water Standpipe Project involves the installation of a hydraulic control weir with a free water discharge condition at the existing LWTP clearwater reservoir. The weir will consist of a 48-inch diameter welded steel standpipe supported by a concrete slab on grade. The standpipe will have an approximate 20-foot vertical height and will serve to raise the hydraulic grade line, under all plant flow conditions, to above the physical elevation of the back-pressure sustaining valve The raise in hydraulic grade line will create enough pressure in the system to eliminate the gravity flow and, thus, eliminate the excessive air entrainment conditions, the risk of contamination at the clearwater reservoir, and a stable steady flow, allowing the pressure sustaining valve to perform better and will reduce air entrainment at the membrane filtration filtrate piping.		10	c	The Lopez Water Treatment Plant (LWTP) is a six MGD treatment plant that treats surface water from Lopez Reservoir and then wholesales the water (in accordance with 'take or pay' contracts between the Lopez Project and it's contractors) to the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, community of Oceano, community of Avila Beach, and County Service Area 12. The LWTP treatment process was recently upgraded to pre-oxidation with potassium permanganate, coagulation, flocculation, and dissolved air floatation (DAF), chlorine dioxide disinfection, low- pressure membrane filtration, followed by additional free chlorine disinfection. The upgraded treatment process has been in operations since 2007.Since the new treatment process has been in operation, the plant has experienced excessive vacuum and air entrainment conditions at the clearwell reservoir and at the pressure sustaining valve just upstream of release into the Lopez distribution system. When the LWTP is operating at low flows, the pressure drops at the outlet into the clearwell reservoir, creating gravity flow and suction into the pipeline instead of pressure flow. this configuration results in unstable flow and mixing, as well as creating a risk for contaminants in the air to enter into the treated water prior to its distribution to the public.	200,000	31	0 06	San Luis Obispo	IV	2009

3735 4010022	4010022-006	LOPEZ PROJECT	Lopez WTP - Sludge Dryin Beds Rehabilitation	g The Sludge Drying Beds Rehabilitation Project involves of demolition and reconstruction of the existing 40-year old LWTP sludge drying beds. Reconstruction will include installation of new drying bed underdrains, valves, decant structures, HDPE liners, filtration media, access ramps, and possible divider walls. The HDPE liner will prevent water leakage between beds and divider walls will provide quick drying and flexibility during peak operations. This rehabilitation project will closely follow the construction of two new sludge drying beds at the LWTP. The new drying beds, coupled with the rehabilitated existing drying beds will provide the functionality, capacity and flexibility needed to handle the LWTP's new treatment process solids residuals.	10	c	The Lopez Water Treatment Plant (LWTP) is a six MGD treatment plant that treats surface water from Lopez Reservoir and then wholesales the water (in accordance with take or pay' contracts between the Lopez Project and it's contractors) to the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, community of Oceano, community of Avila Beach, and County Service Area 12. The LWTP treatment process was recently upgraded to pre-oxidation with potassium permanganate, coagulation, flocculation, and dissolved air floatation (DAF), chlorine dioxide disinfection, low-pressure membrane filtration, followed by additional free chlorine disinfection. The upgraded treatment process has been in operations since 2007.Treatment solids residuals from the DAF process and neutralized cleaning solutions from the membrane filtration process are currently sent to two 40-year old sludge drying beds at the LWTP site. Water percolates through the sand media, is collected by underdrains, and is discharged into a water course below the Lopez Terminal Reservoir spillway. Solids concentrate accumulate at the bottom of the drying beds, dry, and are periodically removed. Typically, the LWTP operates one bed in drying mode and one in operation mode.Over the past two years of operations with the new treatment process, the LWTP sludge drying beds have consistently been required to operate beyond their maximum capacity. Treatment	850,000	31	0 06	San Luis Obispo	IV	2009
3736 3610006	3610006-001	WATER FACILITIES AUTHORITY-JPA	Devil Canyon Azusa Pipeline Emergency Interconnection	The Project is a multi-agency benefit project for Water O Facilities Authority (WFA), Three Valleys Municipal Water District (TVMWD), and Inland Empire Utilities Agency (IEUA). WFA, as the lead agency, serves treated imported water to approximately 430,000 residents in the Chino, Chino Hills, Montclair, Upland, and Ontario communities. In addition, the Project will provide water supplies to residents in TVMWD's service area consisting of Azusa, Glendora, Claremont, La Verne, San Dimas, Covina, West Covina, Pomona, Walnut, Diamond Bar, and Rowland Heights. The Project includes construction of water system improvements along Benson Avenue, 18th Street, and Miramar Avenue in the Cities of Upland and Claremont. The system includes two connections to the San Gabriel Valley Municipal Water District conveyance pipeline that conveys State imported water to Los Angeles County water agencies. Construction includes approximately 7,700 linear feet of 36" pipeline and appurtenances together with two booster station and two automated control valves. One connection will deliver raw water to the WFA's WTP and to TVMWD's WTP with use of existing facilities. The other connection will release imported raw water to the San Antonio Channel for conveyance to IEUA's Chino Basin groundwater recharge facilities. Lastly, the Project will provide facilities for conveyance of treated water from WFA's	10	c	The Project will provide an emergency interconnection from the San Gabriel Valley Municipal Water District, Devil Canyon-Azusa Pipeline to the Water Facilities Authority's 81 MGD Treatment Plan to provide imported water when the Metropolitan Water District's Rialto Feeder is out of service. The feeder has been taken out of service for maintenance for periods as long as one week. During peak summer demands, such interruption may be catastrophic. The Project also includes a pipeline that will deliver treated water to Three Valleys Municipal Water District providing for multi-agency benefits.	7,400,000	8	0 13	San Bernardino	v	2009
3737 1510040	1510040-004	Kern County Water Agency		Upgrade existing surface water treatment plant from 45 O MGD to 90 MGD to supply water to member water agencies.	10	С	Growth in Bakersfield area has led to overall degradation of groundwater, including oilfield, pesticide and nitrate contamination buildup, often requiring wellhead treatment or well abandonment.	34,000,000	3	0 12	Kern	Ш	2003

3738 4010022	4010022-005	LOPEZ PROJECT	Lopez WTP - 18 Inch Distribution Line Pigging	The 18-inch Lopez Distribution Line Pigging Project consists of the cleaning of an existing 5.5-mile stretch of 18-inch diameter steel distribution pipeline to remove aluminosilicate deposits from the inner wall of the pipeline. Cleaning will be performed via pigging with foam pigs, modeling the distribution system's previous successful pigging project. Insertion and retrieval fittings have already been installed and all inline butterfly valves within the stretch have been replaced with gate valves to accommodate the pigging operation. The pigging will also require an extensive water treatment operation to treat turbid water before discharging it into the ocean. Cleaning this stretch of pipeline will result in increased flow capacity and efficient delivery for the distribution system.	0	10	c	The Lopez Water Treatment Plant (LWTP) is a six MGD treatment plant that treats surface water from Lopez Reservoir and then wholesales the water (in accordance with 'take or pay' contracts between the Lopez Project and it's contractors) to the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, community of Oceano, community of Avila Beach, and County Service Area 12. Its pipeline distribution system is approximately 40 years old and has experienced capacity problems in recent years. Flow testing performed in 1983 revealed a maximum flow rate of 7,253 gpm. Flow testing performed in 1998 revealed that the maximum flow rate had decreased to 5,492 gpm. Visual pipeline inspections have revealed that the major cause of this capacity reduction is due to aluminosilicate deposits on the inner walls of the pipes, with deposits reaching 0.375 inches thick in some areas. Testing performed on the deposits pointed to pigging as the most effective way clean the distribution system would best increase its capacity pigging two main stretches of distribution pipeline, one of which was successfully pigged in 2003.The remaining stretch of distribution pipeline, still requires cleaning. Until it is cleaned, a large portion of the distribution system will experience flow capacity problems and inefficient	325,000	31	0.06	San Luis Obispo	IV	2009
3739 5610046	5610046-002	UNITED WTR CONS DIST		Develop groundwater guardian program to promote well head protection by involving all affected parties including agriculture, urban interests and the public.	0	10	С	Develop groundwater guardian program and well head protection program.	50,000	16	0 06	Ventura	IV	1998
3740 4010022	4010022-009	LOPEZ PROJECT	Lopez WTP - Carbon Dioxide pH Suppression System	The Carbon Dioxide pH Suppression System Project involves the new installation of an approximately 100,000 gallon carbon dioxide storage tank and an automated feed system at the LWTP. The feed system will consist of feed panels, piping, pH monitoring equipment, vaporizers, diffusers and a PLC for integration with the existing LWTP SCADA system for monitoring and control. The system will add carbon dioxide to the water prior to treatment, resulting in the production of carbonic acid (H2CO3). The carbonic acid will reduce the pH of the water and, thus, will significantly reduce the tendency for calcium carbonate to precipitate and form scale on the LWTP process components.	0	10	c	The Lopez Water Treatment Plant (LWTP) is a six MGD treatment plant that treats surface water from Lopez Reservoir for the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, community of Oceano, community of Avila Beach, and County Service Area 12. The LWTP treatment process was recently upgraded to pre-oxidation with potassium permanganate, coagulation, flocculation, and dissolved air floatation (DAF), chlorine dioxide disinfection, low-pressure membrane filtration, followed by additional free chlorine disinfection. The upgraded treatment process has been in operations since 2007.Since the new treatment process has been in operation, LWTP's process components – piping, valves, feed strainers, water quality monitoring equipment and membrane filter elements – have experienced a significant calcium carbonate (CaCO3) scale build up. This scale build is a result of the combination of the naturally high pH, hardness and alkalinity of the surface water from Lopez Reservoir and the new treatment process. The scale build-up has caused plant shutdowns, frequent process	1,095,000	31	0 06	San Luis Obispo	IV	2009

3741 3600175	3600175-002	Barstow Dagget Airport	Barstow/Daggett Reservoir and Booster Station	r Demolish existing booster station and reservoir. Construct replacement reservoir to meet current American Water Works Association standards. Construct booster station to meet current building code. Booster station will include high efficiency motors to reduce energy consumption.	O	10	с	The booster station plumbing fixtures are failing due to corrosion and age. Its pumps are inefficiency and unreliable. The design of the station poses a health and safety risk to all that work on it due to electrical and mechanical design deficiencies. The existing reservoirs' concrete shell is failing due to structural fatigue creating numerous leaks. The risk of total structural failure in a modest seismic event is highly probable.	750,000	29	25 13	San Bernardino	V	2009
3742 5000092	5000092-001	OID #49 - GILBERT		INSTALL ELECTRICAL GENERATOR. INSTALL NEW HYDROPNEUMATIC TANK. OTHER = DESIGN AND CONSTRUCTION	0	10	с	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POWER FAILURES. CORRODED HYDROPNFILMATIC TANK	95,000	12	37 10	Stanislaus	Ш	1998
3743 3400130	3400130-002	GREGG WATER CO		Construct a new 250,000 gallon storage tank for emergency water supply. Involves design and	0	10	с	Wells and small private systems that are unreliable with poor water quality and cannot provide adequate	250,000	19	40 09	Sacramento	ļ	1998
3744 5800821	5800821-001	NICHOLS POINT MOBILE HOME PK	Well Replacement, Main Replacement and Service Replacement	The project is comprised of the following divisions: Drill larger well and install larger pump. Consolidate with existing well and pumb system. (Existing is believed to be a six inch at approximately 220 feet deep. Provide and install minimum four inch main. Provide and install 5000 gallon water tank, with connections for fire departments. (or size according to fire Department requirements) Remove and abandon and remediate existing septit Tanks and leach fields. Provide and install new sewer system and connection to Wheatland sewer system.	0	10	с	The Health Department in Yuba County sent me the information for use of our water Company. The system is old and needs replacement. The City of Wheatland, Ca, could use extra water and this would be available for them to acquire or consolidate with. The well is small and needs to be replaced with a larger one. The mains are old, even tho the water is still of good quality. The mains need to be upgraded. The service lines also need replacement. There are five septic tanks and systems on the property. In order to insure the future purity of the water system, these need to be removed and the community needs to be connected to the Public Sewer System of the City of Wheatland. The City of Wheatland has some very high connection fees that need to be paid before they will allow us to hook up to the City Public Sewer System.	825,000	26	40 21	Yuba	1	2009
3745 1500455	1500455-003	WILLIAM FISHER MEMORIAL WATER COM	P# Tank Replacement	Replace two 10000 gallon tanks with one 50000 gallon tank.	0	10	с	Storage is inadequate to meet peak flow - fire flow demands	160,000	18	51 19	Kern	Ш	2007
3746 1000060	1000060-001	MUSICK MEADOWS #1		POSSIBLE DEVELOPMENT OF ADDITIONAL SOURCE CAPACITY IN THE FUTURE.	0	10	С	CONCERNED ABOUT SOURCE RELIABILITY ASSOCIATED WITH CONDITION OF BACKUP WELL.	25,000	65	70 23	Fresno	ш	1998
3747 2702073	2702073-002	SAN MIGUEL WS #22		Erect fencing for wells and storage tanks.	0	10	С	Need source protection (fencing for wells and storage tanks).	21,302	31	93 05	Monterey	Ш	1998
3748 1500585	1500585-002	OASIS PROPERTY OWNERS ASSOCIATION		Putting water storage tanks with booster pump	0	10	С	Not enough water pressure in the summer time	85,000	36	100 19	Kern	Ш	2004
3749 1500585	1500585-001	OASIS PROPERTY OWNERS ASSOCIATION		Drill new well and install storage tank	0	10	С	Well sanding due to corrosion of well casing	250,000	36	100 19	Kern	III	1999
3750 5602116	5602116-001	SILVER WHEEL TRAILER PARK		Replace pipe lines and refurbish well.	0	10	С	Upgrade the distribution facilties and well.	120,000	64	120 06	Ventura	IV	1998
3751 0500019	0500019-005	MINERAL MOUNTAIN MUTUAL WATER	Replace water storage tank	We would like to replace an aging water tank that is leaking with a steel/glass 50,000 gal tank. Because of the high Iron and mineral content of our water, we have frequent problems with the liners and with the iron causing bacteria in the pumps. We feel the new tank would solve most of our problems and be a good investment for the quality of our water and delivery system.	0	10	С	Our present water tank is old and the liner needs replacing (again). Presently it is leaking. We had hoped to replace the tank with a steel/glass tank but the cost is prohibited by our limited funds. We felt the glass liner would stand up best to our water quality which is high in minerals(iron) and requires us to replace the liners frequently.	150,000	24	125 10	Calaveras	III	2009
3752 2701046	2701046-001	VILLA CASA APARTMENTS WS		Install storage tanks	0	10	С	Water system has no storage. Needs 90,000 gallons storage.	100,000	42	126 05	Monterey	Ш	2000
3753 5000013	5000013-001	OID #45 - LOUIS MEYER		INSTALL ELECTRICAL GENERATOR. OTHER = DESIGN AND CONSTRUCTION.	0	10	С	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POWER FAILURES.	30,000	37	129 10	Stanislaus	Ш	1998
3754 5000016	5000016-001	OID #41 - MOUNTAIN VIEW		INISTALL ELECTRICAL GENERATOR. REPLACE DISTRIBUTION SYSTEM. OTHER = DESIGN AND CONSTRUCTION	0	10	с	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POWER FAILURES. DISTRIBUTION SYSTEM FAILING.	155,000	42	147 10	Stanislaus	Ш	1998
3755 0800556	0800556-001	HRC C.S.D.		Build storage tank and install larger distribution line to replace old line. Provide fire hydrants.	0	10	с	Distribution system is 40 plus years old and fire hydrants are too small. Existing redwood storage tank is 50 years plus old and leaking.	250,000	31	150 01	Del Norte	I	1998
3756 5000015	5000015-002	OID #22 - WILLIAMS TRACT		DRILL BACK-UP WELL. OTHER = DESIGN AND CONSTRUCTION	0	10	С	NEED BACK-UP WATER SOURCE	125,000	53	150 10	Stanislaus	Ш	1998
3757 5000015	5000015-001	OID #22 - WILLIAMS TRACT		INSTALL ELECTRICAL GENERATOR. OTHER = DESIGN AND CONSTRUCTION.	0	10	С	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POSER FAILURES.	30,000	53	150 10	Stanislaus	ш	1998

3758 5000237	5000237-001	NORTH OAKS MUTUAL WATER CO		UPGRADE EXISTING 100 HP AG WELL	0	10	С	NEED SECOND WELL FOR RELIABILITY AND FLEXIBILITY	65,000	61	183 10	Stanislaus	ш	1998
3759 4200842	4200842-001	SAINT MARIE MOBILE HOME PARK		Replace storage tank and install new piping, pump	0	10	с	Needs to upgrade the distribution system.	250,000	78	250 06	Santa Barbara	IV	1998
3760 5000014	5000014-001	OID #46 - SUNSET OAKS		station and fire hydrants. INSTALL ELECTRICAL GENERATOR AND NEW PRESSURE TANK. OTHER = DESIGN AND CONSTRUCTION.	0	10	С	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POWER FAILURES. PRESSURE TANK FAILING.	75,000	77	269 10	Stanislaus	Ш	1998
3761 5000014	5000014-002	OID #46 - SUNSET OAKS		INSTALL BOOSTER STATION. OTHER = DESIGN AND	0	10	с	LOW PRESSURES IN HIGHER ELEVATIONS.	40,000	77	269 10	Stanislaus	Ш	1998
3762 5000317	5000317-001	OID #51 - SUNSET OAKS #10		INSTALL ELECTRICAL GENERATOR. OTHER = DESIGN	0	10	С	LIMITED WATER STORAGE RESULTING IN OUTAGES	40,000	82	287 10	Stanislaus	Ш	1998
3763 3610017	3610017-005	HAVASU WC	Meeting fire flow & CT compliance	And Construction. Havasu Water Company has completed the majority of an engineered response to bring the company into compliance. The compliance requires an additional 100,000 gallon tank, a 75 HP fire pump and a short 12' pipe to connect the system. This preliminary design was presented by Metropointe Engineers to the San Bernardino County Fire Marshall approximately 2 years ago. Due to the estimated cost of \$175,000, HWC coule not qualify for financing.Fire flow pump (est. 2009 price ind sales tax\$51,000Delivery, installation, testing	0 1 )  4	10	c	Havasu Water Company is not in compliance with the County of San Bernardino minimum fire flow requirements of 1,750 gpm. HWC was grandfathered in over 30 years ago and has one 100,000 gallon fire supply tank available. A letter from the San Bernardino County Fire Marshall is available. Since Havasu Water Company had to abandon its old 50,000 gallon tank, there is not any way to annually clean the remaining 100,000 gallon tank without putting its water customers out of service for several days.Havasu Water is also hard pressed in the winter months to meet the required CT because of inefficient storage.	176,250	211	350 13	San Bernardino	v	2009
3764 3610017	3610017-003	HAVASU WC	Meeting County Water Fire Flow Compliance	Havasu Water Co. has completed the majority of an engineered response to bring the company into compliance. The compliance requires an additional 100,000 gallon tank, a 75 HP fire pump and a short 12" pipe to connect the system. This preliminary design was presented by Metropointe Engineers to the SB County Fire Marshall approximately 2 years ago. Due to the estimated cost of \$175,000, HWC could not qualify for financing. Fire Flow Pump (est. 2009 price) incl sales tax\$51,000Delivery, installation, testing25,000100,000 gallon bolted galvanized tank	0	10	с	1. Havasu Water company is not in compliance with the County of San Bernardino minimum fire flow requirements of 1,750 gpm. HWC was grandfathered in over 30 years ago and has one 100,000 gallon fire supply tank available. A letter from the San Bernardino County Fire Marshall is available. Also lack of adequate fire supply mandates that all new home connections install a 1" meter versus a 5/8" meter. This increases the individual's monthly water bill by \$78.86 a month.2. Since Havasu Water Company had to abandon its old 50,000 gallon tank, there is not any way to annually clean the remaining 100,00 gallon tank without putting its water customers out of service for several days.	176,250	211	350 13	San Bernardino	v	2009
3765 5700712	5700712-001	DUNNIGAN WATER WORKS	Dunnigan Safe Drinking Water and Fire Protection water supply	Extending drinking water service and fire protection water, to the two (2) neighborhoods of Dunnigan that are currently consuming unsafe drinking water and without adequate fire protection water, will require:(1) 42,500' of 8" main(2) 34,450' of 10" main(3) 1"meters x 300(4) fire hydrants x 40(5) 500,000g storage tank (6) pumping station (7) a new Well +or- 650' (8) proper abandonment of 300 shallow wells.	0	10	с	This area is an older section of the Dunnigan community with shallow wells and septic tank systems at each of the +or - 300 homes. The nitrate levels in the upper water tables (30'-50') exceed mcl limits. These residential wells of 75'-175' have very high nitrate levels, many exceeding mcl limits. None of the wells have disinfection. The nearest Fire Protection water for many of the homes in these two (2) Dunnigan neighborhoods is up to 1/4 mile away at various irrigation district outlets.	8,757,100	68	400 09	Yolo	I	2009

3766 5010026	5010026-009	City of Modesto, DE Hickman	Water Main and Service Replacement - Hickman	The Hickman Water System will require the replacement and upsizing of water mains and service. Water mains and services will be moved out of the easement areas and installed in the street for easy access. Fire hydrants will also be installed. Adequate water flows will result due to appropriate sized water mains. This will improve water quality and bring sufficient water pressures and volumes for fires and household use. With new piping, water conservation will improve by eliminating water leaks. A total of 8,500 feet of water mains will be upgraded. There are 115 meter services that will be replaced during the infrastructure improvements. All meter services will comply with State mandates.	0	10	c	The Hickman Water System infrastructure is aging and in desperate need of major upgrades. The Hickman system is a stand alone system with only two wells. Staff spend many hours fixing leaks, maintaining system, and spending money on street repairs and property damage to customers due to leaks. The water system has insufficient water quantity due to limited water delivery restricting new growth, including residential, industry and school expansions. With the low pressure issues, outdated water mains and services, the Hickman area has limited fire protection; especially during peak hours. There are over 8,500 feet of water main that needs to be upgraded to meet the needs of this community and provide adequate volumes of water for building, industry, schools and fire protection. Well pumping is restricted due to wells cannot be overdrawn due to manganese contamination.	675,000	192	565 10	Stanislaus	Ш	2009
3767 1510052	1510052-001	NORTH EDWARDS WD		REPLACE OF EXISTING METERS, AND UPGRADE WELLS 1 ( AND 2 FACILITIES AND FOUNDATION.	0	10	с	DISTRIBUTION SYSTEM IMPROVEMENTS	75,000	222	597 19	Kern	Ш	1998
3768 3600220	3600220-002	CSA 42 Oro Grande		Enhance abality to operate and montior unattended sites throughout water distribution system.	0	10	С	Unreliable telemetry system	25,000	140	700 13	San Bernardino	v	2000
3769 3600220	3600220-006	CSA 42 Oro Grande	County Service Area 42 Water Mainline Replacement	Install 1,400 linear feet of 8" PVC water mainline and or econnect 40 residential service connections.	0	10	с	This is a water main line replacement project. Two streets in County Service Area 42 (CSA42) need the old 6" steel water lines replaced with new 8" PVC water lines. The purpose of replacement is to reduce water quality problems, replace failing main lines and increase fire flow for the community.	71,000	140	700 13	San Bernardino	V	2009
3770 5010033	5010033-002	City of Modesto, DE Grayson	Water Main and Service Replacement - Grayson	The Grayson water system will require the replacement and upsizing of water mains and service. Water mains and services will be installed in the street for easy access. Fire hydrants will also be installed. Adequate water flows will result due to appopriate sized water mains. This will improve water quality and bring sufficient water pressure for fires and household use. With new piping, water conservation will improve by limiting water leaks. Over 9,000 feet of 8" water main will be replaced. There are 176 meter services that will be replaced during the infrastructure improvements. All meter services will comply with State mandates.	o	10	c	The Grayson Water System infrastructure is aging and in need of major upgrades. Grayson is an isolated small community that depends on two wells for the entire water supply. Staff spend many hours fixing leaks, maintaining the system, and spending money on property damage to customers due to leaks. The water system has insufficient water quantity due to limited water delivery restricting new growth, including residential, industry and school expansions. With the low pressure issues, outdated water mains and services, the Grayson area has limited fire protection; especially during peak hours. This is very expensive water to produce because of wellhead treatment for nitrates. Leaks can drain the storage tank limiting fire fighting ability. There is over 9,000 feet of water main that needs to be upgraded to meet the needs of this outlying community.	775,000	275	1,100 10	Stanislaus	III	2009
3771 5000433	5000433-001	OID-OAKDALE RURAL WATER SYSTEM #1		INSTALL ELECTRICAL GENERATOR. INSTALL PRESSURE ( TANK. OTHER = DESIGN AND CONSTRUCTION.	0	10	с	LIMITED WATER STORAGE RESULTING IN OUTAGES DURING POWER FAILURES. PRESSURES FLUCTUATE AS BOOSTER PUMP CYCCLES ON AND OFF.	75,000	431	1,134 10	Stanislaus	ш	1998

3772 1010020	1010020-004	Laton Community Services District	Electronic Water Meter Reading Project	The project includes installing 500 5/8-inch x 3/4-inch water meters with data transmitting capabilities and a laptop to recieve water consumption data for billing and water system management purposes. Further, it is estimated that 250 meter boxes, lids and meter stops will be removed and replaced with new meter boxes, lids and water stops. The installation of these meter reading and transmitting devices will significantly reduce the amount of District staff time devoted to meter reading and will free up staff time for other needed operation and maintence activities.	0	10	С	As the District's production production and distribution system ages, there is more demand on the District's personnel to perform operation and maintenance activities. The periodic reading of the meters reduces the amount of time District staff has to devote to operation and maintenance duties.	400,000	454	1,236 23	Fresno	11	2009
3773 3610007 3774 1210020	3610007-003 1210020-004	BASELINE GARDENS MWC Fieldbrook Glendale C.S.D.	Rock Pit Rd and Old Railroad grade water line extension	Recoat tank The project will include an 8 inch main line extension up both Rock Pit and Rail Road Grade. These pipelines will be looped together and will include appropriate appurtenances, including fire hydrants, valves and service connections with water meters. Twenty existing residential dwellings will be served.	0	10 10	c c	Interior coating failure on storage tank This area of the community is on private wells or take water directly from creeks or intermittent surface waters. These sources of supply generally don't meet drinking water standards. Groundwater supply's are extremely limited, with the wells generally running dry in late summer and early fall. In addition, these waters are typically high in iron and manganese. Surface waters are subject to contamination and the potential for contamination is increased because the use on site sewage disposal systems (septic tanks and leach fields). In addition, these surface waters typically dry up in the summer and remain that way until winter rains arrive. The area served by this project also currently does not have fire protection and this main line extension will correct this deficiency.	100,000 1,400,000	424 531	1,300 13 1,670 01	San Bernardino Humboldt	V I	1998 2009
3775 3610060	3610060-001	SBDNO COUNTY SERVICE AREA W-1		Design and purchase a small package surface water treatment plant to utilize Morongo pipeline water allotment	0	10	С	Mojave Water Agency Morongo Basin pipleine aqueduct water available but untreated surface water	100,000	506	1,670 13	San Bernardino	v	2000
3776 5610021 3777 4010023	5610021-002 4010023-003	WARRING WATER SERVICE INC Golden State Water Company - Edna	Edna - Drill and Equip New Well	Repair and upgrade the reservoir. A new well needs to be drilled and equipped to ensure a secure and consistent source of supply for our customers. Further, if a source with low selenium can be found, then the ion exchange treatment could be terminated and the issue dealt with by blending, further saving money for our customers.	0	10 10	c c	No additional storage for emergency situations. Groundwater levels in the area of our current two wells in this area of fragmented aquifers have dropped considerably in recent years due to competition with large agricultural users. Another of our wells was taken out of service due to surface water influence and contamination. This results in a precarious situation where there is absolutely no margin for error in the source of supply for this small system. Also, the current wells have developed erratic levels of selenium that frequently exceed the MCL, necessitating the use of expensive ion exchange equipment to treat the water.	100,000 2,500,000	483 599	1,700 06 1,940 06	Ventura San Luis Obispo	IV IV	1998 2009
3778 4010023	4010023-004	Golden State Water Company - Edna	Edna - Main from Treatment Plant to Edna Reservoir	This project would install 2,800 feet of 12 inch main and sufficient yard piping to connect the treatment plant directly to the reservoir, thereby substantially reducing the amount of head the wells have to pump against. It would also install additional booster capacity at the reservoir to facilitate higher pressures in the upper reaches of the system and improve fire flow.	0	10	с	Current system configuration has wells pumping to a treatment plant consisting of iron and manganese filters followed by ion exchange for selenium. Then the water goes directly into the distribution system, and the reservoir fills from the system. This means the wells are pumping against a significant amount of head, leading to lowered pumping rates, excessive wear on pumps and treatment equipment, and increased maintenance	2,000,000	599	1,940 06	San Luis Obispo	IV	2009

costs for our customers.

3779 5710007	5710007-004	Esparto C.S.D.	Updating of Water System Grid to Provide Constant Equal Pressures .	The project is for the installation of approximatly 4,140 feet of 12 inch water main to complete the piping required to complete the USDA Project, it also includes all fittings, valves and fire hydrant replacements. It includes the installation of 800 feet of 1 inch HDPE service piping and approximatly 80 feet of 1 1/2 inch HDPE service piping, also 84 service saddles and meter. This also includes the costs for the backfill and road reconstruction required after the Project.	s.	10	c	With Daly use trough out the Day we experiance complaint and have found them to be as much as a 10 psi differance in pressures in differant sections of town. We are conserned that if there is a fire in one area of town there may be a critical Pressure loss in another section of town. We are in a situation of just completing a Project Funded by a Ferderal USDA Loan but had to cut part of the project because of a Lack of funds. We are hoping to get some grant funding to gins the remainer of the Project because having to go back to our customers a year after we raised the rates approximatly 54%. This system needs major upgrading as the maintenance and upgrading through the years has been minimal at best.	497,080	688	2,000 09	Yolo	I	2009
3780 1010039	1010039-010	Caruthers Comm Serv Dist	Standby Power	Add standby power facilities at Well No. 5.	0	10	с	Existing standby power facilities at Well No. 4 has exceeded the design life expectancy and is presently experiencing operational difficulties.	100,000	672	2,103 23	Fresno	ш	2004
3781 1510007	1510007-002	FRAZIER PARK PUD	infrastructure replacement	t Develop and implement an infrastructure replacement plan.	0	10	с	Several leaks in distribution system. Many mains larger than 4-inch diameter are at least 35 years old; smaller lines are even older.	11,000,000	1,362	2,348 19	Kern	Ш	2002
3782 5010039	5010039-001	WESTERN HILLS WATER DISTRICT/DIABLO O	GI Western Hills Pump Station Cooling Project	Design and install adequate air conditioning for pump stations.	0	10	С	Excessive heat in raw water pump stations.	250,000	1,000	3,000 10	Stanislaus	Ш	2007
3783 4910028	4910028-007	Sweetwater Springs CWD - Monte Rio	Monte Rio 2009 Schoolhouse Improvements	This project constructs a storage tank at the schoolhouse site with a capacity of approximately 65,000 gallons at the top of Bonita Terrace, installs a booster station, and connects with replacement reservoir at Upper Schoolhouse site. This project fits well with CIP-PHASE IV-A, PROJECT 2 distribution system improvements in the Monte Rio Terraces that will start construction in May 2009 and is funded separately.	0	10	с	This project is constructing a storage tank to fit in with current project replacing and improving distribution system in Monte Rio Terraces. It will improve system pressure, provide adequate water flow at all times, and provide adequate fire flows. There are no violations at this time, but the system does suffer from inadequate flow and pressure.	638,000	1,061	3,000 18	Sonoma	II	2009
3784 4010901	4010901-001	SLOCSA #10A - Cayucos	CSA 10A (Cayucos) - New Storage Tank	The New Storage Tank project involves the construction of a new 400,000 gallon storage tank at a location just south of the community of Cayucos. The new tank will be an above ground welded steel tank connected to the existing distribution system. The project will require property acquisition and the upsizing of various reache of the pipeline distribution system. A project to upsize these lines will be performed prior to or at the same time as installation of the new storage tank. The additional storage supplied by this tank will upgrade th CSA 10A distribution system so that it meets current demands and fire flow regulations, providing a safer community for the residents of Cayucos.	n O e s	10	c	County Service Area 10A (CSA 10A) currently consists of a water treatment plant, a 210,000 gallon water storage tank and a pipeline distribution system that serves a portion of the community of Cayucos. The existing storage tank and pipeline distribution does not have adequate storage capacity to meet both the current demand and existing fire flow regulations. According to required storage calculations completed for the CSA 10A Water System Master Plan (2003) and the CSA 10A Storage Needs Calculation Addendum (April 2007), current storage is currently deficient by 281,000 gallons. In order to meet current and future storage requirements, CSA 10A needs to add 396,000 gallons of storage. Since Cayucos is susceptible to fire, earthquakes and landslides, this project is a high priority for public safety.	698,000		3,150 06	San Luis Obispo	IV	2009

3785 4010901	4010901-002	SLOCSA #10A - Cayucos	CSA 10A (Cayucos) - Waterline Upgrades	The Waterline Upgrades Project involves the upsizing of O existing water distribution pipelines in CSA 10A to meet existing demands and existing fire flow regulations. The Project will include upsizing 2,631 feet of existing pipe along Shearer Avenue from 4-inch to 10-inch PVC pipe. The project will also include upsizing 392 feet of existing pipe along Chaney Avenue from 6-inch to 8-inch PVC pipe. Pipeline reaches chosen for upsizing were determined based on fire flow simulation modeling and the future addition of a new 400,000 gallon storage tank, which will be constructed either at the same time as this project or shortly thereafter. The upsizing of these waterlines, coupled with the installation of a new storage tank, will upgrade the CSA 10A distribution system so that it meets current demands and fire flow regulations, providing a safer community for the residents of Cayucos.	10	с	County Service Area 10A (CSA 10A) currently consists of a water treatment plant, a 210,000 gallon water storage tank and a pipeline distribution system that serves a portion of the community of Cayucos. The existing storage tank and pipeline distribution does not have adequate storage capacity to meet both the current demand and existing fire flow regulations. Several reaches of the pipeline distribution system have reached their design life and are undersized to accommodate the existing conditions. Fire flow demand simulations have shown that these undersized pipelines create large head losses, minimizing flows to many reaches of the distribution system, especially those at higher elevations. Since Cayucos is susceptible to fire, earthquakes and landslides, this project is a high priority for public safety.	635,000		3,150 06	San Luis Obispo	IV	2009
3786 5510008	5510008-012	LAKE DON PEDRO C S D	Infrastructure Meter Replacement	Contract out the installation of 1500 meters to increase O the reporting accuracy of our water sales. We have already received two bids on the project. With the required funding in place, this project can be started immediately.	10	c	The infrastructure in our community is over forty years old. A random number of meters were tested several years ago to reveal that their accuracy is very poor. Many meters have failed altogether and most are underreporting. The new meters were purchased and are onsite, but funding has been unavailable for their installation. We are also facing our fourth year of constrained revenues due to the economic downturn in our isolated, rural community which has resulted in three years of unbalanced budgets. The installation of these meters will help recover additional funds that are truly due to the district and enable us to proceed with some of the projects that are required to ensure our water supply and water quality.	75,000	1,442	3,600 11	Tuolumne	ш	2009
3787 5510008	5510008-001	LAKE DON PEDRO C S D		INSTALL TWO NEW FILTER VESSELS WITH SURFACE O WASH FACILITIES.	10	c	INADEQUATE CLEANING OF FILTER MEDIA DURING BACKWASHING, INTERIOR STRUCTURAL DAMAGE TO	180,000	1,442	3,600 11	Tuolumne	Ш	1998
3788 1910117	1910117-004	MONTEBELLO-CITY, WATER DEPT.	Northern System – Transmission Main Rehabilitation	Project :There are two options for this project. The Option I consists of locating the leak, repair of the transmission pipeline and relining of the transmission main including laying of a temporary pipeline along the present alignment surface. The Option II is installation of a replacement transmission water main in a public right of way where the new water main would be accessible for future maintenance. Option I of the project would be the investigation of the existing pipeline alignment to determine if the repair and relining option is feasible. If so then that option would be engineered including installation of a temporary bypass water line while repairs are made. Option II of the project would be to install approximately 11, 000 feet of new transmission water main in public street right of way. Should Option I not be viable, the City will apply for funding for Option II. Benefits:The repair and/or replacement of the transmission main would secure for the foreseeable future the supply of water from the MWD connection to the Hillside Reservoir at Iquana/ Liberty Avenue. Project Cost:The estimated overall cost of this project is as follows:OPTION lInvestigation location of leak \$ 25,000Leak repair \$ 10,000Lining of water main \$400,000Temporary bypass water main \$150,000Subtotal = \$\$85,000Construction	10	c	Existing Condition: The City of Montebello Northern Water System with approximately 1,200 metered services, the majority of which are residential services has as its sole source of supply a connection with the Metropolitan Water District of Southern California (MWD). To transport the water supply to its principal storage reservoir and pumping station is a large diameter water main exists in an inaccessible right of way between an abandoned landfill (OII) and the Gas Company's Montebello underground gas storage facility. The water main has had a continuous leak for several years. Because of the inaccessible location of the pipeline the leak possess a risk factor for the City. No public notification is required.	772,200	1,627	3,944 22	Los Angeles	IV	2009

3789 2410012	2410012-005	HILMAR COUNTY WATER DISTRICT	Hilmar County Water District meter replacemen project	Hilamr County Water DistrictWater Meter Replacement O t ProjectThe project would be to remove and replace about half of the existing water meters within the district. The new meters would be a radio read model and the district would install softwate to read those new meters along with the recently installed new meters to this format.	10	c	Hilmar County Water DistrictWater Meter Replacement ProjectPresently the district has close to 1600 meters in operation to cover their existing customers. the meters where installed in the early 1990's and the life of the meters is coming to an end. The District has seen a reduction in the billed flow compared to the flow from the wells. TheDistrict wouldlike to replace these aging meters and install new radio read meters to have a more efficent operation. The use of meters has been shown in the district to lead to water conservation and witht he meters getting older the measured flow is less than is delivered to the customer.	280,000	1,566	5,000 11	Merced	111	2009
3790 3610009	3610009-002	BIGHORN - DESERT VIEW WATER AGENCY	Meter Accuracy and Reliability	Install new meters on all property connections. Install O new meters on all production and booster facility pumps. Install datalogging equipment at selected facilities. Project costs to include meters, miscellaneous parts and labor.	10	С	Old, inaccurate meters within the system result in lower per capita usage registration which reduces revenues and fails to adequately record per capita usage. Accurate registration insures the customers are correctly billed, and metrics for statewide conservation assessments can be established. Production well meters require upgrade and telemetry for accurate monitoring and recordation of groundwater production from the various groundwater subbasins tapped by wells owned by multiple agencies. Accuracy in production and consumption figures is vital for future water planning.	200,000	1,903	5,000 13	San Bernardino	v	2009
3791 1910108	1910108-003	BELL GARDENS-CITY, WATER DEPT.	Rehabilitation /Reactivation of Water Well No. 3F	Project :Rehabilitation /Reactivation of Water Well No. O 3F would be videoed and cleaned as needed and test pumped. A new electric motor driven pumping unit would be installed along with a control system with pressure tank and a new chlorination system. The well site facilities would be made secure to protect it from being vulnerable to external intrusions of force. After installation and pump testing the well would be used to provide water to the City Water system. Benefits:Provide Bell Gardens water system with its groundwater rights and reduce the cost of importing MWD water.	10	c	Existing Condition:The City of Bell Gardens Water System Well No. 3F has been inactive since 1997-98. The Well did supply prior to that time a large portion of City water system supply needs. Water Well No. 1 now supplies about 80% of the water supply needs. The balance of the supply needs is obtained via a Metropolitan Water District of Southern California (MWD) connection, which supplies imported water. The City has 1,914 acre feet of groundwater pumping rights in the Central Basin of which it only uses 800 acre- feet. With MWD planning a rationing program in effect the City is looking to reactivate Well 3F to use the available groundwater rights and to reduce its use of MWD water. The City has also adopted the MWD Model Conservation Ordinance and is notifying all of the residents and other users of water in the City of the need to conserve water and to reduce the usage of the MWD water supply which comes from the Colorado River and the State Water Project (Department of Water Supply). No public notification is required.	488,800	1,589	5,247 15	Los Angeles	IV	2009

3792 1910108	1910108-004	BELL GARDENS-CITY, WATER DEPT.	Closure of Gaps in Water System To Improve Circulation/Quality	Project :This project is to install water mains to close the O remaining gaps and eliminate the dead ends while improving water circulation. Install water mains to close gaps in the existing water system and thus eliminate dead ends and to improve circulation in the water system and thereby improving water quality and comply with health department disinfection requirements in the water system. Benefits:By eliminating the gaps in the Bell Gardens water system and the existing dead ends, the quality of delivered water will improve.	10	с	Existing Condition: The City of Bell Gardens Water System owns a public domestic water service system, which serves about 30% of the area of the City through 1,460 metered service connections. Customers range from single family residences, multiple residential through commercial and industrial services. Within the water system, as constructed prior to 1990, when the system was acquired by the City, there are a number of dead ends water lines, which restrict circulation of water and water quality. The City has within available funding, installed new water mains to close gaps to improve water circulation in the distribution system. Several water line gaps remain. Each gap in the water line means there are two dead ends in the water system. No public notification is required.	528,000	1,589	5,247 15	Los Angeles	IV	2009
3793 2810002	2810002-010	Calistoga, City of		Relocate pump station to area not impacted by floods. O	10	с	Present booster pump station is in floodway, has been flooded a number of times.	100,000	1,491	5,302 03	Napa	Ш	1998
3794 0310003	0310003-004	AWA Sutter Creek		Extend life of canal through improvements or replace O with 8 mile pipeline	10	С	Amador Canal is vulnerable to contamination and periodic structural failures	6,000,000	1,654	5,458 10	Amador	ш	1999
3795 1910018	1910018-004	Bellflower Municipal Water System	Water Reservoir & Booste Pump Station #2	er As most of the BMWS is supplied from service O connections to BSMWC, additional distribution storage would be most beneficial if implemented within the BSMWC system. Therefore, the operational and fire storage may be omitted from the BMWS Water System Improvement Program. The City of Bellflower originally determined that approximately 15 MG of additional above-ground storage capacity was required for reliable service to City water purveyors, 11.4 MG of which was specifically for 'emergency' storage. The City has since sold the water system to BSMWC. As the City no longer owns this backbone transmission system, the City's storage capacity for the (former) Peerless Water Company distribution system will cequire reassessment. The majority of the City's supply water will come from BSMWC which relias heavily on local groundwater sources (5000 AF of 6000 AF total 2007 production). Secondary power supply to BMWS wells and investment in similar upgrades for BSMWC wells will allow the City to take full advantage of groundwater.	10	C	BACKGROUND - In January 2007, the City acquired the assets of the Peerless Water Company for the sum of \$5.8 million. On March 21, 2007, the California Department of Health Services (DHS) made their first site visit and inspection of the water system since 1999. Their engineering report identifies a number of problems, including:a. The water pressure in portions of the system must be limited due to the deteriorated condition of the piping (paragraph 2.4.1).b. Wells 2, 3 and 8 exceed the secondary MCL (Maximum Contaminant Level) for manganese (paragraph 2.6.1.2).c. Well 8 exceeds the secondary MCL for iron (paragraph 2.6.1.2).d. The System Operations Plan does not address sequestering treatment of manganese and iron (paragraph 2.5.2).e. Wells 2, 3 and 8 require the City to initiate proper testing of manganese and iron (paragraph 2.6.1.2).f. Unregulated Chemicals Monitoring Regulation (UCMR) monitoring is deficient. A round of monitoring for hexavalent chromium should have been completed by December 31, 2002. g. The Stage 2 Disinfection Byproducts Plan due to DHS was not submitted by the October 1, 2002. (paragraph 2.6.3). He Of System plan must be implemented by October 1, 2007 (paragraph 2.6.3).h. Wells 4, 5, 6, 7, 9, 11, 12, 14, 15, and 16 (total of 10) are inactive and must be rehabilitated or destroyed in accordance with County Health Department regulation (Currangerab 2).	3,000,000	1,819	5,967 16	Los Angeles	IV	2009

3796 1910147	1910147-005	SATIVA-LA. CWU F	Well Keplacement and Treatment Plant Construction	The sativa Los Angeles County Water District (SLACWD) to purchased the property adjacent Well #4 at \$71,900.00. The area of the property is 150 feet X 50 feet. Demolished dwelling cost \$8,550.00 and the installation of 10 feet security fencing at the cost of \$29,500.00 and abandonment of Well #4 (\$61,000.00).SLACWD has secured a Budget Estimate from Layne Christensen Company for the construction of the new well at the cost of \$589,000.00 to include piping installation to existing 10,0000 gallon hydro-pneumatic pressure tank, check valves,gate valves,etc., meter and treatment system, (chlorination system), in addition to Supervise Control and Data Acquisition (SCADA) system. The new pump house and upgraded electrical system is estimated to cost \$91,000.00.Purchase of property, demolition of dwelling, security fencing and abandonment of Well #4 was funded by SLCWDRequesting funding for construction of new well, pump housing , system components, etc. needed is \$689,000.00.	U	10	L	Our well distribution system is more than 68 years old and recently Well #4 had to be abandoned because of the violation of organic contaminants such as volatile organic compounds (VOC's) and inorganic contaminants such as arsenic, radioactive materials, iron and manganese. All of these chemicals exceeded the Maximum Contaminant Levels prescribed by United States Environmental Protection Agency and California Department of Public Health Services (CDPHS).In 2007, after expending thousands of dollars trying to bring Well #4 into compliance with CDPHS, we sought advice from the CDPHS and Water Replenishment District (WRD) of Southern California, Chief Hydro-Geologist, Mr. Ted Johnson. Since we were unable to meet the compliance of CDPHS (The above mentioned contaminants). Mr. Ted Johnson suggested that we abandoned Well #4. Hence a new well is being constructed adjacent to Well #4 in order to meet the customers demands.	695,000	1,488	5,813 22	Los Angeles	IV	2009
3797 5710005	5710005-003	City of Winters		Replace existing distribution and transmission lines with new mains. Replace all pipes with leaded joints and replace service lines where mains are replaced.	0	10	C	Aging steel pipes; delivery and pressure problems occur.	1,500,000	1,900	6,875 09	Yolo	I	1998
3798 3610015	3610015-002	CRESTLINE VILLAGE CWD - DIVISION 10		Annexation of area into CV water district	0	10	с	Dart Canyon area supplied by individual private wells	1,815,000	4,900	7,400 13	San Bernardino	v	1998
3799 4010017	4010017-003	Golden State Water Company - Los Osos	Los Osos - Rosina Blending Project	In this project, raw water from lower and upper aquifer of wells needs to be brought together at one site so that the water can be blended to reduce nitrate. Sufficient yard piping needs to be installed to connect this blending station to the distribution system, and additional piping needs to be installed so that an IX exchange system can be brought in at a future date and treat even more of the high nitrate water for use. This will require about 1,300 feet of raw water main and sufficient yard piping to accomplish this goal.	0	10	c	Salt water intrusion in the lower portion of this stratified aquifer is necessitating a shift to pumping from the upper portion of the aquifer. However, the upper portion is badly contaminated with nitrates from the ubiquitous septic systems in the area. Therefore, blending or other treatment of the high nitrate water must be conducted before it can be used.	1,500,000	2,687	8,682 06	San Luis Obispo	IV	2009

3800 1510018	1510018-012	ROSAMOND CSD	SemiTropic-Rosamond Water Bank Authority - Phases 1B & 1C	The Semitropic-Rosamond Water Bank (SRWB) will create 800,000 acre-feet of storage in two groundwa bank facilities located in Wasco and Rosamond, CA. T makes it the 13th largest storage project in California The primary purposes of the Project are to improve water quality, to enhance water supply reliability and flexibility in a cost-effective and environmentally soun manner, to help reduce the rate of aquifer overdraft, allow continuation of agricultural uses on Project land and encourage conjunctive use, where appropriate. T Project will supply the needs of RCSD, of the Antelopp Valley and of other regions in Southern California through facilities that are of sufficient size and scope be both cost effective and environmentally sound. In essence, the Projects act as both an underground storage reservoir and natural water treatment plant. Supplies will be stored in wet years for later recovery and use in dry years. Water recovered from the Rosamond Water Bank meets drinking water quality requirements and water recovered from the Semitrop Water Bank meets drinking water standards, with the exception of Arsenic. An arsenic treatment plant will developed at Semitropic to reduce Arsenic to acceptable levels. As surface water is cycled through the groundwater bank facilities, the quality of the wa	O tter his nd to 55, he e to t t	10	c	RCSD, like most water agencies in California, is striving to maintain both the quality and reliability of the water supply used to serve its customers. Rosamond receives its water supplies through a system of wells in its service area, which RCSD operates, and from imported State Water Project supplies as a customer of the Antelope Valley-East Kern Water Agency (AVEK).RCSD is in the process of acquiring additional water systems, including a local high school. These systems have high arsenic levels which exceed the MCL of 10 ppb. RCSD also has two groundwater wells that exceed or are in close violation of the acceptable arsenic level. Also in two of these systems the uranium exceeds 30 µg/L. As is the case in much of California, the reliability of RCSD's imported supplies has fluctuated drastically in recent years. In 2009, RCSD expects to receive less than 15% of its requested amount of imported supplies from AVEK. Previously, in 2005 and 2006, significant amounts of surplus State Water Project water were available that could have been stored for the current drought and it is expected that, while we are currently in a drought, additional wet years will occur in the future. RCSD requires 30,000 AF of storage capacity to store wet year water for use when it is needed. Surface water reservoirs are not a viable option in this part of the Moiave Desert. therefore. the water needs to be stored	20,000,000	4,593	10,633 19	Kern	111	2009
3801 1510053	1510053-001	ANTELOPE VALLEY E KERN WTR AGY		is dramatically improved for the end user, reducing EXPAND EXISTING PLANT OR INTERCONNECT WITH EXISTING NEARBY PLANT FOR INCREASED CAPACITYA RELIABILITY. OTHER - DESIGN AND CONSTRUCTION	O ND	10	с	under ground in a "groundwater bank".Water quality INCREASE CAPACITY - EXISTING CAPACITY AT PEAK CAPACITY	7,300,000	14	11,548 19	Kern	ш	1998
3802 1510053	1510053-002	ANTELOPE VALLEY E KERN WTR AGY		PROVIDE TWO CHLORINE SCRUBBERS	0	10	с	MODIFY CHLORINATION SYSTEM TO COMPLY WITH THE	200,000	14	11,548 19	Kern	ш	1998
3803 2710011	2710011-003	Soledad, City of	City of Soledad Water We #14	II The test well was completed in early 2008 and should test flow of 1200 GPM from an 825 foot level and the quality sampling returned within all limits. The well w be connected to our SCADA system and have disinfection on site. There will be a covered wellhead and a small disinfection bilding inclosed by a chainlink fenced and paved area.	la O e iill	10	с	This well #14 would replace a well that has high Manganese in its discharge. The impacted well #9 is at present out of service. Without a well with equal capacity this zone will have insufficient production capability to meet system demands. A test well has been completed and is caped and ready to complete. Capping an abandoned well would be included in this project.	725,000	4,951	16,146 05	Monterey	II	2009
3804 1010004	1010004-003	Coalinga-City	Palmer Reservoir	Construction of an above-ground 3 million gallon (MG) steel potable water storage tank and the repair of an existing 2.8 MG steel potable water storage tank along with all related tank site location and necessary piping and valves. Integration of SCADA system elements of the new reservoir into the City's existing SCADA system	0	10	c	In 2003 in order to reduce the amount of disinfection by- products in the distribution system, chloramination facilities were constructed at the treatment plant.After treatment, the drinking water is pumped from the clear well of the treated water pumping station into a 27-inch diameter pipeline in Palmer Avenue. The water surface elevation of the treated water pumping station is approximately 500 feet. Approximately 2 miles west of the water treatment plant, the flow tees at Calaveras Avenue. Water destined for the Pleasant Valley State Prison and the Coalinga State Hospital flows south in a 12-inch diameter pipeline in Calaveras Avenue. Water destined for the community of Coalinga and the other miscellaneous users mentioned above, continues west another 1.5 miles to the 2.8 MG Palmer Avenue Reservoir. The high water level elevation of the Palmer Reservoir is 1033 feet. The treated water leaving the Palmer Reservoir flows southwesterly through approximately 8 miles of 27-inch and 24-inch transmission mains to the 7.6 MG Derrick Avenue Reservoir. The water flow control valves. Water then flows from the Derrick Reservoir is controlled by rate-of-flow control valves. Water then flows from the Derrick Reservoir is the control valves. Water then flows from the Derrick Reservoir is the control valves. Water then flows from the Derrick Reservoir is the control valves. Water then flows from the Derrick Reservoir is the City through a 30-inch diameter transmission main. The Derrick Reservoir, with a high water elevation of 841.5 feet, serves to pressurize the City of Coalinga community water system.Water, going to the Pleasant Valley State	10,000,000	3,488	16,800 23	Fresno	11	2009
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3805 3610013	3610013-002	CITY OF LOMA LINDA	Loma Linda Water Zone 2 Transmission Main	A Install a 20" diameter water transmission line from existing water well to existing 3.2 million gallon reservoir. This line will be constructed parallel to the existing 20" transmission line.	0	10	С	Increase flow capacity from well sites to reservoir to meet current demand.	1,500,000	4,436	21,592 13	San Bernardino	V	2009
3806 3610013	3610013-001	CITY OF LOMA LINDA	City of Loma Linda Zone 1 Transmission Main	Install a 20" water transmission line from existing water wells to existing storage facility. The line will be constructed parallel to the existing transmission line.	r O	10	С	Existing transmission main isn't large enough to meet system demand.	2,500,000	4,436	21,592 13	San Bernardino	v	2009
3807 1910022	1910022-005	CALIF STATE POLYTECHNICAL UNIV - POMO	Of Install Nitrate and Perchlorate Removal System at Well	The University would Install a Commercially available Nitrate and Perchlorate Removal System which meets the best applicable technology for Nitrate and Perchlorate removal from Drinking Water . Installation of new Monitoring system analyzers and other supporting Hardware would also be required as directed by the Department of Public Health.	0	10	с	The University has two active Wells which both are in exceedance of the Nitrate MCLand the Perchlorate MCL . The University has to Purchase additional water from a MVD source in order to meet the MCL for Nitrate and Perchlorate . The University would install a Well Head Treatment System which would allow for the removal of these contaminants .	1,200,000	7,575	23,500 22	Los Angeles	IV	2009
3808 3610008	3610008-005	BIG BEAR CITY CSD		Design reclamation facility to replace potable water used for habit	0	10	С	District required to supply water to endangered species habitat	500,000	6,356	25,000 13	San Bernardino	V	1998

3809 1910042	1910042-002	PICO RIVERA - CITY, WATER DEPT.	The Rehabilitation of Water Supply Wells #1, #3, #4, and #5	The City of Pico Rivera recently completed a comprehensive Water Master Plan (July 2009) of its water supply and distribution system, which evaluated the City's ability to meet State and Federal drinking water regulations and provide a reliable water system to its customers. As result of the study, the City must complete several major capital and operational improvement projects over the next several years. In January 2009, the City adopted a three-year water rate case to support current operations, but only a limited amount of pay-as-you go capital projects. Critical to maintaining and upgrading our water system is the ability to obtain certain Grant Funds to construct the necessary high priority projects in a timely manner. Indentified in the water master plan and capital improvement program are well rehabilitation projects necessary to maintain reliable water groundwater supply. The project will initially include a comprehensiv inspection program of all four water supply wells, including detailed survey, testing, and video inspections. Based on the results of the inspection program and the age of each of the four wells, as a minimum it is anticipated that the following rehabilitation improvements will be necessary at each supply well:1. Re-case the existing well by installation of well liner.2. Air Burst well3. Dual air swab well (mechanical re-development, airlifting, and swabbing,	O d ve of	10	c	The City's main water supply system consists of a total of 10 groundwater wells, a few of which are inactive and several which are active, but in need of rehabilitation. Several years ago, the City conducted a video inspection program on three existing wells (Wells #2, #11, and #12) and identified significant problems including, deterioration of well casing, plugging of screens, and severe casing alignment issues. The City implemented three well rehabilitation projects to rectify these problems. The City now needs to implement a second phase of this program and conduct well video inspections and rehabilitation work on four wells (#1, #3, #4, and #5) Wells are listed in order of priority. It is anticipated that based on the video inspection and well rehabilitation work on four wells will need to be rehabilitated in some manner (i.e. recasing, gravel pack, sanitary seal, etc.)Without an inspection and well rehabilitation program, the City will be at risk for losing between 30-50 percent of its water supply in the near term (5-10 years.) The City is concerned with the risk that would be incurred with the full collapse of an existing supply well and the replacement costs to construct a new well, given the City's current available funds in the water capital improvement program; this could be a major obstacle.	600,000	9,335	39,000 07	Los Angeles	IV	2009
3810 1910042	1910042-004	PICO RIVERA - CITY, WATER DEPT.	Fire Protection and Pipeline Upgrade Project	The City of Pico Rivera recently completed a comprehensive Water Master Plan (July 2009) of its water supply and distribution system, which evaluated the City's ability to meet State and Federal drinking water regulations and provide a reliable water system to its customers. As a result of the study, the City mus complete several major capital and operational improvement projects over the next several years. In January 2009, the City adopted a three-year water rate case to support current operations, but only a limited amount of pay-as-you go capital projects. Critical to maintaining and upgrading our water system is the ability to obtain certain Grant Funds to construct the necessary high priority projects in a timely manner. The Fire Protection and Pipeline Upgrade Project was recommended in the Water Master Plan and is critical to meeting the standards set forth by Los Angeles County Fire District-Eastern Division and the Uniform Fire Code for needed fire flow and minimum residual pressure requirements in residential and commercial areas. Approximately 6,000 lineal feet of new 8-12 inc ductile iron water main is necessary to replace undersized water mains, generally 4 and 6-inch in diameter, to ensure adequate fire flows can be satisfied.	O st e	10	C	There are existing areas of the City that do not meet fire flow requirements, under the standards set forth by Los Angeles County Fire District-Eastern Division and the Uniform Fire Code and minimum residual pressure requirements in residential and commercial areas. Residential fire flows were evaluated at 1,500 gallons per minute (gpm) and commercial fire flows at 4,000 gpm. The problem is undersized water mains which can not convey the required fire flow at a minimum pressure of 20 psi.	1,400,000	9,335	39,000 07	Los Angeles	IV	2009

3811 1910042	1910042-005	PICO RIVERA - CITY, WATER DEPT.	Fire and Operational Storage Upgrade Project	The City of Pico Rivera recently completed a comprehensive Water Master Plan (July 2009) of its water supply and distribution system, which evaluated the City's ability to meet State and Federal drinking water regulations and provide a reliable water system to its customers. As result of the study, the City must complete several major capital and operational improvement projects over the next several years. In January 2009, the City adopted a three-year water rate case to support current operations, but only a limited amount of pay-as-you go capital projects. Critical to maintaining and upgrading our water system is the ability to obtain certain Grant Funds to construct the necessary high priority projects in a timely manner. The proposed project includes the construction of a new 1. MG steel reservoir at the City's Plant II site to replace the smaller existing reservoir. The City's goal is, as a minimum, to upgrade the system storage to assure tha a minimum required fire storage capacity of 960,000 gallons would be available in the City's storage tanks. By constructing a new 1.5 MG reservoir the City would increase its available storage capacity to nearly 2 MGs City-wide. The City will be conducting a reservoir preliminary design study to evaluate siting and piping issues associated with the new reservoir locate at its existing Plant II site. Upon completion of the siting study, the City would prepare final plans and	O e e 5 at	10	c	The City is supplied by a continuously pumped water system through a combination of 10 groundwater supply wells and three booster pump stations, the latter located adjacent to three above-ground water storage tanks. The City currently only maintains a total of 750,000 gallons of above-ground water storage in three steel water tanks (Plant III 0.8 million gallons (MG), Plant II 0.48 MG, and Plant III 0.19 MG). The fire storage requirement for the City is approximately 960,000 gallons based on a maximum fire flow of 4,000 gallons per minute and four-hour duration, as recommended by the Los Angeles County Fire District-Eastern Division. The required fire storage exceeds the available above- ground water storage criteria, consistent with industry standards ( American Water Works Association) to provide 25 percent of the maximum day demands for operational needs, fire storage, and emergency storage equal to 50 percent of an average day. The City is currently approximately 4.7 MG deficient in above ground storage and must increase its storage capacity to provide reliable fire protection for its customers. The City's lack of redundant power on its well systems and the potential risk of losing well supplies during a seismic event, make it critical to maintain sufficient above- ground water storage.	2,500,000	9,335	39,000 07	Los Angeles	IV	2009
3812 3610055	3610055-004	YUCAIPA VALLEY WD ID-A&2	potential MTBE contamination; drill replacement wells	Drill ejection and/or replacement wells.	0	10	С	Potential MTBE contamination of major wells. Need replacement source.	1,500,000	2,312	40,654 13	San Bernardino	v	2000
3813 5010028	5010028-004	Ceres, City of	City of Ceres Online Rapid Response Analysers	A variety of online analysers are vital to the operation of a system such as the City of Ceres, which suffers fro- an ongoing list of chemical and mineral contaminents including arsenic, uranium and nitrates produced in systemic spikes which threaten public health. Specifically:Well Number 1 at Smyrna requires online implemetation of real time Nitrate analysers and alarms.Well number 22 at Rockerfeller requires online implemetation of real time coliform bacteria and uranium analysers and alarms.Well Number 16 at Mitchell & Hatch requires online implemetation of real time Nitrate analysers and alarms.Costs associated wit this project include:Hardware in the form of the specifi analysers, Construction costs associated with the integration of this hardware, Software and alarm integration with the existing system, and Project management costs.	O m I th	10	c	The City of Ceres runs a water system currently comprised of some fifteen active producing wells which are mixed into a large city-wide distribution system. These wells have hiustorically suffered from a variety of contaminent issue, primarily with regard to arsenic, nitrates and colform. The levels of these chemical contaminants require continuous monitoring in order to ensure safe drinking water throughout the system. At present, the momnitoring equipment at city disposal is unable to monitor real time spikes in the levels of these contaminents, making it essentially impossible to thwart ongoing level increrases which threaten public safety on a regular basis. It is hoped that a more real-time state of the art system of monitoring may be implemented to insure drinking water quality through out the city, and to allow the system operators to more rapidly pinpoint contaminent sources for containment or treatment upgrade.	150,000	10,617	40,943 10	Stanislaus	Ш	2008
3814 3410017	3410017-010	CalAm - Parkway		A/E Parkway main replacement. Involves design and construction.	0	10	С	General system improvement. Inadequate distribution system pressures due to groundwater contamination.	680,000	13,332	45,187 09	Sacramento	I	1998
3815 3410017	3410017-001	CalAm - Parkway		Parksite backwash tank. Involves design and construction.	0	10	с	General system improvement. Lack of backwash tank capacity threatens Fe Mn treatment process.	200,000	13,332	45,187 09	Sacramento	I	1998
3816 3410017	3410017-006	CalAm - Parkway		Center Parkway Main replacement. Involves design an construction.	nd O	10	С	General system improvement. Loss of wells due to groundwater contamination.	270,000	13,332	45,187 09	Sacramento	I	1998
3817 3410017	3410017-004	CalAm - Parkway		Sky Parkway backbone main. Involves design and construction.	0	10	с	General system improvement. Inadequate distribution system pressure with the loss of supply due to groundwater contamination.	550,000	13,332	45,187 09	Sacramento	I	1998

3818 3610038	3610038-008	RIALTO-CITY	Water SCADA System	The project will be to upgrade the current SCADA system that is more than 20 years old and not very dependable. This will allow the City to operate its system and meet its daily demands on a timely basis with little to now down time. This system monitors our treatment system that provides potable water to some 48,000 residents.	0	10	С	Current Supervisory Control and Data Acquisition System (SCADA) is failing to operate as required thus compromising the water quality standard as prescribed by Department of Health Services and the Regional Water Quality Control Board. The system drops off line and fails to communicate with the wells and reservoirs requiring the City to operate on a manual mode again compromising the water quality.	550,000	11,923	48,418 13	San Bernardino	v	2009
3819 3610029	3610029-014	MONTE VISTA CWD	Zone 4 Pressure Relief Station	The project involves the construction of a new pressure relief station including installation of all valves and appurtenances, installation of SCADA panel, connections, and construction of drainage facility.	2 0	10	с	The work involves the addition of a pressure relief station to Pressure Zone 4 of the domestic distribution system. Without this station, the zone is vulnerable to swings in system pressures and pressure surges which can result in failure of the distribution system infrastructure. This project will protect several miles of distribution pipelines and increase water supply reliability	60,000	11,595	51,014 13	San Bernardino	V	2009
3820 3610029	3610029-024	MONTE VISTA CWD	Hydroturbine No. 3 Rebuild	The District receives flows of treated imported water to its Pressure Zones 1 and 2 from the Water Facilities Authority (WFA) at District Plant 4. Incoming pressure is about 175 psi and flow can vary up to over 15 million gallons per day. In conjunction with regulating flow, the District can reduce pressure and recover energy with hydroelectric turbines through implementation of this project to rebuild and recommision the hydroturbine. The on-site generators are 480V 3-phase generators which provide energy to the Plant No. 4 facilities and/or to Southern California Edison (SCE).	o 0 s r	10	c	This project is intended to meet the "green" infrastructure (energy efficiency) project threshold stipulated in the American Recovery and Reinvestment Act of 2009. After over a decade of service, Hydroturbine No. 3 failed and has been out of operation for some period of time. When in operation, this facility through its hydroturbine reduces high pressure from a jointly operated imported water treatment plant from about 175 psi to about 40 psi and converts the pressure difference into energy that is made available to the energy grid via Southern California Edison. This project seeks to recommission Hydroturbine No. 3. It is an energy efficiency and socially responsible project that seeks to help accomplish the State's vision to reduce greenhouse gas emissions to meet Assembly Bill 32 goals.	250,000	11,595	51,014 13	San Bernardino	v	2009
3821 3610029	3610029-023	MONTE VISTA CWD	State Street Metering Facility Modifications	The work involves the construction of a low flow bypass system to address the station's deficiencies under low flow conditions and includes bypass piping, valves, meter, site work, SCADA, and required appurtenances.	s O	10	С	The work involves the modification of an existing metering station which is utilized to deliver surplus water supply to the City of Chino Hills (adjacent water system). The station delivers up to 24 millions gallons per day (MGD) to the City. However, under low demand periods (3 MGD or less), the station exhibits shortcomings and does not operate as intended. This project will address those shortcomings.	65,000	11,595	51,014 13	San Bernardino	V	2009
3822 3610029	3610029-025	MONTE VISTA CWD	Aquifer Storage and Recovery Well No. 2 with Ion Exchange Treatment	This project will address the deficiencies in District Pressure Zone 3 system by constructing a new well capable of both production and injection at an existing District site. An ion exchange treatment system will be included so as to ensure and maintain water quality. There also exists at the site a storage tank which will be rehabilitated and placed into service. The District has the ability to implement this as either a design-bid-build or design-build project, having recent and relevant experience with both delivery methods.	0 2 e	10	с	The nitrate levels of the groundwater in the Pressure Zone 3 portion of the District domestic water distribution system is significantly above the State MCL. There is also a water supply need and storage deficiency within this zone which subsequently also serves adjacent Pressure Zone 4. These water quality, supply needs, and storage deficiencies leave about 6,000 service connections vulnerable to inadequate ability to handle maximum day demand needs and/or fireflow needs. This projects addresses these issues by placing a clean water source and supply within the zone rather having to rely on importing into the zone.	4,400,000	11,595	51,014 13	San Bernardino	v	2009
3823 3610014 3824 3610014 3825 3610014 3826 3610014 3827 3610014	3610014-001 3610014-004 3610014-005 3610014-006 3610014-007	CITY OF COLTON CITY OF COLTON CITY OF COLTON CITY OF COLTON CITY OF COLTON		Recoat reservoir Rehabilitate wells Install approved coating Recoat reservoir Recoat reservoir	0 0 0 0	10 10 10 10 10	с с с с	Reservoir interior coating failure 53%wells produce below rated capacity Refurbish LaLoma reservoir Interior coating failing on Rialto Reservoir Interior coating failure on Domecq reservoir	800,000 200,000 350,000 350,000 350,000	10,150 10,150 10,150 10,150 10,150	51,350 13 51,350 13 51,350 13 51,350 13 51,350 13 51,350 13	San Bernardino San Bernardino San Bernardino San Bernardino San Bernardino	V V V V	1998 1998 1998 1998 1998

3828 3910004	3910004-001	Lodi, City of	City of Lodi Surface Water Treatment Facility	The City of Lodi Surface Water Treatment Facility C Project will include:1. An eight million gallon per day (8 mgd) facility to treat Mokelumne River water. The facility will be located on 13 acres of land the City currently owns immediately adjacent to the Mokelumne River. The facility functions will be divided into two main structures for "clean" and "dirty" activities. The Operations Building ("clean") will include areas for laboratory work, administrative offices, staff support areas and public interaction areas as well as the membrane filtration. The Support Building ("dirty") will include areas for chemical handling, solids dewatering, service pumps, maintenance workshop, and storage and warehouse areas. Site improvements include roadways, parking and landscape areas to support the treatment facility and improve the area to compliment the nearby Lodi Lake Park.2. Raw water supply will be via 240 feet of 48-inch diameter pipe and 2,500 feet of 30-inch diameter pipe.3. Membrane filtration system was selected as the treatment process for the treatment facility because membranes provide a positive barrier to pathogens, increased flexibility to meet future regulations, smaller and more easily expanded footprint, and greater opportunities for automation.4. Disinfection will be by the chlorination to meet EPA and California Department of Public Health regulations log removal/disinfection of pathogens and to maintain a	0	10	C	The City of Lodi currently uses 26 wells to provide groundwater as the sole source of supply to our 63,000 residents. A 2004 study showed the City uses 17,011 Acre Feet per Year. The ground water elevation has decreased an average of .39 feet per year from 1927 to 2004. The City is also experiencing potential ground water contamination issues related to PCE/TCE. PCE and TCE have been detected in samples taken in soils and groundwater. Three major plumes of contamination have been discovered. While no operating wells are out of compliance with any drinking water standards, the contamination is a serious threat. The City of Lodi began remediation activities including soil vapor and groundwater extraction and treatment in 2004. The remediation efforts are anticipated to last 30 to 50 years. In October 2003 the City of Lodi entered into an agreement with the Woodbridge Irrigation District to purchase 6,000 acre feet of Mokelumne River water per year. The purchase is intended to supplement the City's water supply to meet long term water demands and to reduce the City's dependence on the groundwater aquifer.	40,000,000	18,679	63,395 10	San Joaquin	Π	2009
3829 3310021	3310021-009	Jurupa Community SD	High School Well Renovation	This project includes renovation of an existing well which would require redevelopment, including the addition of a sanitary seal and re-equipping. The project would provide the benefit of providing an additional source of raw water to the Roger D. Teagarden lon Exchange Plant and provide a more diverse and reliable water supply for Jurupa Community Services District. This project will yield approximately 600 more acre-feet per year of water and will create 12 new jobs.	D	10	С	An existing well located at Jurupa Valley High School within the Jurupa Community Services District (JCSD) is not currently used because it requires redevelopment including addition of a sanitary seal and re-equipping. This project is needed in order to increase the raw water supply to the Roger D. Teagarden Ion Exchange Plant, which will increase the service area potable water supply.	975,000	24,684	68,297 20	Riverside	v	2009
3830 3310021	3310021-012	Jurupa Community SD	Selby Street Water Service	e Jurupa Community Services District (JCSD) is evaluating C the feasibility of providing water and sewer service to approximately 70 to 80 homes and businesses located in the Eastvale area. The proposed project includes installation of approximately 3,250 feet of domestic water pipeline, which will help provide residents of a disadvantaged community with more reliable, higher quality drinking water service. This project will create 14 new jobs.	D	10	С	Homes in the disadvantaged area of Eastvale are currently served water through private domestic wells, which have experienced high nitrate levels in the past. The project is needed to help provide approximately 70 to 80 homes and business in this disadvantaged area with more reliable, higher quality drinking water service.	600,000	24,684	68,297 20	Riverside	v	2009
3831 3310021	3310021-010	Jurupa Community SD	Geordie Way Water Service	The proposed Jurupa Community Services District C project will construct 1,100 to 1,400 feet of water pipeline to provide potable water service to residents currently served by private well systems in the Glen Avon area. The project will benefit residents in a disadvantaged community. This project will create 12 new jobs.	D	10	С	The proposed project will construct 1,100 to 1,400 feet of water pipeline to provide service to residents currently served by private well systems in the Glen Avon area of Jurupa Community Services District. Owners in this area have reported that wells have run dry during summers. The project would provide a more reliable water supply for residents in a disadvantaged community.	350,000	24,684	68,297 20	Riverside	v	2009

3832 1910079	1910079-003	LYNWOOD-CITY, WATER DEPT.	Water System Circulation Improvements – Phase I	Project :To mitigate the marginal low water pressures of and low levels of chlorine residuals, this project will install larger diameter water mains in principal streets of the northern areas to replace smaller diameter water mains. The Phase I of this solution is the installation of 3,000 feet of 12-inch diameter water main in Martin Luther King, Jr. Boulevard from Long Beach Boulevard westerly to Loraine Street. Benefits:The Benefit to the water customers of the City of Lynwood is to improve water pressure and provide a more standard chlorine residual.	1(	0	с	Existing Condition:The water pressures and chlorine residual are marginal in the northern section of the City of Lynwood Water System, particularly in the panhandle area north of Abbott Road at State Street/Long Beach Boulevard and the panhandle section along Alameda Street north of Martin Luther King, Jr. Boulevard. This appears due to several factors mainly small diameter water mains. No public notification is required.	792,000	9,035	73,212 22	Los Angeles	IV	2009
3833 1910079	1910079-002	LYNWOOD-CITY, WATER DEPT.	Water System Circulation Improvements – Phase II	Project :To mitigate the marginal low water pressures and low levels of chlorine residuals, this project will install several sections of 12-inch diameter water mains in principal streets of the northern areas to replace smaller diameter water mains and close the gaps in the existing system. The Phase II of this proposed solution is as follows: installation of 720 feet of 12-inch diameter water main in Butler Avenue and Bellinger Street;installation of 500 feet of 12-inch diameter water main in Alameda Street West at Lynwood Road;and installation of 1,600 feet of 12-inch diameter water main in Lynwood Road from Alameda Street West to Bellinger Street. These larger water mains will permit the greater use of water Well No. 19 to serve the northern area.Benefits:The Benefit to the water customers of the City of Lynwood is to improve water pressure and provide a more standard chlorine residual.	10	0	c	Existing Condition:The water pressures and chlorine residual are marginal in the northern section of the City of Lynwood Water System, particularly in the panhandle area north of Abbott Road at State Street/Long Beach Boulevard and the panhandle section along Alameda Street north of Martin Luther King, Jr. Boulevard. This appears due to several factors mainly small diameter water mains. No public notification is required.	744,480	9,035	73,212 22	Los Angeles	IV	2009
3834 1910001	1910001-007	City of Alhambra	Garvey Reservoir Recoating Project	An epoxy coating will be applied to the walls and floor of the steel tank after removal of any corrosion. These areas will then be prepared for the application of the epoxy. Cathodic protection will be reinstalled in the tank to help reduce the amount of future corrosion. The new epoxy lining will extend the life of the tank an additional 30-35 years. The exterior of the tank is structurally sound which will also extend the life of the tank. Water quality will thus be maintained. This project is one of several infrastructure improvement projects to complete the systemized preservation of the City's eleven steel reservoir tanks.	10	0	с	Garvey Reservoir tank was originally constructed in 1980. A recent inspection revealed that the steel walls and floor is exhibiting advanced corrosion. This tank does have cathodic protection installed to inhibit corrosion, however, due to the age of the tank, and with no appreciable upgrades since installation, the steel is corroding. This in turn can significantly affect the water quality. In order to maintain compliance with drinking water standards to provide safe drinking water, the recoating of the tank walls and floor is necessary.	1,500,000	17,740	92,158 16	Los Angeles	IV	2009
3835 3310012	3310012-015	Elsinore Valley MWD	Brine Tanks Relocation for Several Wells Facilities	O from inside the building to the outside and piping reconfigured. At two locations, the salt tanks located outside will be replaced because they have been damaged by sun light and weather. Proper covers and necessary fences will be provided for weather protection and safety of the tanks.	10	0	c	This Capital Improvement Project entails relocating or replacing the five (5) polyethylene brine storage tanks located at five ground water wells sites. The tanks are used to store salt, which is utilized to generate sodium hypochlorite for disinfecting the ground water for potable use. The brine tanks located inside the bulidings release salt dust during high pressure filling of the tanks by the salt supplier. This dust can not be effectively controlled and its deposit is resulting in corrosion of other expensive electrical and electronic equipment inside the building. Therefore, the salt storage tanks must be relocated outside the buildings to prevent damage to electrical equipment. At other facilites, uncovered salt storage tanks located outside the buldings have been damaged by sun light and weather and need replacement of tanks with covers on top.	300,000	36,817	121,420 20	Riverside	v	2009

3836 3310012	3310012-014	Elsinore Valley MWD	Water System Pressure Reducing Vaults Safety Upgrades	The goal of the project is to improve the PRV stations to C a level that will provide desired safety, vault access and reliability to properly operate and maintain the stations and to eliminate confined space entry, where possible by building above ground vault stations.	o :	10	С	This project proposes to replace pressure reducing valve (PRV) stations in the California Oaks Community. There are twelve (12) California Oaks PRV stations that need to be assessed for replacement and safety improvement. Each valve is currently located within a vault below the sidewalk, covered by a heavy steel lid. In addition to confined space entry safety concerns, many of the PRV stations have a number of substantial deficiencies which include rusted valve covers and hatches, rotted framing, and inadequate operator accessibility. Accumulation of moisture in vault also inhibits accessibility to PRV & related maintenance tasks.	700,000	36,817	121,420 20	Riverside	v	2009
3837 3310012	3310012-012	Elsinore Valley MWD	Terra Cotta Well Equippir Project	g The Terra Cotta Well project consists of two C construction phases; the drilling and equipping phases. The drilling phase, consisting of installing the well casing and developing and testing the well, has been completed. The well equipping phase consists of constructing the wellhead facilities including the mechanical, disinfection and electrical equipment, and constructing the adjoining park improvements. The project is a joint use project between EVMWD and the City of Lake Elsinore. The project also involves constructing a passive park on the site. The park will consist of a low water use landscaping area, walkways, benches, and educational signs regarding drought tolerant landscaping and water conservation practices. EVMWD's Board of Directors adopted the Mitigated Negative Declaration on December 14, 2006 and filed the Notice of Determination on December 20, 2006. The engineering documents have been finalized and the project is ready for immediate construction bidding.	о :	10	С	In accordance with the recommendations of the Elsinore Valley Municipal Water District's (EVMWD) Water Resources, Urban Water, and Groundwater Management Plans, the proposed Terra Cotta Well will maximize the use of EVMWD's local water resources while reducing dependence on imported water from the State Water Project and Colorado River Aqueduct. In addition, this dual-purpose well will be capable of injecting water in the groundwater basin during low demand periods or when replenishment water is available, and extracting water during periods of high demand, thus providing enhanced control of peak demand management and depleting aquifer. The anticipated production is 1,200 gallons-per-minute or 1432 acre-feet per year operated over a 9 month period. EVMWD's current potable water supply is comprised of 61% of imported water from the State Water Project in combination with Colorado River water, and 39% of local water supply of EVMWD. Energy production is a significant source of greenhouse gas emissions. Approximately 19% of electricity and 30% of natural gas (non-power plant) consumed in California are used to deliver, treat, and dispose of water. Long-distance water conveyance, such as that from Northern to Southern California, accounts for a	3,100,000	36,817	121,420 20	Riverside	v	2009
3838 1510031	1510031-001	Bakersfield, City of	Stine 60" Raw Water Pipeline Project	The project will construct a 4.5 mile 60" diameter raw C water transmission pipeline on Stine Road/ canal right of way corridor. This pipeline will supply a 40 million gallon per day drinking water treatment plant. Use of the pipeline will protect the raw water supply and ensure security by bypassing an open conveyance system.	o :	10	с	This project will protect and provide a raw water supply to a new drinking water treatment plant. The construction of this project will eliminate current water supply problems due to groundwater contaminants called volitale organic compounds (VOC's) or naturally occuring contaminants such as arsenic and lead.	9,560,000	32,703	132,736 12	Kern	III	2009
3839 5410016	5410016-001	CWS - Visalia		INSTALL GAC TREATMENT. OTHER - DESIGN AND C CONSTRUCTION	с с	10	с	FAST GROWING COMMUNITY - PCE HAS CONTAMINATED THIS AREA AND WILL EFFECT A NEW WELL WHEN DRILLED	200,000	39,379	133,749 12	Tulare	Ш	1998
3840 5410016	5410016-002	CWS - Visalia		DESIGN AND CONSTRUCT GAC TREATMENT VESSEL AND C UPGRADE PUMP AND MOTOR. OTHER - DESIGN AND CONSTRUCTION	о :	10	с	WELL CONTAMINATED WITH CARBON TETRACHLORIDE (WELL 25-01)	225,000	39,379	133,749 12	Tulare	Ш	1998

3841 3710006	3710006-007	Escondido, City of	Reed Reservoir Project	The existing Reed Reservoir is a 140-ft diameter by 24-f high above ground steel tank. The tank was constructed in 1954 with a nominal storage capacity of 2.75 million gallons. The Reed Reservoir is the only reservoir in the pressure zone which it serves by gravity flow. The reservoir also functions as the forebay for the East Grove Pump Station, which pumps to a higher pressure zone. This project will replace the existing 2.75 million gallon tank with two 2.5 million gallon partially buried circular prestressed concrete tanks and associated piping. The new tanks will maintain the same water elevations as the existing tank. The old tank will be demolished as a part of this project.	t O	10	c	The Reed Reservoir is a 140-ft diameter by 24-ft high above ground steel tank. The tank was constructed in 1954 with a nominal storage capacity of 2.75 million gallons. In December 2001, an evaluation of the Reed Reservoir was performed by an engineering consultant, Tetra Tech, Inc. The evaluation included numerous inspections of the tank interior and exterior. The consultant determined that Reed Reservoir is unstable for design seismic loading. The existing Reed Reservoir shell plates are overstressed and must be strengthened. The inspections revealed extensive corrosion of the internal shell and structural members. The coal tar coating has deteriorated so much that little to no protection is provided from corrosion. It was determined that rehabilitating the existing reservoir would cost the same as constructing a new reservoir; therefore it was recommended that the City construct a new reservoir. A corrosion consultant performed Ultrasonic Thickness (UT) testing on the shell and roof of the tank. Testing indicated pit depths of approximately 100 mils deep on the North Side of the tank, which is approximately 40% wall loss. The second larger area of corrosion was on the South Side of the tank where pit depths measured approximately 90 mils. The evaluation noted that the corrosion indications at that location corresponded with a small buckle in the tank shell. The UT testing of the roof showed evidence	7,800,000	25,828	140,000 14	San Diego	v	2009
3842 3910001	3910001-002	California Water Service - Stockton	Stockton "District Wide" Water Conservation Program	The program has two "full service" elements that encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 32,250 residential homes / 64,500 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 1,979 acre feet per year. Element B. A team of specialist will retrofit 10,750 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 330 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 months or less. The program will employ 75 to 100 people for 12 months.	0	10	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 2,237 acre feet per year or 50.0 / 75.0 gallons per day, per person.	19,600,000	43,689	171,777 10	San Joaquin	11	2009
3843 3010062	3010062-001	City of Garden Grove	Sodium Hypochlorite Systems	Covert all chlorine gas systems to bulk sodium hypochlorite systems.	0	10	С	The City's vulnerability assessment recommends the use of a less harzrdous disinfectant instead of chlorine gas, which is utilized currently.	500,000	34,077	172,781 08	Orange	v	2007

3844 3610039	3610039-036	SAN BERNARDINO CITY	Gilbert Street Well Perchlorate Treatment Project	The San Bernardino Municipal Water Department's plan O of action includes, but is not limited to the following:1. Request water quality data (perchlorate concentrations) for up gradient wells of adjoining agencies including East Valley Water Department (EVWD).2. Request source evaluation studies (if completed) from EVWD. This may be limited to interviews of EVWD staff if documentation is not available.3. Evaluate the lateral distribution of perchlorate based on this data and knowledge of past agricultural land use.4. Perform modeling simulations to evaluate flow pathways and travel times from the source area to City production wells.5. Expand on the identified alternatives, identify other potential alternatives, and prepare a technical memorandum for the proposed alternatives.6. Prepare a construction bid package of the CDPH approved alternative.7. Retain a contractor to construct the facilities.	10	C	While conducting normal triennial sampling for perchlorate, the Gilbert Street Well perchlorate concentration was reported at 4.8 parts per billion (ppb) or 80 percent of the maximum contaminant level (MCL) of 6.0 ppb. Subsequent test runs of the well to atmosphere (not into the distribution system) have indicated an upward trend in perchlorate concentrations which has shut down the well since July 2008.	750,000	42,301	173,359 13	San Bernardino	V	2009
3845 1910043	1910043-004	GLENDALE-CITY, WATER DEPT.	Hexavalent chromium full treatment facility (Cr+6)	This project involves implementing improvements to protect public health by removing chromium 6 from contaminated wells. This will be accomplished by completing construction of a 1,200 gpm of treatment capacity at the GWTP. The City of Glendale has managed a comprehensive research effort over the past five years to develop and demonstrate chromium 6 removal technologies. This project proposal is based on the sound science derived from this previous work. A 1,200 gpm full-scale treatment plant is planned to remove chromium 6 from Wells GN-2 and GN-3. The treatment approach will likely employ the reduction-coagulation-filtration process, and the scope of construction involves pipelines, treatment equipment, controls, operations lab, and related facilities, at an estimated cost of \$8.5 million. The demonstration facilities have all of the necessary environmental and regulatory permits and approvals to proceed without interruption. This project would benefit from the previous environmental mork for the demonstration facility. This will allow early completion of the environmental review for the full treatment facility. A design/build contractor is currently under contract for the demonstration facilities. The city intends to expedite design and construction of the 1,200 gpm facility by using the existing contract wehicle. The necessary technical, managerial and financial support is in place to	10	c	The problem relates to protection of public health from groundwater supplies contaminated with chromium 6 in concentrations that exceed primary drinking water MCLs. The Cities of Los Angeles, Burbank and Glendale rely on groundwater in the San Fernando Valley of Los Angeles County that has been contaminated with chromium 6 and VOCs. The VOC contamination was addressed by a Superfund project that included construction of the Glendale Water Treatment Plant (GWTP) and eight wells. Chromium 6 concentrations are increasing in the groundwater which has not been addressed. There is no MCL for chromium 6, but it is currently regulated under the total chromium MCL of 50 ug/L. The California OEHHA was poised to release a draft PHG for chromium 6 with indications that it will be approximately 0.06 ug/L. This was later deferred. CDPH will be obligated to set the MCL as close to the PHG as technically feasible. Wells GS-3 and GN-3 produce water approaching or exceeding the current chromium MCL and both are operated at reduced capacity because of chromium 6 cours of the eight wells will exceed this standard. Two wells, GN-2 and GN-3, are forecasted by EPA to reach 170 ug/L; GS-3 has exceeded the MCL, and GS-4 is forecasted to reach 50 ug/L. Chating and S-4 is forecasted to reach 50 ug/L. Chating and S-4 is forecasted to reach 50 ug/L.	6,500,000	33,275	207,157 15	Los Angeles	IV	2009
3846 1510003	1510003-004	CWS - Bakersfield	Bakersfield "City Wide" Water Conservations Project	The city wide water conservation project has two O elements.a. Indoor: CWSC will replace / retrofit 102,000 bathrooms and the projected water savings is 3,129 acre feet per year.b. Outdoor: CWSC will replace 16,867 ET controllers and the estimated water savings is 517 acre feet per year.	10	С	CWSC intends to reduce the district total water consumption to match the long term water supply.	49,369,875	63,641	208,867 12	Kern	III	2009
3847 5010010	5010010-014	Modesto, City of	S. Ninth Street Water Mair Replacement	This project involves installing water mains on S. Ninth O Street. The main will be installed per City of Modesto Standards. The main will bring safe drinking water to businesses and residences with better pressure and more reliablity. Currently, the water supply is insufficient for any future development in the industrial and commerical area due to fire flow and demand requirements.	10	C	This commercial and industrial area is unable to grow or improve due to the lack of sufficient water supply for domestic, industrial or fire flow uses. Old, substandard and undersized water mains restrict property owners from remodeling, building new businesses or residences in the already economically deprived area.	850,000	68,497	212,000 10	Stanislaus	Ш	2009

3848 5010010	5010010-010	Modesto, City of	Modesto-Salida Water Transmission Main	This project would consist of a single water transmission main from the Modesto contigious service area to the Salida water system service area. The current alignment is for Kiernan Avenue (SR 219) but alternate alignments are being explored. The pipeline would be ductile iron. The water transmission main would not only provide additional water when needed but would also be used as a source of safe drinking water in which to blend with the contaminated well water. There are limited connections between Modesto and Salida and very few treatment options at each well site due to property size. This pipeline would be a relatively simple and efficient solution to an identified risk in the Salida water system.	0	10	c	The water system in Salida is owned and operated by the City of Modesto, however, there are only 2 water main inter-ties between Modesto and Salida. Those inter-ties are 12 inch and less. Salida has 8 wells all with varying levels of Arsenic and currently four wells are at risk with contaminate levels of 7 ppm or higher. In June 2009, the City of Modesto Capital Planning began modeling the Salida system with a variable presuming those four wells were to go offline due to contaminates. Preliminary findings indicate there is a real demand for more water for the Salida system when these wells are offline.If one well exceeds the MCL and is forced to shutdown, the remaining wells will need to increase production to compensate for the loss. The unknown factor is whether this will lead to an increase in contaminates in the remaining wells due to increased pumping. If this were to occur, it would not only lead to a chain reaction of pumps going offline, but it would be crippling to the Salida system.	2,500,000	68,497	212,000 10	Stanislaus	111	2009
3849 5010010	5010010-012	Modesto, City of	Ninth Street Bridge Water Main	This project would provide a dedicated water transmission main from the existing 16-inch main along S. Morton Boulvard at Ninth Street continue south along the underside or through the Ninth Street Bridge across the river and connect to the existing 12-inch main along River Road.	0	10	C	Modesto south of the Tuolumne River is an economically deprived area with no new prospects for safe drinking water for domestic and industrial use. This area currently experiences unacceptable fire flows and extremely low water pressures most of the time. This project would provide a dedicated water transmission main from Modesto north of the Tuolumne River through/along side the Ninth Street Bridge to Modesto south of the river. North Modesto has enough water to supply more water to South Modesto, but the infrastructure to supply is not enough.	1,250,000	68,497	212,000 10	Stanislaus	111	2009
3850 3710010	3710010-005	Helix Water District	Helix 1A Pump Station Replacement	This Project replaces 4 existing pumps with 3 new pumps and rehabilities an existing underground pump station including piping, electrical, and sitework. The existing pumps are near the end of their service life. The three new pumps will be 2,400 gallons per minute rated at 250 horsepower each. The piping improvements include new inlet and outlet piping and a new bypass pipeline with a pressure control valve. The new bypass will allow the pump station to pump closed- system (without a tank) to provide water customers service during shutdowns or emergencies. Sitework improvements include upgrades to a pressure reducing valve vault, a flow meter vault, and installation of a new isolation valve vault. Electrical improvements include a new electrical cabinet and electrical switchgear to allow a temporary generator connection to provide water to customers during a power outage.These infrastructure inprovements are needed to bring the pump station up to the current design requirements and standards.	0	10	C	This Project replaces 4 existing pumps with 3 new pumps and rehabilities an existing underground pump station including piping, electrical, and sitework. The existing pumps are near the end of their service life. Infrastructure inprovements are needed to bring the pump station up to the current design requirements and standards.	640,000	55,497	263,642 14	San Diego	v	2009

3851 3710010	3710010-003	Helix Water District	Pipeline Project 1818 El Canto/Toledo	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. This Project replaces 6,850 feet of cast-iron pipe with 6,850 feet of PVC pipe in the unincorporated area of the County of San Diego in the Casa de Oro community. The existing cast-iron pipe was installed in 1948, 1951, and 1952. Pipelines will be replaced within several streets including El Canto Dr., Toledo Rd., Ramona Dr., Pinto Pl., and Madrid Way. Existing cast- iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. The old cast-iron pipelines on this project have had four recent breaks in 1991, 2003, 2006, and 2007. The Project will replace old cast-iron pipe with PVC pipe that is less prone to failure and more reliable. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	0	10	C	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. The Project replaces 6,850 feet of cast- iron pipe. The old cast-iron pipelines on this Project have had four recent breaks in 1991, 2003, 2006, and 2007. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	1,450,000	55,497	263,642 14	San Diego	v	2009
3852 3710010	3710010-002	Helix Water District	Pipeline Project 1636 Mt. Helix B	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. This Project replaces 7,000 feet of cast-iron pipe with 7,000 feet of PVC pipe on Mt. Helix. The existing cast-iron pipe was installed from 1939 to 1953. Pipelines will be replaced within several streets including El Granito Ave., Sunset Ave., Starlight Ln., Mesa Terrace, Alto Dr., Ward Ln., and several easements. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. The old cast-iron pipeline on this Project has had one pipe break in 1978. The Project will replace vill cold cast-iron pipe with PVC pipe that is less prone to failure and more reliable. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	0	10	С	This Project is an infrastructure improvement project that replaces Helix's old cast-iron pipelines with new pipelines. Existing cast-iron pipes break and leak requiring the distribution system to be shut down and water deliveries to customers are impacted until repairs can be made. This Project replaces 7,000 feet of cast- iron pipe. The old cast-iron pipeline on this Project has had one pipe break in 1978. These infrastructure improvements are also needed to bring the pipelines up to the current design requirements and standards.	1,650,000	55,497	263,642 14	San Diego	v	2009
3853 3710042	3710042-004	San Diego County Water Authority	Fencing and Barricades at Critical Facilities	Harden walls, perimeter fences and gates around critical facilities; install vehicle barriers at office buildings, operations control center, and at critical water facilities to deter vehicles from driving up walkways and entrances. This project is rated in 4th position in Prop 50, Chapter 3 and is ready to go.	0	10	с	The need for vehicle barriers that deter vehicles from driving up walkways and entrances to the San Diego County Water Authority office building, operations control center, and critical facilities, and beefing up fencing and gate access to critical water conveyance facilities was identified in Vulnerability Assessments submitted to the USEPA. Increasing the physical protection system at critical water facilities lowers the risk and reduces vulnerability to a terrorist attack.	200,000	102	3,140,000 14	San Diego	v	2009
3854 3710042	3710042-007	San Diego County Water Authority	Microwave Communication System	Install a microwave communication system with a network of five microwave towers, fiber optic lines, private leased lines, switches, and routers that ensures alternate routes to move data back to the operations control center and out again to the flow control facilities. This project is rated in 4th position in Prop 50, Chapter 3 and is ready to go.	0	10	C	The need for redundancy in the San Diego County Water Authority water control communication system was identified in Vulnerability Assessments submitted to the USEPA. Mitigating consequences of a terrorist attack, earthquake, or other natural disaster involves increasing the redundancy of the communication system that controls the flow of water in the county. Over 100 flow control facilities communicate the status of the aqueduct system over land-based phone lines. A microwave communication system mould provide redundancy in the event that the primary system fails.	1,750,000	102	3,140,000 14	San Diego	V	2009

3855 1900904	1900904-002	ACTON CONSERVATION CAMP # 11	Add additional storage tank to meet needs of current population	Add additional 100,000 gallon water storage tank to serve current and future expanded camp population.	0	10	Ρ	Inadequate storage at camp to serve current and future population.	200,000	1	90 16	Los Angeles	IV	2009
3856 1900007	1900007-003	CALIFORNIA CONSERVATION CAMP # 14	Clean and Disinfect interior of 250,000 gallon stell water storage tank	Install a temporary 5,000 gallon polyetheylene storage tank on existing tank site to provide a temporary water system to the camp. Clean bottom of existing water tank by using high pressure water, shovels and disinfec tank.	0 t	10	р	The interior of the needs to be thoroughly cleaned and disinfected following all AWWA standards as required in a Department of Public Health inspection report dated October 9, 2008.	48,000	1	95 16	Los Angeles	IV	2009
3857 1000190	1000190-002	LONE STAR SCHOOL	Lone Star School Well	New well and / or DBCP treatment	0	10	Ρ	Single well; well exceeds DBCP standards	500,000	6	347 23	Fresno	Ш	2009
3858 1503140	1503140-001	FRAZIER MOUNTAIN HIGH SCHOOL	Frazier Mountain High School-New Well/Intertie with Lebec CWD	As part of this project, the Frazier Mountain High Schoo will either drill a new well or develop intertie with Lebe CWD.	ol O ec	10	Ρ	Frazier Mountain High School has only well. Therefore, the water system is unreliable.	500,000	1	500 19	Kern	Ш	2008
3859 1503341	1503341-004	TEJON-CASTAIC WATER DISTRICT	Increase water source	Domestic water filtration expansion.	0	10	Ρ	Current water production at capacity, unable to meet anticipated prowth	500,000	15	1,000 19	Kern	ш	2007
3860 1503341	1503341-003	TEJON-CASTAIC WATER DISTRICT	Well rehabilitation	Pull and repair well.	0	10	Р	Down hole failure at Rose Well.	100,000	15	1,000 19	Kern	ш	2007
3861 1503341	1503341-002	TEJON-CASTAIC WATER DISTRICT	Water Quality Improvement	Install water filtration system.	0	10	Р	Impurities in water and sediment buildup in tank.	70,000	15	1,000 19	Kern	ш	2007
3862 1900764	1900764-003	HENNINGER FLATS	Replace chlorination system and structure enclosing the system	Replace current chlorination system with modern system, including a secured structure to enclose the system.	0	10	Ν	Henniger Flats is a historic, recreational site serving approximately 300 campers and hikers weekly in high season. The water is supplied from a spring located in a cement and metal structure. The current chlorination system has been consistently failing.	200,000	1	25 16	Los Angeles	IV	2009
3863 3600193	3600193-001	Park Moabi	Moabi Regional Park Water System Improvements	The project aims to seek the consultation with a hydro- geologist to evaluate the current wells in order to diagnose production issue and advice of adaptation to exist well or the possible addition of a new well location as needed to improve production and reduce contaminant input levels. The project will construct the new well and/or all other recommendation to rehabilitate the existing wells. Additionally the project with consult with engineers to provide design plans, specification and recommendation to construct a new treatment facility for the water system in order to remove the minerals and metal deposits as noted in recent testing of the current system and likely to be present in any new well. The project shall then construct the treatment facility based the plans via a pubic bid and shall be constructed with new and efficient technology to remove the current noted minerals and metals as well as remove any new deposits that may be found in the future and ensure a healthy viable source of water to supply the Park Site for many years. The project shall also construct modification to the existing system to ite the new well and treatment facility to the system as well as to improve flow dynamics and for fire purposes, this shall include improvement to the old water system and service including replacement and adding piping, isolation valves and looping for pressure and service	o n	10	Ν	The water system at the park site is over 40 years old and although newer wells been installed recently as the system has expanded and newer connections have been made the system still relies upon the original design and equipment installed and haphazardly modified over the years. In addition, current wells that services the system are not providing adequate flow during peak demand and limit future growth. Additionally, the current well, although planned in locations intended to remove chances of contamination, all contain contaminants based upon the composition of the local aquifer and are affected by the river water quality; this applies even to the newer well of approximately five years old. Minerals and contaminants from years of local industrial uses have resulted in the entire local aquifer containing contaminants as it percolates down from those sites. The current discovered contaminant levels may likely increase over the decade or new contaminants may be additionally leached into the system. The project aims to evaluate the current wells, possibly locate a new well as needed to improve production and reduce contaminant input levels, provide engineering and installation of new treatment facility for the water system in order to remove the minerals and metal deposits as noted in recent testing of the current system and likely to be present in any new well. The treatment facility will be designed with	800,000	159	25 13	San Bernardino	v	2009
3864 1900764	1900764-002	HENNINGER FLATS	Tank Replacement	Destroy current cement block tank and install a new secured tank in its place to meet AWWA standards.	0	10	Ν	Henniger Flats potable water is fed from a horizontal spring which flows through primitive filtration systems and then into a 6,500 cement block tank which is in bad disrepair, leaking and exposed to the elements. Currently, we have bypassed this tank and the water flows directly to other tanks at a lower part of the facility. The tank should be destroyed and a new tank erected in its place.	200,000	1	25 16	Los Angeles	IV	2009
3865 5000395	5000395-001	BASSO BRIDGE FISHING/BOATING ACCESS		INSTALL LARGER PUMP, ADDITIONAL STORAGE AND PRESSURE SYSTEM. OTHER = DESIGN AND CONSTRUCTION.	0	10	Ν	INADEQUATE SUPPLY AND PRESSURE	45,000	2	26 10	Stanislaus	Ш	1998

3866 5000165	5000165-001	WOODWARD RESERVOIR WATER SYSTEM		REPLACE WELL PUMP AND ELECTRICLA COMPONENTS. REPLACE/IMPROVE CHLORINATION SYSTEM. OTHER = DESIGN AND CONSTRUCTION	0	10	Ν	ONE OR TWO OF THE FOUR WELLS SUBJECT TO COLIFORM CONTAMINATION DISTRIBUTION SYSTEM INADEQUATE	35,000	1	26 10	Stanislaus	ш	1998
3867 5000239	5000239-001	LA GRANGE PARK-OHV		REPAIR OR REPLACE SECONDARY SUBMERSIBLE PUMP. INCREASE STORAGE CAPACITY, REPLACE ELECTRICAL SYSTEM. OTHER = DESIGN AND CONSTRUCTION	0	10	Ν	INADEQUATE SUPPLY AND OUTDATED ELECTRICAL	25,000	3	26 10	Stanislaus	Ш	1998
3868 3600585	3600585-002	Thousand Pines Amer. Ctr.	Thousand Pines Camp- New Well Project	In order to build the new well, we will need to have some piping done, distribution infrastructure as well as a new tank.	ο	10	Ν	As a non-profit camp, in the San Bernardino Mountains, we currently have four wells, one of which we have designated (100,000 gallons) for the fighting of fires, if that need occurs. As a result, we now have a shortage of drinking water for our camp needs. This is forcing us to purchase water from the local water agency (CAWA). We are asking for a grant and or loan in order to build a 5th water well so that we can once again be self sufficient, yet still help out our county fire agency, in case a breaks out again, like in year 2006.	85,000	1	120 13	San Bernardino	V	2009
3869 1000058	1000058-003	MUSICK CREEK TRACT ASSOCIATION		INSTALL A SEPARATE INLET PIPE FROM THE WELLS TO THE STORAGE TANKS.	0	10	Ν	THE STORAGE TANKS HAVE A COMMON INLET/OUTLET PIPE FROM THE WELLS.	50,000	48	165 23	Fresno	ш	1998
3870 1000058	1000058-004	MUSICK CREEK TRACT ASSOCIATION		Construct 80,000 gallon storage tank.	0	10	N	Inadequate water storage facilities.	90,000	48	165 23	Fresno	III	2004
3871 1000058	1000058-002	MUSICK CREEK TRACT ASSOCIATION		CONSRUCT A 80,000 GALLON STORAGE TANK.	0	10	Ν	ADDITIONAL STORAGE TO IMPROVE THE EXISTING VOLUME PROVIDED BY THE THREE STORAGE TANKS.	60,000	48	165 23	Fresno	Ш	1998
3872 3600756	3600756-002	Oak Glen Chstn Conf Centr	Oak Glen Christian Conference Center Fire Suppression Upgrade	We will install a complete 6" fire line on our 46 acre mountain situated conference center. This will include fire hydrants, pumps, generators, piping and engineering required to construct an adquate system.	0	10	Ν	We are a conference center serving over three thousand inter city individuals anually. Our water system was installed over fifty years ago and as you may imagine our fire suppression system is non existant. We need to install a complete fire suppression system for our three hundred bed facility. With the recent fires in our area a fire suppression system is imperative. This will include a complete domestic water system upgrade for our antiquated system.	2,500,000	1	180 13	San Bernardino	V	2009
3873 3600756	3600756-001	Oak Glen Chstn Conf Centr	Oak Glen Christian Conference Center Tank Restoration	We will replace the steel lid with new and repaired sections and epoxy the inside and outside of the steel reservoir including the floor with health department recommended coatings. We will also provide proper drainage around the exterior of the tank. This will require the removal and reinstalling of security fencing	0	10	Ν	Our 216,000 gallon tank reservoir needs repairs to the steel lid and repainting inside and out. This tank is fifty years old and because we are a not for profit entity funds for these repairs are not available in house. We serve over three thousand inter city individuals in our conference center anually with meals, shower and bath facilities, drinking water and recreation facilities including a swimming pool.	55,000	1	180 13	San Bernardino	V	2009
3874 0900112	0900112-001	CANDLELIGHT VILLAGE WATER SYST	Source and Storage Capacity Expansion Fire Suppresion and Lot Metering	This project will include drilling for at least one more well, the installation of two 15,000 gal storage tanks, the laying of about 4000 feet of water line. Installation of fire hydrants to areas not covered by hydrants now, and installation of dry hydrants into the reservoirs in the park, and the installation of 45 meters on each space. The cost of installing the pipe will be a little higher than normal as street grading would have made this less expensive. Since not all street grading has been completed, it will cost about\$50,000 more than if all grading had been completed. This project will also allow the present staff of 4 to stay employed during the installation. I would estimate this project at approximately 6 months to 1 year.	o ,	5	С	This system is for a mobilehome park. Part of the park is for mature adults only. The old section of the park was built in the 1960's and has no fire hydrants in it. There is also no metering of the old park and the supply piping will need to be modified to accept meters. The new section is already set up to accept metering with a minimum of modification. This project was originally intended to be funded by the construction of new areas in the Mobilehome Park. Since all bank financing has stopped for any kind of construction funding, we will have to fund the improvements to the water facilities from this source. This is a dry area and we are trying to design everything for low water usage and individual metering, with adequate back up for dry years. We are in a rural area with no public water system near us, so we need to be self sufficient.	300,000	20	35 09	El Dorado	1	2009

3875 4900893	4900893-001	West Water Company (PUC)		Storage tank with high service pumps and water mains, meters	0	5	с	System consists of 63 foot deep well with 2,500 gallons of storage. System has no disinfection and experiences low pressures under peak demands.	750,000	16	50 18	Sonoma	II	2004
3876 0707501	0707501-002	ANGLER S RANCH #3	Installation of usage meters and pump replacement	Meter installed at the pump house to monitor total water pumped.Meters installed at each residence to monitor individual property owner use.Submersible pump installed in place of surface pump to eliminate cavitation problem due to dropping water table.	0	5	с	Installation of water meters will encourage water conservation as we would change our billing from a flat rate to charging by volume.Having a main meter, and a meter at each residence will allow us to find and repair any leaks in the water main. Property owners will be encouraged to find leaks on their properties if we start charging for water volume used.Submersible pump will eliminate water volume problem caused by water table dropping below 20 feet.	80,000	30	60 04	Contra Costa	II	2009
3877 4200822	4200822-002	SANTA RITA WATER CO		install individual user water meters	0	5	С	No individual user meters to monitor consumption, having same would promote water conservation	20,000	20	66 06	Santa Barbara	IV	1999
3878 2701040	2701040-002	MCCOY RD WS #05		Install storage tanks	0	5	с	Water system has no storage. Needs 50,000 gallons storage.	80,000	24	72 05	Monterey	Ш	2000
3879 1500540	1500540-001	PINON HILL WATER COMPANY		DRILL NEW WELL. OTHER - DESIGN AND CONSTRUCTION	0	5	С	WATER QUALITY PROBLEMS - NONE OVER THE MCL	75,000	38	75 19	Kern	Ш	1998
3880 1500447	1500447-002	SIERRA BREEZE MUTUAL WATER COMPAN	Ŷ	procure and instal new 20,000-gallon tank and flow meters on the wells	0	5	С	30-year old bolted steel storage tank requires replacement; flow meters needed to ensure 50/50 blend of two system wells	30,000	73	144 19	Kern	Ш	2004
3881 4900611	4900611-001	Rains Creek Water District		Install remote telemetry unit to monitor tank levels and chlorine conc.	0	5	С	Need remote telemetry unit to monitor tank levels and chlorine conc.	50,000	64	150 18	Sonoma	II	1998
3882 4400599	4400599-001	SUNSET BEACH MUTUAL WATER CO		Construct pipeline to City of Watsonville water supply.	0	5	С	System has problem with salt water intrusion.	510,000	65	150 05	Santa Cruz	II	1998
3883 4400660	4400660-001	RANCHO SAN ANDREAS		Purchase and install new well pump and motor in existing well	0	5	С	Well pump failed and needs to be replaced	10,000	50	200 05	Santa Cruz	П	1999
3884 4200560	4200560-004	CA CITIES WTR SISQUOC #1	Sisquoc - Main Replacements	Replacing these aging water mains in this very small system will solve the issues of high leak numbers, unacceptable water loss, low pressure to our customers, and insufficient fire flows.	0	5	с	Aging water mains in this very small system lead to a high number of leaks, unacceptable water loss, low pressure to our customers, and insufficient fire flows.	575,000	68	200 06	Santa Barbara	IV	2009
3885 5601117	5601117-008	SENIOR CANYON MUTUAL WATER CO		Purchase this privately owned parcel.	0	5	С	Needs to accuire the privately owned parcel to protect watershed.	120,000	240	450 06	Ventura	IV	1998
3886 5601117	5601117-004	SENIOR CANYON MUTUAL WATER CO		Replace ancors, cable and pipeline.	0	5	С	Needs to upgrade distribution pipelines.	199,836	240	450 06	Ventura	IV	1998
3887 5601117	5601117-003	SENIOR CANYON MUTUAL WATER CO		Renovate horizontal well	0	5	С	Improvements needed in horizontal well.	46,000	240	450 06	Ventura	IV	1998
3888 5601117	5601117-002	SENIOR CANYON MUTUAL WATER CO		Add a reservoir	0	5	С	Needs additional storage capacity	142,393	240	450 06	Ventura	IV	1998
3889 4000568	4000568-008	SAN SIMEON CSD	Well field	This project involves replacing outdated and unreliable	0	5	С	This project is intended to address reliability issues that	110,805	206	499 06	San Luis Obispo	IV	2009
			SCADA/Telemetry Repair	telemetry equipment associated with the District water				have occurred due to age and reliability of SCADA and						
				supply system. This includes wellhead control and				telemetry facilities. Equipment failures, loss of						
				status monitoring, emergency alarms, groundwater				communication, antiquated equipment and						
				level reporting, reservoir level reporting, and				unsupported proprietary equipment are main concerns.						
				emergency alarm reporting to District staff.				Recent failures have caused District reservoir to run dry, leaving the community without water for sanitary needs						

or fire protection.

3890 2800521	2800521-004	CIRCLE WATER DISTRICT	Circle Oaks Water Source Augmentation	Drill a test well in a location determined by geological survey. Drill production well, seal well to 50' below the surface. Provide motor and pump to allow 100 GPM to be supplied to filter plant, provide pump control equipment to allow automatic pump control from the plant based on demand, and provide buried piping to the treatment plant. This project has already been engineered by Brelje & Race, Consulting Civil Engineers, and is estimated at \$207000.	0	5	c	Circle Oaks water is provided by a single 150 foot deep well and springs. The well is capable of 90 GPM and the springs 28 GPM. The spring source has been interrupted after past earthquakes although this has resolved in 1-2 weeks. If the springs are interrupted, the well can produce enough water to adequately supply the District with 189 homes built out of 330 lots. If any event, seismic or otherwise, would interrupt the single well source, Circle Oaks would have insufficient water for basic customer needs. In addition, if lot owners were to build on all the remaining vacant lots, the single well would be insufficient to reliably supply adequate water for the District.Circle Oaks is in urgent need of a second well capable of supplying 100 GPM to provide a reliable supply of water for customers mot recover faster in the event of heavy customer use in hot weather and after depletion after a fire.	207,000	190	500 03	Napa	II	2009
3891 4910020	4910020-003	Sonoma County Water Agency		Install early warning systems in three locations to detect contamination before water is delivered to Agency customers	0	5	с	Pollution threats to raw water quality from watershed sources.	1,615,000	136	500 18	Sonoma	II	1998
3892 5700797	5700797-001	MONROE/LEINBERGER CENTER	Yolo County: Monroe well Upgrade	Agency Costomers. We intend to do the follwing:1) Redo all piping so it comply's with city needs2) Add a new PGE transformer and meter so the well is off of Monroes Elerctrical system3) Generator for Power loss. 4) Upgrade all Controls for well. Currently it is a hard start would like to change to soft start.5) Well pump Modifications as needed for optimal efficiency at new operating pressure range.6) 2-way flow measurement meter suitable for secure continuous monitoring7) Specialty valves i.e. backflow prevention, pressure sustaining, Etc.8) Security and access improvement, so city can enter Well area. By doing this we hope to improve the cities system and will provide our detention center with other Wells, making the water service to our inmates a more reliable water system.	o	5	c	Yolo County (County) and the City of Woodland (City) are interested in interconnecting water systems between the City and the County's Monroe Detention Center. The purpose of the interconnection is to improve the overall reliability of both water systems through regionalization. To improve each water systems system components and operating parameters such as the County's existing well's constuction features, the well pump's sizing and performance characteristics, discharge piping configuration, storage capacity, type and location of valves, and electrical controls are currently being evaluated. Water quality data for both water systems is also being evaluated to determine an optimal blending plan. Interconnection capital improvement items will include:1) Specialty valves i.e. backflow prevention, pressure sustaining, etc.2) 2-way flow measurement meter suitable for secure continuous monitoring3) Pipeline installation and interconnection fittings/valves4) Well pump modifications as needed for optimal efficiency at new operating pressure range5) Electrical control and monitoring improvements, including SCADA equipment compatible with city SCADA system6) Security and access improvements7) PGE service meter and transformer8) Generator for back up power for wellThe well Has no outstanding violations	475,000	4	500 09	Yolo	I	2009
3893 1900803	1900803-007	El Dorado Mutual Water Co.	LA County Intertie With El Dorado	Basically this would be a connection to 4 other water companies. The connection to LA County Water would require a vault on 10th street W., and would be a one way connection - we would buy water from them in case of an emergency. The other 3 Mutuals (Westside, Shadow Acres, White Fence Farms) would be a 2 way connection, and would benefit us all in case one of us has an emergency. A total of 4 vaults including engineering, valves and meters.	0	5	C	We have no guaranteed emergency backup and only one well. AVEK is our only backup, and although they have always helped us out, the written agreement is that they can shut down our connection at any time. This written agreement is also true with the 3 Mutuals that border us.	260,000	223	648 15	Los Angeles	IV	2009

3894 1900803	1900803-006	El Dorado Mutual Water Co.	2 Vertical Pressure Pumps With Variable Frequency Drive	Two new vertical pumps and a variable frequency drive with an electrical system upgrade (including wiring, panels, sensors etc.) would increase efficiency, reduce cost, provide increase flow to other agencies in case of emergency, and provide a consistant regulated pressure to customers.	O e	5	с	Our existing 2 Pressure pumps are old and inefficient. They cycle using an old mercury based relay pressure sensor. If we were to ever intertie with our 3 nearby mutual water companiesand need to supply them with emergency water, the existing pumps could not keep up. The relay method used now wastes electricity with the startup surge and the water hammer is hard on the system pipes connected to the pumps.	100,000	223	648 15	Los Angeles	IV	2009
3895 1900803	1900803-009	El Dorado Mutual Water Co.	Security System - El Dorado Water Co. Yard	For a security system we would install an infrared video camera system. The video would be stored on hard drive at the site, internet accessible, and dial maintenance cell phone if suspicious movement was detected. A seperate system that would monitor the pressure tank, holding tank, motors, chlorinator and electrical system would also alert maintenance.	0	5	с	Our water yard faces a busy 5 lane road - it has a lot of visibility. The site is unmanned both day and night.	60,000	223	648 15	Los Angeles	IV	2009
3896 2910007	2910007-002	Nevada ID - Cascade Shores		Replace the redwood tank with a welded steel tank.	0	5	С	Degradation of treated water in storage due to dilapidated redwood tank.	95,000	396	978 21	Nevada	I	1998
3897 2910007	2910007-003	Nevada ID - Cascade Shores		Replace the redwood tank with a welded steel tank.	0	5	С	Degradation of treated water in storage due to dilanidated redwood tank	110,000	396	978 21	Nevada	I	1998
3898 3910014	3910014-001	San Joaquin County-Raymus Village		DRILL NEW WELL. OTHER = DESIGN AND	0	5	С	SYSTEM COULD USE ANOTHER WELL.	450,000	329	1,086 10	San Joaquin	ш	1998
3899 4210021	4210021-001	Golden State Water Company - Tanglewoo	d Tanglewood - Reservoir and Booster Station	Construct new 0.36 MG storage tank, new booster station with standby power, and transmission pipelines from well to tank.	ο	5	с	This small system is currently supplied by two wells, one of which is not useable due to very high nitrate and well construction issues. This well is scheduled to be destroyed, leaving essentially one well and a purchased water connection. The purchased water is both expensive and unreliable in drought years. There is currently no storage capacity in this system, so no advantage can be made of off peak pumping for reduced energy costs, and there is no storage available for fire flow should the need arise.	2,500,000	456	1,498 06	Santa Barbara	IV	2009
3900 4210021	4210021-002	Golden State Water Company - Tanglewoor	d Tanglewood - Tanglewood Well #3	A new, deep well needs to be constructed that will draw water from an aquifer uncontaminated by nitrates, and that will provide a more reliable and less expensive source of water for our customers.	v O	5	С	This small system is currently supplied by two wells, one of which is not useable due to very high nitrate and well construction issues. This well is scheduled to be destroyed, leaving essentially one well and a purchased water connection. The purchased water is both expensive and unreliable in drought years.	2,000,000	456	1,498 06	Santa Barbara	IV	2009
3901 3310030	3310030-001	Pine Cove Water District	PCWD Test Well Drilling Project	Test wells will be drilled to find sufficient water sources for use in the future or in times of severe drought. We already have C.E.Q.A. approval for 12 test holes to be drilled. Drilling new test wells will ensure us of a sufficient water supply in times of drought as well as for future use. Since we have no access to an outside water source, we need to be diligient and forward thinking in order to provide a continual supply of potable water to our customers.We will be drilling 8 inch wells with the hopes of getting 15 GPM from each one. As a small water district in a remote location, we are dependent on ground water to provide water to our customers. When precipitation is lacking, as it has been in recent years, it becomes critical that we continue to drill new wells to find new water sources.		5	С	The Pine Cove Water District is located at an altitude of 6500 ft. in the San Jacinto Mountains. Our only access to water is through wells. With the continuing drought that California is experiencing, this could prove to be a very large problem. Therefore, it is imperative that we drill test wells to be sure that we have water for future use. We are not able to buy water from another agency should we experience a shortage. While we encourage conservation amoung our customers, we feel it is necessary to continually look for new water district, we are limited by our budget. This project would help us identify water sources for the near and distant future.	160,000	1,078	1,500 20	Riverside	v	2009
3902 5610035	5610035-002	RIO MANOR MUTUAL WATER CO		Facility replacements and improvements	0	5	С	Substandard system reliability.	1,000,000	282	1,500 06	Ventura	IV	1998
3903 5610035	5610035-001	RIO MANOR MUTUAL WATER CO		Replace 4 inch diameter hydrants with 6 inch diameter. Install meters to reduce water usage.	0	5	С	Replace fire hydrants, install service meters.	150,000	282	1,500 06	Ventura	IV	1998
3904 1910035	1910035-006	KINNELOA IRRIGATION DIST.		Extend distribution line from Larmona Drive to 1908 N. Kinneloa Canyon	0	5	С	Eliminate specific dead ends in the distribution system on Larmona Drive and Kinneloa Canyon Road.	88,000	580	1,650 07	Los Angeles	IV	1998

3905 1910035	1910035-003	KINNELOA IRRIGATION DIST.		Extend distribution line from 1900 Windover Road to 2090 Villa Heights.	0	5	С	Eliminate specific dead ends in the distribution system on Windover and Villa Heights Road.	79,000	580	1,650 07	Los Angeles	IV	1998
3906 1910035	1910035-005	KINNELOA IRRIGATION DIST.		Extend transmission line from 2090 Villa Heights Road	0	5	С	Eliminate specific dead ends at 2090 Villa Heights Road and Crystal Lane	200,000	580	1,650 07	Los Angeles	IV	1998
3907 3710041	3710041-002	Majestic Pines Community SD	Whispering Pines Reservoir replacement	Project would involve the design, engineering, construction and hooking up of a 350,000 gallon steel reservoir on our existing Whispering Pines Reservoir site. We are hopeful that this can be done without destroying the existing reservoir thereby enabling us to utilize this structure for storage of additional fire suppression water. The old structure could be isolated from the distribution system and only be used for fire fighting purposes. If this turns out to be impossible, the old structure would be destroyed and utilized as a material storage for things like sand and gravel. The nev structure would be built on the eastern portion of the property and plumbed into the distribution system with about 100 feet of 6-8 inch mainline. The existing structure is in need of replacement since it has deteriorated over the years to the point where repairs are difficult and short lived. Though we have never been cited for it's condition due to any water quality or contamination issues, it's replacement was requested by our CDPH inspector in our last two inspections. The potential for water quality problems may exist even though we take precautions to avoid these sort of issues.	O e w	5	C	Existing reservoir was constructed in the 1940's or 1950's. Concrete construction with hypolon liner. This structure began to leak slightly about 18 months ago and we have looked into re-lining it. Based on the age of this structure and its current condition, it seemed more prudent to replace it instead of just repairing the liner. On the past two CDPH inspections, this problem has been sited and a request for replacement was made. We have been working with an engineering firm to put together a preliminary engineering report for the project but the cost for this would deplete most all of our reserve funds. The cost for a liner replacement would be almost the same amount. At this point, replacement of the liner appears to be the most logical course of action to correct the leakage problem. This does nothing about the condition of the structure which is in very bad repair. While we have never been cited for the condition of our reservoir, there is the potential for problems in the future. It would be impossible for us to maintain adequate service to a large portion of our customers indefinitely should this reservoir have some sort of failure making it unusable. Financial reserves were significantly depleted during the construction of our new well and treatment facility completed in 2007. This project was vital to our system since our supply was diminishing due to existing wells being over used. This well and treatment plant project was completed	500,000	671	1,964 14	San Diego	v	2009
3908 3710041	3710041-003	Majestic Pines Community SD	Kentwood Treatment Pla	nt This project would involve the planning, design and construction of a proper evaporation pond at our Kentwood Treatment plant replacing the existing unlined structure.Project would consist of the excavation of the old pond and properly disposing of materials saturated with oxidized iron material. The next phase would be the re-compaction of soils disturbed during the previous phase and the shaping of a new evaporation pond. Steel reinforcement rods (rebar) would then be installed in a manner to make the structure solid and secure. Concrete would then be "sprayed" (shotcrete) on the site thick enough to cover the rebar and provide enough coverage to enable the use of equipment in the pond whenever the need arise: in the future.A major cost in the construction of this project will be the disposal of materials removed from the site. Since this is something we have had to build twice in the past ten years, the engineering costs for this should not be extreme.	O f e s	5	C	Our existing backwash evaporation pond at the Kentwood Treatment facility is not lined. This means that the oxidized iron filtered out of our well water at this site could possibly seep back into the ground. Our other two newer treatment facilities have concrete lined evaporation ponds to stop this from happening. Our Kentwood facility was constructed in the 1960's and has been updated over time to make it a more effective filtration system. While it is an older system, it functions quite well and with the upgrades made over time, we have been able to remain in compliance with safe drinking water requirements. In our last two or three inspections made by the CDPH, the issue of the lack of lining in this backwash evaporation pond was brought up and a request for correction was made. The condition of this facility has not resulted in any violations in drinking water standards, but it is an issue that needs to be corrected as per CDPH requirements.	150,000	671	1,964 14	San Diego	v	2009
3909 4110020	4110020-003	Palo Alto Park Mutual Water Company	Solar Power for Water System	This project will consist of installation of 144 solar panels, inverters and storage facilities at the yard of the existing facility in East Palo Alto, California.	O e	5	С	The water system is entirely dependent on PG&E electrical power. We consume an enormous amount of engery. This secondary source would be helpful, save money and energy thus ensuring a more efficient and economically operating water company.	252,564	652	2,500 17	San Mateo	II	2009

3910 4110020	4110020-006	Palo Alto Park Mutual Water Company	Sand Separator	Sand Separators for Well #5 and Well #7Site Plan of FacilitiesPalo Alto Park Mutual Water CompanyThe work will include installation of 500 gpm centrifugal- action sand separators on the discharge piping of Well #5 and Well #7 for Palo Alto Park Mutual Water Company.The reason these sand separators are needed is that both wells produce sand that clogs the existing booster pumps, storage tank and distribution pipelines. The sand wears out the pipe and pump impellersThe estimated cost is shown below:Sand Separators for Wel #5 and Well #7 Item # Description Quantity Unit Unit Cost Total Cost1 Site Grading 11s. \$ 5,000.00 \$ 5,000.00 2 Well Head Piping 2 ea. \$ 10,000.00 \$ 20,000.00 3 Sand Separators 2 ea. \$ 10,000.00 \$ 20,000.00 4 Disinfection 1 ea. \$ 1,000.00 \$ 1,000.00 5 \$ 0,000.00 Subtotal \$ 46,000.00 Construction Contingencies 15.00% \$ 6,900.00 Engineering 20.00% \$ 9,200.00 Total \$ 62,100.00	0 1	5	с	Palo Alto Park Mutual Water Company Sand Separators for Well #5 and Well #7The work will include installation of 500 gpm centrifugal-action sand separators on the discharge piping of Well #5 and Well #7 for Palo Alto Park Mutual Water Company.The reason these sand separators are needed is that both wells produce sand that clogs the existing booster pumps, storage tank and distribution pipelines. The sand wears out the pipe and pump impellers	62,100	652	2,500 17	San Mateo	Π	2009
3911 3910017	3910017-001	San Joaquin County-Mokelumne Acres		DRILL NEW WELLS TO REPLACE CONTAMINATED WELLS	S. O	5	с	THREE OF THE SYSTEM'S WELLS HAVE DBCP GREATER	1,500,000	1,103	3,640 10	San Joaquin	Ш	1998
3912 0310003	0310003-009	AWA Sutter Creek	Small Diameter Pipeline Ditch Conveyance Conversion Project	OTHER = DESIGN AND CONSTRUCTION The project would pipe the existing 23 mile canal to continue unfiltered-raw water service intended for agricultural uses. Piping the canal would continue to sustain the current service by maintaining pressures and reliability. Additionally, piping the canal would improve water quality and reliability to all customers. The water would be protected from accidental or deliberate contamination as well as fecal or E.coli from individual septic systems, livestock or wildlife and blow- outs between Lake Tabeaud and the Tanner Water Treatment Plant. This would be an enhancement to the protection of the water service over the open ditch system for those residences which depend on the canal as there only water source. The project would combine both a gravity and pumped piping system which would be joined near the Harmon Siphon several miles east of the Tanner Water Treatment Plant. The project would also consider preliminary planning and design together with estimated costs to provide treated water to a high concentration of residential homes in the mid section. This area is about a 10 mile segment. The remainder area of service on both sides is agricultural uses. The Agency further helieves that a weighted review of	O - - -	5	c	The Amador Canal conveyance system is a 23 mile open ditch system from Lake Tabeaud to the Tanner Water Treatment Plant (WTP) in Sutter Creek. The source is the Mokelumne River via Lake Tabeaud. The system was originally built in the 1850's to convey raw water to goldrush era miners in Amador County. Currently the Amador Canal serves 127 customers unfiltered-raw water. This ditch system is monitored, controlled and maintained by Agency staff walking the ditch in all weather conditions with no connection to the Agency's telemetry systems. Maintaining the quality, reliability including sufficient pressure to provide service to these customers is a continual effort. The existing low flows and warm weather induce additional issues with debris, algae, color and odor. Additionally, there is continual opportunity for accidental or deliberate contamination as well as fecal or E.coli from individual septic systems, livestock or wildlife. Added to these issues are blow- outs, un-planned and planned outages. All of which create high maintenance and operation costs which burden is passed on to existing low income users. The canal system is exposed to health risks associated with the use of un-filtered-raw water in homes for the 127 customers which 61 is the only water source available. These 61 customers are ut of comminance	4,700,000	1,654	5,458 10	Amador	II	2007
3913 3110026	3110026-002	Nevada ID - North Auburn		the 2000 census area, qualifies the service area as a low Install temporary shoring natch cracks and holes	v O	5	c	with the 1996 Amendments to the Safe Drinking Water Potential for contamination of treated water and	560.000	2 724	6 320 21	Placer	I	1998
				relocate system pumps, and replace roof. Involves design and construction.		-	_	prolonge water outages due to structural failure of reinforced concrete roof of Clearwell tank.		,	-,			
3914 3110026	3110026-003	Nevada ID - North Auburn		Add 3.0 MG storage tank. Involves design and construction.	0	5	С	Inadequate system storage for diurnal demands and emergency reserves.	1,700,000	2,724	6,320 21	Placer	I	1998
3915 4010014	4010014-005	CAMBRIA COMM SERVICES DIST		Provide alternate temporary routing of the pipeline during construction and replacement of at least 300 ft. of pipeline.	0	5	С	Needs to upgrade distribution mains for earthquake safety.	150,000	3,993	6,500 06	San Luis Obispo	IV	1998

3916 4010014	4010014-009	CAMBRIA COMM SERVICES DIST	Water System Supervisory Control and Data Aquisition Installation	In the use of overhead land-lines for remote monitoring and alarms has proven to be unreliable in Cambria duu to falling trees during storms. Such failures can come at the most critical times, which would be particularly true during a major fire. Past failures of the land-line: have also resulted in tanks not filling properly and low distribution system pressures. This project will install pre-purchased SCADA radios, while also installing and providing ancillary sensors, wiring, conduits, and conti cabinets. The SCADA system will be installed in accordance with the District's SCADA master plan, which was designed to monitor pumping stations, emergency generators, well fields, and storage tanks.	o e s rol	5	с	The water master plan adopted by the Cambria Community Services District Board of Directors on September 25th, 2008 included a recommendation to install wireless Supervisory Control and Data Acquisition (SCADA) equipment on its water distribution system. The new SCADA system will replace an existing obsolete system, which only monitors a small portion of the overall warer system. Because the existing SCADA system relies upon overhead wires, it has proven to be unreliable due to falling trees that often occur in the area during storms. This existing system would similarly fail during a wildfire event. Past communication failures of the existing system have resulted in low distribution system pressures, as well as tanks not filling properly.	253,000	3,993	6,500 06	San Luis Obispo	IV	2009
3917 4010014	4010014-004	CAMBRIA COMM SERVICES DIST		Seawater desalination plant with beach wells	0	5	с	Needs to improve source capacity for maximum demand conditions.	10,000,000	3,993	6,500 06	San Luis Obispo	IV	1998
3918 3610062	3610062-003	RUNNING SPRINGS WATER DISTRICT		Drill new well	0	5	С	Limited source capacity requiring the purchase of outside water	125,000	3,160	6,713 13	San Bernardino	v	1998
3919 3610062	3610062-011	RUNNING SPRINGS WATER DISTRICT		Construct 200k gallon reservoir	0	5	с	Limited storage capacity	160,000	3,160	6,713 13	San Bernardino	v	1998
3920 2610001	2610001-003	MAMMOTH CWD	Mammaoth Community Water District: Wells #15 and #20 Rehabilitation	Mammoth Community Water District proposes to chemically treat and physically remove encrustations i the well casings of supply wells #15 and #20. Rehabilitation of wells #15 and #20 in the above mann would improve both production and reliability of both wells. This project is "shovel-ready" in May of 2009.	O in ner	5	С	Due to aging infrastructure, Mammoth Community Water District (MCWD) water supply wells #15 and #20 are exhibiting a declining efficiency and loss of production capacity. Production losses are impacting the ability of MCWD to meet current water supply demands. Wells #15 and #20 supply more than 25% of MCWD water demand. Due to continuing drought conditions, MCWD surface water supply is expected to be restricted. Loss of well #15 and/or #20 well capacity would cause severe short term water supply shortage and would result in non-compliance with Department of Public Health requirements to maintain reserve capacities.	200,000	3,666	8,214 13	Mono	V	2009
3921 2610001	2610001-008	MAMMOTH CWD	MCWD: Filter Replacement at Lake Mary Treatment Plant	Mammoth Community Water District proposes to y replace the existing filter media with Best Available Technology filter media consisting of a graded gravel base layer, two graded sand layers and an anthrocite coal layer. This project would ensure production and reliability of the Lake Mary Water Treatment Plant while reducing energy consumption.	O f	5	С	The Mammoth Community Water District (MCWD) Lake Mary Treatment Plant is exhibiting more frequent and longer backwashes through aging filters. The reduction in effectiveness of the filter media results in higher energy consumption for water quality maintenance in order to comply with State Drinking Water regulations for reduction in water turbidity. The Lake Mary Treatment Plant supplies at least 40% of MCWD water demand. Loss of Lake Mary Treatment filtration capacity would cause a severe short term water supply shortage and would result in non-compliance with Department of Public Health requirements to maintain reserve capacities.	100,000	3,666	8,214 13	Mono	V	2009

3922 2610001	2610001-010	MAMMOTH CWD	MCWD: Groundwater Treament Plants Arsenic Removal	To achieve compliance with the arsenic MCL rule, MCWD has retained the services of HDR engineering to evaluate the best available treatment option for arsenic removal. To achieve compliance with the Lead and Copper MCL rule, MCWD proposes to add aeration systems to adjust the ph of the plant effluents. The Department of Public Health has initially approved this treatment alternative. To achieve the most cost-effective and timely implementation, MCWD will incorporate both the ph control and the arsenic removal improvements into a single design and construction contract.	0	5	C	The Mammoth Community Water District (MCWD) Groundwater Treatment Plants #1 and #2 are experiencing treatment failures resulting in arsenic levels as high as 13 ppb. The California Department of Public Health (CDPH) requires arsenic maximum contaminant levels (MCL) to be below 10 ppb at all times. Per CDPH requirements, MCWD has announced Teir II public notification of the exceedence of the arsenic MCL. Additionally, MCWD customers have seen a continued exceedence of the Safe Drinking Water Act (SDWA) Lead and Copper Rule. CDPH has mandated that MCWD implemant the results and recomendations of a recent Corrosion Control Study to achieve SDWA compliance for the Lead and Copper Rule. MCWD has already given Teir II public notification to District customers regarding non-compliance with the Lead and Copper Rule.	5,600,000	3,666	8,214 13	Mono	v	2009
3923 2610001	2610001-005	MAMMOTH CWD	Mammoth Community Water District: Lake Mary Treatment Plant Filter Replacement	Mammoth Community Water District proposes to replace the existing filter media with Best Available Technology filter media consisting of a graded gravel base layer, two graded sand layers and an anthrocite coal layer. This project would ensure production and reliability of the Lake Mary Water Treatment Plant while reducing energy consumption. This project is "shovel-ready" in summer of 2009.	o	5	C	The Mammoth Community Water District (MCWD) Lake Mary Water Treatment Plant is exhibiting more frequent and longer backwashes through aging filters. The reduction in effectiveness of the filter media results in higher energy consumption for water quality maintenance in order to comply with Safe Drinking Water regulations for reduction in water turbidity. The Lake Mary Treatment Plant supplies at least 40% of MCWD water demand. Loss of Lake Mary Treatment filtration capacity would cause a severe short term water supply shortage and would result in non- compliance with Department of Public Health requirements to maintain reserve capacities.	100,000	3,666	8,214 13	Mono	v	2009
3924 2610001	2610001-006	MAMMOTH CWD	MCWD Well Rehabilitation: Wells #1, #15 and #20	To improve production and reliability of the MCWD supply wells, #15 and #20 require chemical treatment and physical removal of encrustations in the well casings. Supply well #1 requires a new variable frequency drive motor.	0	5	C	Due to aging infrastructure, Mammoth Community Water District (MCWD) water supply wells #1, #15 and #20 are exhibiting a declining efficiency and loss of production capacity. Production losses are impacting the ability of MCWD to meet current water supply demands. The three wells supply more than 25% of MCWD water demand. Loss of well #1, #15 and/or #20 would cause severe short term water supply shortage and result in non-compliance with Department of Health requirements to maintain reserve capacities.	300,000	3,666	8,214 13	Mono	v	2009

3925 0310012	0310012-014	AWA Buckhorn Plant	Buckhorn WTP CIP Process Improvements	s Design and construct plant modifications at the Buckhorn water treatment plant including a new CIP tank. New piping, valving and plant controls would be installed to support the tank and system.	0	5	C	The Buckhorn water treatment plant uses membrane filtration. Membranes are cleaned with a clean-in-place (CIP) process. The Buckhorn water treatment plant is equipped with one CIP tank. The CIP tank is used to mix batches of caustic and acid solutions which are circulated through the membranes. The membrane manufacturer recommends back-to-back caustic and acid washes on each rack of membranes. The only way that this can be done with one CIP tank is to waste the caustic solution, which is reusable on other racks, prior to mixing a batch of acid solution. In order to reuse solution, the plant membranes are cleaned sequentially with the caustic solution, and then with the acid solution. This method requires twice as many rack shutdowns and doesn't allow for back-to-back cleaning. The second tank was not installed because it was believed that CIPs would only have to be done every 6 months. Currently CIPs are completed every 2 -3 months. If an activated carbon system is installed at the plant to control disinfection by-products, CIPs may have to be completed even more frequently. This new project will help the plant improve the membrane cleaning process and support the control of disinfection by-products. The improvements will reduce by 50% the number of shutdowns and start-ups needed to operate the Buckhorn Water Treatment Plant. This improvement allows for compliance with Section	500,000	2,558	8,508 10	Amador	III	2009
3926 0310012	0310012-011	AWA Buckhorn Plant	CAWP Distribution System Improvements	A new 12" distribution main (approximately 2.6 miles in total length) is proposed from an existing distribution system storage tank that is located higher in elevation that the existing tank that feeds this area (approximately 340 feet higher). A significant portion of the pipeline would be installed within existing right-of- way (approximately 9,800 linear feet). A smaller portion of the pipeline (4,100 linear feet) would likely be installed along parcel lines of lands in private ownership. Easement discussions with private land owners have not begun, but easements are not expected to be difficult to obtain. In order to keep system static pressures within a reasonable range of 60 psi to 80 psi, several pressure reducing stations would be installed. The Agency will obtain the necessary encroachment permits with Amador County Public Works and all trenches within the County right-of-way will be reconstructed to current standards. Above- ground system markers will be installed every 100 feet for the portion of the main installed on lands in private ownership. However, before the design plans are started, a significant number of fire flow tests will be conducted and a system model will be created, to verif and support the improvements needed for this project.This project will provide significantly increased static and residual system pressures in compliance with Section 64602 of Title 22, as well as flushing velocities i	n O of o y	5	C	Several subdivisions (Meadow Pines Estates, Foster Ranch Estates, and Vanver Acres) and other unnamed subdivisions within a localized portion of the Central Amador Water Project ('CAWP') service area (formerly Pioneer CSD) experience significantly low distribution system water pressures, with static pressures ranging from 25 to 39 pounds per square inch ('psi'). During simulated fire flow testing, the residual pressures drop to between 9 to 25 psi. Fire flows range from 155 to 289 gallons per minute. These customer service pressures will drop below the Section 64602 of Title 22 required minimum distribution system of 20 psi during any fire flow demand, and distribution system required minimum pipeline flushing velocities of 2.5 feet per second cannot be provided without sucking air into the system and contaminating the drinking water violating Section 64575 of Title 22. Also, the Fire Code and Fire Department requirements of 1,500 gpm of fire flow protection is not being provided to the community as there is effectively minimal to no fire flow available in the summer. The Agency's ability to meet demands in an emergency, including drought and fire situations would be significantly improved with the implementation of this project. There is an important public health problem associated with water outages including subjecting the distribution system to backflow and contamination that would be significantly reduced	3,810,000	2,558	8,508 10	Amador	Π	2009
3927 1910005	1910005-002	LOS ANGELES CO WW DIST 40 Reg 38 Lake	L marquis hillcrest repipe	Remove old galvinized pipe and improve the standard/quality of drinking water. Improve the water pressure. The mobile home park has been in existence	0	5	С	Remove old galvinized pipe and improve the standard/quality of drinking water. Improve the water pressure. The mobile home park has been in existence	150,000	3,526	12,609 16	Los Angeles	IV	2009
3928 2910004	2910004-009	Nevada ID - E. George, Banner Mountain		for over 50 years. Replace with standard water main materials. Involves design and construction.	0	5	С	for over 50 years. Inadequate system reliability due to routine failure of substandard pipeline materials.	440,000	5,238	12,939 21	Nevada	I	1998

3929 3410018	3410018-013	Rio Linda/Elverta Community Water Dist	RLECWD – Hydro- pneumatic Tanks Replacement Project	The Rio Linda/Elverta Hydro-pneumatic Tanks Replacement Project consists of replacing the existing tanks with new ASME code certified tanks equipped with Pressure Safety Valves and automatic air-pad systems. Final plans and specifications for this project will be completed by June 2009.	0	5	c	The Rio Linda/Elverta Community Water District (District) maintains nine hydro-pneumatic tanks throughout their system to maintain pressures. A recent inspection and stress analysis by the former General Manager has indicated that five of the tanks are not ASME certified Pressure vessels and are not protected by Pressure Safety valves. Additionally, the tanks are beyond their useful life and are corroded internally. It has been recommended to replace the existing hydro-pneumatic tanks with new ASME code certified tanks at an estimated cost of 5500,000. The District has completed the required 218 process and has approved an ordinance (No. 2009-02) which provides for a surcharge fee to pay for the proposed construction loans.	500,000	4,483	13,386 09	Sacramento	I	2009
3930 3410704	3410704-016	SCWA Mather-Sunrise	Mather Housing Filter Upgrade	The proposed project will replace the filter underdrain laterals and install new greensand media.	0	5	C	The greensand media filter at the existing "Mather Housing" manganese removal treatment plant has deteriorated and need to be replaced. Presently, the filter underdrain system has plastic laterals that are broken, and thereby allowing large amounts of filter media to pass to the treated water storage tank. Moreover, the greensand media used for filtration is aged and in need of replacement.	300,000	4,330	15,903 09	Sacramento	I	2009
3931 1910245	1910245-004	SANTA FE SPRINGS - CITY, WATER DEPT.		Treat & improve water quality with a batch treatment facility at well site.	0	5	С	Taste and odor problems from Well 2.	950,000	5,209	17,438 22	Los Angeles	IV	2003
3932 1910245	1910245-001	SANTA FE SPRINGS - CITY, WATER DEPT.		Construct replacement well near spreading grounds. Conduct tracer study to determine travel times of recycled water.	0	5	С	One existing well has collapsed, causing more reliance on imported sources.	1,250,000	5,209	17,438 22	Los Angeles	IV	2000
3933 1910191	1910191-004	NORWALK - CITY, WATER DEPT.	Norwalk Park Well No. 10 and Transmission Main Project	Design and construction of the City's Norwalk Park Wei No. 10 and Transmission Main Project. Its anticipated to provide assurance of water supply reliability, emergency fire suppression to the water distribution system, during and after a major seismic event.	11 O o	5	c	During the past several years, the City has experienced increasing problems with the integrity of its water system infrastructure. Improvements are needed in order to safeguard the quality of the drinking water supply being served to the City's constituents. Inadequate water supply and pressure restrict development in the economically depressed Norwalk Park neighborhood in the center of town. Additionally, both a federally funded study and a County study indicated that the City's ability to provide water would be severely compromised in the event of a major earthquake. Inadequate storage limits the City's fire suppression capability. In order to obtain a State Ioan, the City would have to increase rates over 50%. The City has already passed a rate increase in 2008	2,600,000	5,401	22,000 15	Los Angeles	IV	2009
3934 1910143	1910143-005	SAN FERNANDO-CITY, WATER DEPT.		Recondition well column and casing. Clean well screen and replace pump/motor. Project involves: Design to solve problem and Construction	ns O	5	С	Well 3 is an aging system supply well which requires refurbishing to assure safe, potable water supply.	85,000	5,049	23,564 16	Los Angeles	IV	1998
3935 4910013	4910013-001	Valley of the Moon Water District		Construct additional wells.	0	5	С	Water supply shortages during summer months. This is undocumented. Additional source capacity would be benificial as emergency back-up.	350,000	6,783	23,858 18	Sonoma	II	1998

3936 3710026	3710026-007	Valley Center MWD	Country Club Reservoir - Cover/Liner Replacement	This 10.0 MG Reservoir is the larger of two reservoirs supplying water to this pressure zone. The project consists of the design and construction of a hypalon liner and replacement cover. The project will include removal and disposal of the existing roof structure, along with block walls and interior columns that support the existing roof structure. A hypalon liner will be designed and installed over the floor and side slopes of the reservoir to eliminate the existing leakage. The existing cover will be replaced with a new floating hypalon cover. The project also includes minor modifications to the inlet/outlet structure, installation of mixing equipment and ancillary site improvements, such as valving and remedial pavement.	5	C	Placed into service in 1975, the Country Club Reservoir is a 10 million gallon, in ground, asphaltic cement lined reservoir with a concrete column and steel truss supported corrugated metal cover. The reservoir cover and support structure is experiencing severe corrosion due to the high humidity, chlorine off-gassing and exposed steel. Several truss components have corroded to the point where portions of the supports are missing and have dropped into the water below, causing water quality concerns. The corrugated metal cover has received numerous repairs to eliminate leakage. The structural integrity of the cover is also jeopardized by the corrosion that has occurred. Further, the under drain system is indicating minor leakage, which is a result of the deteriorating asphaltic cement liner.Installation of a new liner and replacement of the cover is needed before this degradation affects the water quality.	2,015,000	9,726	25,572 14	San Diego	V	2009
3937 3710026	3710026-006	Valley Center MWD	Pfau Pump Station Replacement	The Pfau Pump Station Replacement project consists of O replacing the two existing 100 HP Horizontal Centrifugal Pumps with four 50 HP Vertical Multi-Stage Pumps coupled to premium efficient motors. With this replacement pump efficiency increases from less than 50% to just more than 80%. This station's average energy consumption is 600,000 KWH per year for an annual cost of 957,000. With the new pumps, annual energy consumption and costs are expected to be reduced to 375,000 KWH and \$60,000, respectively, while pumping more water. Also included in the replacement is the installation of Supervisory Control and Data Acquisition (SCADA) equipment to monitor and trend real time station efficiency, allowing District operators to make better decisions on operating schedules and pump selection. The pumps and controls were pre-purchased in April 2009, with delivery scheduled for November 2009. Installation will be by District forces, with consultants providing station integration into the District SCADA system.	5	C	The Pfau Pump Station was originally constructed in 1968 with two 100 HP horizontal Centrifugal pumps. The design efficiency of these pumps is less than 50%. The pump station operates with a pressure reducing valve on the discharge line to keep the pumps within the design operating parameters, thus further reducing the overall station efficiency.	250,000	9,726	25,572 14	San Diego	v	2009
3938 1910077	1910077-004	GSWC - FLORENCE/GRAHAM	Perchlorate removal for Converse Well #1	It is proposed to add ionic exchange process to removal O perchlorate. The perchlorate level at this well is barely above the MCL, thus it is expected the ionic exchange process should run longer before the media become exhausted. The well has a pretty good yield at 1000 gpm. The urgency to bring this well back online is apparent. The Florence-Graham System last year lost 3 productive wells out of the 7 wells due to perchlorate and VOC contamination. To treat this well can improve the water shortage for this system	5	с	This well has perchlorate contamination. The detected level before the well was shut down was up to 5.8 ppm. Due to concern of perchlorate MCL violation, the well was placed offline since October of 2008. Very recently, a well profile analysis was performed at this location by BSST Ink, Inc. Perchlorate was detected at various depth with concentration up to 6.2 ppb	1,000,000	9,729	31,340 15	Los Angeles	IV	2009

3939 3410010	3410010-008	CalAm - Suburban	Sacramento "District Wide" Water Conservation Program	The program has two "full service" elements that encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 45,000 residential homes / 90,000 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 2,761 acre feet per year. Element B. A team of specialist will retrofit 15,000 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 920 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 to 24 months and employ 75 to 100 people.	0	5	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 3,721 acre feet per year or 50.0 / 75.0 gallons per day, per person.	27,585,000	9,874	33,314 09	Sacramento	1	2009
3940 3410021	3410021-008	San Juan Water District	Water Main Replacement Projects	Bentley to Folsom Oaks - replace 329 feet of 8 inch mainline and appurtenances with 12 inch mainline.Park Vista - replace 746 feet of 8 inch mainline and appurtenances.	0	5	С	The Park Vista and Bently to Folsom Oaks mainlines are old, leaky, and unreliable. They need to be replaced. The Park Vista line would cause serious soil erosion and environmental damage if it breaks.	400,000	10,240	33,792 09	Sacramento	I	2009
3941 3410021	3410021-009	San Juan Water District	Four inter-tie pipelines from GravityZone to Sierra Zone	The four inter-tie pipelines will total about 4,275 feet in the following manner:Excelsior Road 12" - 1,050 ft.Peerless Avenue 12" - 1,200 ft.Oak Avenue 12" - 1,400 ft.Gravity Zone transmission main connection to Cooperative Transmission Main 30" - 625 ft.They will be constructed of pvc or ductile iron.	0	5	С	With the installation of four 12" to 30"inter-tie pipelines from the Gravity Zone to the Sierra Zone, the Sierra Pump Station can be decommissioned, and the zone will be fed completely by gravity pressure. The electrical energy formerly required to operate the pump station will no longer be required, and will be available for other uses in the community. The lower water pressure to the Sierra Zone will result in meaningful water conservation.	820,000	10,240	33,792 09	Sacramento	I	2009
3942 1910062	1910062-005	LA VERNE, CITY WD	Groundwater Treatment Facility - Pomona Basin	The City proposes to construct a 1,000 gpm ion exchange treatment facility and related piping at its main water operations yard. The treatment system will also require limited piping to provide discharge of wastes from the treatment system. The City proposes to rehabilitate and exsiting concrete line and connect it to the City's existing industrial waste (brine) line. This concrete line is in very close proximity to the proposed treatment facility and the city's existing brine line.	0	5	c	La Verne overlies three groundwater basins, each of which is affected by nitrate and perchlorate contamination. Blending with imported surface water supplies is the current method of treatment, but is limited due to demands. This proposed ion exchange project will enhance the city's ability to produce and treat local groundwater supplies and reduce its dependence on imported surface water supplies. The ion exchange will allo the city to produce more groundwater and production will not be limited by demand, as is currently the case with blending operations.	2,500,000	8,516	34,046 15	Los Angeles	IV	2009
3943 3010035	3010035-001	Golden State WC - Placentia		Study the need to install chloramination facilities.	0	5	с	Potential nitrification hazard.	65,000	11,201	36,374 08	Orange	v	1998

3944 3110004	3110004-003	City of Lincoln	Catta Verdera 30" & 36" Transmission Pipeline and Metering Station	The Catta Verdera 30" & 36" Transmission Pipeline & Metering Station (Project) includes the construction of approximately 10,000 feet of 30-inch transmission pipeline from an existing 30-inch stub-out on a PCWA-owned 42-inch transmission line about 200 feet north of the City's 5 million storage tank, in a northerly directior along the easterly edge of the Catta Verdera development, the westerly edge of the PCWA Whitney Reservoir, following PCWA's Caperton Canal access road to the Metering Station site in the City Park/old City Pond/City Open Space area. Appurtenaces along the 30-inch pipeline include air relief and pipeline drain valves aligned into existing canal spill/drainage ways. The access for service and fire vehicles. Fencing along the EVA will be designed as a 12-foot wide EVA with access for service and fire vehicles. Fencing along the EVA will be required in the Whitney Reservoir area. Construction of a metering station capable of SCADA flow control from 0 – 20 mgd with pressure reduction from a hydraulic grade of about 900 ft to about 600 ft. The design and materials of construction, security, Gity metering station at the City's 5 million gallon tank. Construction of approximately 4,000 feet of 36-inch transmission pipeline from the metering station in a westerly direction through City Open Space to the	0 5f 	5	c	The Catta Verdera 30° & 36° Transmission Pipeline and Metering Station Project (Project) is required primarily to: - Continue to meet City water demands from its wholesale treated surface water supply; - Provide a second pipeline and metering station to provide wholesale deliveries to the City; and - Provide a high pressure gravity supply to the only booster-fed portion of the City's distribution system. In 2006 the City purchased about 8,700 acre-feet of treated surface water based on a wholesale water agreement with the Placer County Water Agency (PCWA). The City's point- of-delivery is through a metering facility to the City's 5 million gallon storage tank. The metering station, per PCWA, has a capacity of about 17 mgd due to limitations in the hydraulic grade available to the two 30- inch pipeline segments feeding the metering facility from northerly and southerly directions. The maximum day delivery to the City in 2006 was 15.2 mgd, and as a result, PCWA notified the City that its demands were approaching the capacity of their delivery system. The PCWA-City agreement identifies the PCWA commitment to meet the City's maximum day demands. Since 2007, the City has coordinated its design team effort with PCWA for a new 30″ transmission line and metering station to increase City deliveries beyond the 17 mgd limit. Downstream of the metering station, a 36- inch pipeline will convey treated water to the iunction	6,000,000	16,238	38,000 02	Placer	I	2009
3945 3610029	3610029-013	MONTE VISTA CWD		Construct new reservoir	0	5	С	11 MG deficient in storage capacity per master plan	4,000,000	11,595	51,014 13	San Bernardino	v	1998
3946 3610029 3947 3610029	3610029-012 3610029-006	MONTE VISTA CWD MONTE VISTA CWD		Construct new booster at Plant 16 Construct pump to waste lines to divert flow to perc basin	0 0	5 5	c c	Low system pressure in Zone 1 No pump to waste lines on several wells	60,000 150,000	11,595 11,595	51,014 13 51,014 13	San Bernardino San Bernardino	v v	1998 1998
3948 5710006	5710006-014	City of Woodland	Contaminanat profilling on well 10.	The project involves dynamic tracey pulse flow survey as well as spinner log flow meter measurement to determine the flow balance required to bring the well into compliance.	0	5	С	This project involve profilling the existing well 10 to devise a strategy aimed at hydraulically manipulating the inflow of water to bring the nitrate concentration into compliance.	500,000	14,065	56,000 09	Yolo	I	2009
3949 3710029	3710029-005	Olivenhain MWD	Design of Alternative Raw Water Pipeline	Olivenhain Municipal Water District is planning on constructing a new raw water pipeline from the San Diego County Water Authority's Second Aqueduct to the David C. McCollom Water Treatment Plant, allowing for continuing raw water supply to the District's treatment plant after introduction of Lake Hodges water into Olivenhain Reservoir. This pipeline would effectively bypass the Olivenhain Reservoir, allowing for continuing local water treatment while forgoing the need for costlier upgrades to the plant itself, and protect water quality water for the District's customers. This project includes all design services for the raw water pipeline. These services include an alignment study; field reconnaissance, data collection, and utility research; surveying, mapping, and right-of- way support; execution of a geotechnical investigation; utility potholing; preparation of a preliminary design report to define the preferred pipeline alignment, define the size of proposed pipeline, perform hydraulic calculations, and establish the basis of design for connection to SDCWA's Pipeline 5 and and use of Olivenhain's Flow Control Facility; completion of final design survey; preparation of a nopinion of probable construction cost; development of a traffic control plan; submittal; provision of technical assistance in order to obtain permits and regulatory	0 g	5	c	Olivenhain Municipal Water District and the San Diego County Water Authority have reached a tentative settlement agreement on water quality issues in regard to Lake Hodges, whereby Lake Hodges water would be introduced into the Olivenhain Reservoir. The District's David C. McCollom Water Treatment Plant, which was designed to treat raw water, is dependent upon Olivenhain Reservoir as a source, and is not capable of treating water contaminated to the level as that found in Lake Hodges. Lake Hodges is a highly impaired body of water. Sampling of Lake Hodges indicates that Lake Hodges water contains 78 contaminants, including minerals such as arsenic, cyanide and lead; organics that include MTBE, vinyl chloride and zylene; and a number of pesticides including aldicarb, aldrin, carbaryl and diazinon. Samples collected from Lake Hodges by the City of San Diego also indicates that water in Lake Hodges waters. These include aluminum, chloride, iron, manganese, and sulfate. Lake Hodges was listed as 303(d) impaired body of water by the US Environmental Protection Agency in 2002 and 2006, and documented sewage spills into Lake Hodges between 2001 and 2006 totaled 44,270 gallons according to the SDCWA's 2008 Watershed Survey.A study completed by CH2M Hill for Olivenhain in September 2006 indicated that it would cost the District a minimum of \$40 million to treat the	212,500	23,109	63,000 14	San Diego	v	2009

3950 3310021	3310021-014	Jurupa Community SD	High School Well Renovation	The High School Well Renovation Project will recover poor quality groundwater that is high in nitrates and total dissolved solids and provide a new local source of raw water supply. With treatment, this groundwater will be able to be used for drinking water purposes, yielding approximately 600 acre-feet per year of potable water for the Jurupa Community Services District. The project includes renovation of an existing well, which requires redevelopment, addition, the project will include approximately 400 feet of 18-inch diameter pipe to connect the High School Well to the existing raw water supply line and treatment facilities. The project will provide an additional source of raw water for the existing Roger D. Teagarden Ion Exchange Plant and provide a more diverse and reliable water supply for th District. Renovation of this well, which is located at the Jurupa Valley High School site, will yield approximately 600 more acre-feet per year of treated domestic water and create 12 new jobs. The High School Well Renovation Project is identified as JCSD Project 1-8 in the Integrated Regional Water Management Plan prepared by Western Municipal Water District (2008 Update).	c t v	5	C	An existing well located at the Jurupa Valley High School site within the Jurupa Community Services District (JCSD) service area is not usable for drinking water purposes because it has poor water quality that does not meet drinking water standards. Its groundwater is high in nitrates (approximately 140 mg/L, which exceeds the primary MCL of 550 mg/L) and total dissolved solids (approximately 940 mg/L, which exceeds the secondary MCL of 500 mg/L). The well requires redevelopment, needs a new sanitary seal, and must be re-equipped to serve as a drinking water supply well. A supply pipeline is needed to convey the raw water to the treatment facilities. Groundwater treatment for nitrate and salinity removal is required for municipal use. The High School Well Renovation Project is needed to increase the raw water supply to the existing Roger D. Teagarden Ion Exchange Plant, which will treat the water to meet drinking water standards and increase the local potable water supply.	1,075,000	24,684	68,297 20	Riverside	v	2009
3951 3110025	3110025-006	Placer CWA - Foothill		Construct 20 million gallons of storage. Involves design and construction.	0	5	с	General system improvement. Insufficient storage.	22,000,000	21,995	72,584 02	Placer	I	1998
3952 1010003	1010003-003	CLOVIS, CITY OF		CONSTRUCT A 2 MG RESERVOIR WITH BOOSTER PUMPS.	0	5	С	GROUNDWATER AVAILABILITY IS LIMITED IN THE NORTHEAST AREA OF THE CITY AND WATER PRESSURE WILL BE INSUFFICIENT TO SERVE THE AREA.	2,405,000	28,918	98,235 11	Fresno	Ш	1998
3953 1010003	1010003-001	CLOVIS, CITY OF		EXPANSION OF THE CITY'S GROUNDWATER RECHARGE FACILITY.	0	5	с	THE CITY'S GROUNDWATER BASIN IS CRITICALLY OVERDRAFTED AND THE WATER TABLE IS CONTINUING TO DECLINE.	2,400,000	28,918	98,235 11	Fresno	Ш	1998
3954 0710001	0710001-001	City of Antioch		Replace deteriorated mains with new and larger mains.	. 0	5	с	Old, deteriorated, and corroded coast iron and galvanized steel mains and services cause numerous leaks and resulting contamination. Also reduce available pressure and flow from fire hydrants.	250,000	30,359	100,945 04	Contra Costa	II	1999
3955 3610041	3610041-022	SAN GABRIEL VALLEY WC - FONTANA	Install nitrate treatment at Well F37A	Install ion exchange treatment to remove nitrate	0	5	С	Well F37A is contaminated withe nitrate above the MCL	1,500,000	42,871	153,647 13	San Bernardino	v	2007
3956 3610041	3610041-012	SAN GABRIEL VALLEY WC - FONTANA	Install ion exchange treatment Well F4A	Install treatment using ion exchange technology to remove nitrate and perchlorate	0	5	С	Well F4A is contaminated with nitrate above the MCL and perchlorate above the AL	1,750,000	42,871	153,647 13	San Bernardino	V	2002
3957 3610041	3610041-018	SAN GABRIEL VALLEY WC - FONTANA	Intake Improvements	Various improvements to intake and pipelines	0	5	С	Surface water intake facilities need improvement	760,000	42,871	153,647 13	San Bernardino	V	2003

3958 3410029	3410029-004	SCWA Laguna/Vineyard	Replace and Upgrade Arsenic Treatment System and Media Filter at Dright Road and Lakeside Water Trea	The proposed project will replace the existing greensand media in the existing four filter vessels at the Lakeside and Dwight Road treatment plants with Filtronics media. The Dwight Road WTP has a single filter with a treatment capacity up to 1500 gpm and the Lakeside WTP has three filters with a total treatment capacity up to 4500 gpm. The Filtronics media would be placed in the same vessels as the greensand media. The filtration rate through the vessels with the Filtronics media at both plants will be the same as the greensand media – approximately 6.4 gpm per square foot. The use of the proprietary Filtronics media will eliminate the need for adding hydrochloric acid because pH adjustment is not required with the Filtronics media. A full-scale coagulation/filtration treatment process using the Filtronic media material was conducted at the Dwight Road WTP and the result shows that both arsenic and manganese were removed to levels below their corresponding state MCL requirements without feeding hydrochloric acid. A full-scale coagulation/filtration treatment process using the Filtronics media material is effective and reliable. The proposed project will help minimize the operational and maintenance problems caused by the use of hydrochlorica caid, and will significantly enhance on-site worker safety. The		5	C	The four municipal wells supplying raw groundwater to the Dwight Road and Lakeside Water Treatment Plants have been found to contain arsenic at levels exceeding the state MCL of 10 ug/l, and manganese at levels exceeding the state secondary MCL of 50 ug/l. These two WTPs employ oxidation, coagulation and filtration processes for the removal of arsenic and manganese. At the Lakeside Treatment Plant, hydrochloric acid is fed at the raw water pumped from wells, then sodium hypochlorite and ferric chloride are fed prior to filtration through three greensand filters. The use of hydrochloric acid at the wells feeding the Lakeside treatment plant is necessary for arsenic removal. However, the use of the hydrochloric acid has created many operational and maintenance difficulties: It is highly corrosive and eats away at plumbing, fittings, screws, bolts, concrete, underground piping, is expensive and requires scrubbing of off gases during delivery; it requires calibration of the pH analyzers on weekly basis; and last the acid is very hazardous to staff who have contact it. The levels of arsenic croatined in the treatment effluent at the Lakeside Treatment Plant typical range from 5 to 10 ug/l. Due to the arsenic exceedence at the Dwight Road plant, its single well and greensand filter have been taken out of service	170,000	41,974	153,701 09	Sacramento	I	2009
3959 1910039	1910039-012	SAN GABRIEL VALLEY WATER COEL MON	ITE Addition of storage reservoir at Plant B14	Construct a second water storage reservoir.	0	5	С	San Gabriel's Plant B14 facility has only one storage reservoir that cannot be taken out of service for needed cleaning and maintenance.	3,000,000	46,304	161,945 22	Los Angeles	IV	2007
3960 1910039	1910039-014	SAN GABRIEL VALLEY WATER COEL MON	ITE Addition of storage reservoir at Plant G6	Construct a second water storage reservoir.	0	5	С	San Gabriel's Plant G6 facility has only one storage reservoir that cannot be taken out of service for needed cleaniong and maintenance.	1,200,000	46,304	161,945 22	Los Angeles	IV	2007
3961 3710014	3710014-008	Oceanside, City of	Peacock Hills Service Area Pressure Regulating Station	The project consists of installing a new pressure- regulating station facility. The work generally includes furnishing labor, equipment, materials, and services to construct an aboveground concrete masonry unit building on a belowground reinforced concrete slab and wall structure to house pipe lines, telemetry (SCADA) equipment, electrical and instrumentation equipment, CLA-VAL regulating valves, butterfly and gate valves, air and vacuum valves, manual air release valves, bridge and jib cranes, and other appurtenances. The pipeline work includes installing and testing CML&C steel pipe and fabricated steel fittings and connections to the existing City of Oceanside facilities. The work also includes upgrading the existing pressure-regulating vault and converting it into a meter vault facility including magnetic flow meters, valves, electrical upgrades, and roof and wall retrofits. Other items of work include by-pass piping and appurtenances, grading, trench and structure excavation and backfill, site improvements, and excavation safety measures.	0	5	c	The Peacock Hills Service Area Pressure Regulating Station (Station) is located on the east side of the City's Guajome Reservoir site at 1398 Temple Heights Drive. The purpose of the Station is to reduce pressure in the aqueducts prior to discharging into the two reservoirs and to maintain minimum pressure to the Peacock Hills Service Area. This Station was constructed in 1978 and houses the City's number 2 and number 3 aqueducts, which are both 24-inch steel pipelines. The aqueducts originate at the Weese Filtration Plant and terminate at the two Guajome Reservoirs. Outside the east side of the Station is a 12-inch pipeline that comes from both aqueducts and serves the Peacock Hills area. The Station is undersized, inadequately ventilated, poorly lit, and has no facilities such as stairs, landings, or lifting devices to facilitate proper maintenance. It is difficult for staff to access and maintain. The facility needs to be expanded and upgraded to current regulations. Furthermore, the steel pipes that are inside and outside the Station have extensive metal surface loss and pitting and need to be replaced.	1,800,000	42,423	178,806 14	San Diego	v	2009
3962 3710014	3710014-009	Oceanside, City of	Weese Water Treatment Plant Improvements	Construction of flocculation and sedimentation basins and improvement to the solids handling process to dispose of the additional sludge that will be produced.	0	5	с	The City of Oceanside's Weese Water Treatment Plant is currently a direct filtration facility. The City is receiving more imported water from the State Water Project than previously so it is necessary to convert the facility to a conventional filtration plant with sedimentation basins.	18,000,000	42,423	178,806 14	San Diego	v	2009

3963 3710014	3710014-007	Oceanside, City of	Wellhead Facilities for Wells 10 and 11	This project to Construct the wellhead facilities for wel 10 and 11, located at 3550 Mission Ave. includes pipin mechanical, well pumps, electrical, controls, civil work, landscaping, and installing a 20° piping, casing and conduit across Highway 76 by jack and bore and tying into existing 20° piping on the north side of Highway 7 Upon completion of the wellhead installation, the City of Oceanside's Mission Basin Groundwater Purification Facility can be operated at its design capacity of 6.37 mgd.	IIs O Ig, ;; n	5	C	The Mission Basin Groundwater Purification Facility, located at 215 Fireside Drive, was originally constructed and put into operation in 1994. The original facility produced 2.2 million gallons per day (mgd) of potable water from brackish groundwater by use of a reverse osmosis treatment process. A subsequent expansion project was to bring the capacity of the plant up to 6.37 mgd. This expansion consisted of three additional production wells, nine monitoring wells, a high and low pump station, an additional reverse osmosis train, and other infrastructure-related work. All work was satisfactorily completed with the exception of the production wells, which when drilled did not produce sufficient quantities for production. In October 1998, a joint participation agreement between the City of Oceanside, San Diego County Water Authority (SDCWA) and the Metropolitan Water District (MWD) for participation in the Groundwater Recovery Program (GRP) was executed. As part of the GRP study, SDCWA has drilled 11 exploratory wells to map the Basin for possible future use. As part of the drilling project, Oceanside had the SDCWA analyze up to five sites with an emphasis on three that can replace the poorly performing well sites 6, 7 and 8. Three of the sites are within a mile of the Mission Basin Groundwater Facility with one being on the plant site. Well Sites 10 and 11 have been drilled by the SDCWA and have shown to	2,400,000	42,423	178,806 14	San Diego	v	2009
3964 3710010	3710010-007	Helix Water District	Chlorine Contactor Valve Rehab	This project comprises the removal of five large valves inside of a 1.8 million gallon (MG) chlorine contactor for the replacement of defective actuators and seats. Due to the criticality of this facility, the work will require th shutdown of the treatment plant for the removal of all five valves and installation of several temporary bulkheads within 24hours. Once the valves are removed, a complete rehabilitation of the valves will begin. Valves will be pressure tested and seats replace as needed. The new actuators will be installed after pressure testing of the valves to avoid possible damag to the actuators. The replacement actuators are custom and factory-sealed for submerged service. After the actuator installation, the valves will be sand blasted and a protective epoxy coating applied to all metal surfaces. As a final precaution, the valves will each have a cathodic protection system installed to provide further protection from future corrosion issue Upon completion of the valve rehabilitation phase of the project the final scheduling, and planning for the reinstallation will occur. The plant will be shutdown, contactor drained for the valve installation. The temporary bulkheads will be removed and all five valve reinstalled complete with cathodic protection.	s O or e ne l e d te es.	5	C	Background, The 106 MGD conventional treatment plant with ozone as a primary disinfectant utilizes a chlorine contactor after biological filtration to inject chlorine/ammonia at the influent of the contactor for chlorimine disinfection residual in the distribution system. Should ozone go offline for any reason the ammonia feed point is automatically switched to the contactor effluent and free chlorine is applied to the contactor influent for CT disinfection compliance. Should the functionality of contactor become compromised the free chlorine addition point referenced above would need to be moved upstream of the filters which would adversely influence the biologically active filters and the formation of disinfection byproducts. This chlorine contactor contains five submerged butterfly valves used to drain, isolate/bypass or change the operation mode. These valves range in size from 36 to 84 inches in diameter. Staff discovered significant leakage of two of the valve seats. Investigations also revealed that the valve actuators are not sufficiently water tight and risk corrosion and eventual damage to the actuator internal gearing and components which could lead to valve failure and subsequent plant shutdown affecting over 250,000 customers. New replacement actuators have been furnished and await installation. When complete	300,000	55,497	263,642 14	San Diego	v	2009
3965 3710020 3966 3710020 3967 3710020	3710020-020 3710020-022 3710020-021	San Diego - City of San Diego - City of San Diego - City of	main replacement main replacement main replacement	Pipeline improvements. Pipeline improvements. Pipeline improvements.	0 0 0	5 5 5	C C	Aging pipelines need to be replaced. Aging pipelines need to be replaced. Aging pipelines need to be replaced.	17,755,070 14,526,600 17,010,340	273,015 273,015 273,015	1,266,731 14 1,266,731 14 1,266,731 14	San Diego San Diego San Diego	V V V	1998 1998 1998

3968 3710042	3710042-013	San Diego County Water Authority	Treatment Facilities in Semitropic-Rosamond Water Bank	The primary purposes of the Project are to improve water quality, to enhance water supply reliability and flexibility in a cost-effective and environmentally sound manner, to help reduce the rate of aquifer overdraft, to allow continuation of agricultural uses on Project lands, and encourage conjunctive use, where appropriate. Treatment facilities in Semitropic-Rosamond Water Bank allows the Water Authority to address its region's vital water requirements by enabling the withdrawal from the bank as necessary of up to 40,000 acre-feet of stored water supply. The Project will enhance the needs of the San Diego region through facilities that are of sufficient size and scope to be both cost effective and environmentally sound. nessence, the Projects act as both an underground storage reservoir and natural water treatment plant. Surplus State Water Project and Central Valley Project supplies will be stored in wet years for later recovery and use in dry years. Water recovered from the Antelope Valley Water Bank meets drinking water quality requirements and water recovered from the Semitropic Water Bank meets drinking water standards, with the exception of Arsenic. This Project will develop an arsenic treatment plant at Semitropic to reduce Arsenic to acceptable levels for introduction back into the California Aqueduct before delivery to end users. As surface water is cycled	o s d	5	c	The San Diego region typically experiences water shortages during periods of drought that are exacerbated by regulatory issues in Northern California concerning the Sacramento-San Joaquin Bay-Delta. The Water Authority's Regional Water Facility Master Plan identified a need for at least 100,000 acre-feet of carryover storage in order to meet reliability goals in dry years. A project for 100,000 acre-feet of carryover storage at San Vicente was included in the Water Authority's Capital Improvement Program in 2004. A subsequent evaluation of the demand and supply analysis based on the 2005 update of the Urban Water Management Plan identified a need for approximately 95,000 acre-feet of additional carryover storage. This evaluation looked at a three-year dry cycle scenario during which demands are high and imported supplies are constrained by preferential rights. Based on that scenario, the Water Authority executed an agreement with Semitropic-Rosamond Water Bank (Semitropic- Rosamond) that would allow water to be delivered and stored during above normal hydrology and extracted from the basin and delivered to the Water Authority either by wheeling through various facilities, exchanges, or a reduction in demands on the Water Authority. Semitropic-Rosamond is a joint powers authority formed by the Semitropic Improvement District of the	13,500,000	102 3,140,0	000 14	San Diego	v	2009
3969 3710042	3710042-009	San Diego County Water Authority	SDCWA Water Efficiency Improvements for End Use Systems	through the groundwater bank facilities and returned to This project will help our region partially offset impacts from SWP and MWD shortages. We are requesting consideration for both federal funds (Federal Economic Recovery, Water Efficiency Funds) and state Category E funding (with forgiveness of principal). The project will implement control technology and distribution system improvements downstream of points of connection. These upgrades, coupled with specialized field services, aim to achieve a minimum 20% water savings at participating large landscape areas on dedicated landscape meters. The proposal meets the "shovel- ready" criteria. Requested funds will enable the expansion of a successful ongoing pilot program, increasing the number and geographic diversity of participating project sites. When fully implemented, total yield from sites funded by this grant will approximate 2,200 AFY. The program is currently being implemented as a pilot in partnership with San Diego Gas & Electric. A contractor was selected via an RFP to deploy irrigation control technology and deliver irrigation management services with a targeted minimum savings of 20% per site. The contractor delivers turnkey services (marketing, site enrollment, audit & installation, ongoing irrigation management, and reporting). To date, 14 large landscape sites are enrolled, spanning a combined area in excess of 85 acres, with nearly 60 dedicated landscape meters.		5	C	Semitropic Water Storage District, Valley Mutual Water The San Diego County Water Authority (SDCWA) is located within the service area of the State Water Project (SWP) system. The SWP is presently experiencing severe water quantity problems resulting from drought conditions, and environmental protection actions necessary to safeguard the Delta ecosystem, and infrastructure limitations (namely the lack of conveyance facilities to circumvent the Delta and the need for additional system storage and conveyance). These conditions restrict the SWP's ability to reliably deliver water to State Water Contractors. Our dependence on imported supplies (as high as 90%), and our location at the furthest reaches of the SWP and Metropolitan Water District (MWD) distribution systems underscore our region's vulnerability to systemwide shortages. Regional and local agencies like SDCWA and its 24 member agencies must mitigate for these shortages through measures identified in our regional Drought Response Plan and Water Conservation Program. Any savings derived from these initiatives ultimately accrue to the local and regional distribution systems to help offset near-term water shortages. This proposal requests funding for a water efficiency program targeting the landscape sector, which has high potential for immediate water savings.	3,850,000	102 3,140,0	00 14	San Diego	v	2009
3970 4000598	4000598-001	CUYAMA LANE WATER COMPANY		Upgrade the entire water system & replace leaking hydrants	0	5	Р	Needs to upgrade and replace distribution system facilities.	100,000	2	25 06	San Luis Obispo	IV	1998
3971 1900901	1900901-002	FIRE SUPPRESSION CAMP 19	Replace storage tanks with two new 100,000 gallon tanks to replace rusty, failing tanks	Destroy two 25,000 gallon tanks on premises and replace with two new 100,000 gallon tanks as recommended by Department of Public Health.	0	5	Ρ	Tanks are rusting and failing.	300,000	1 1	125 16	Los Angeles	IV	2009

3972 3700912	3700912-003	YMCA CAMP MARSTON/RAINTREE	YMCA Raintree Ranch Infastructure upgrade	Need to install site specific well for the facility as well a 60k steel reservoir. Depending on well location, cos to install electrical to well could be extensive. Throug extensive chlorination we have been able to minimize positive choliform readings. Would install a filitration system to remove and/or minimize iron and mangane levels. Need to replace all current steel distribution lines in system with modern pvc or c-900 piping. Installation of booster pumps and automated chlorination system would be needed as well. Curren system has no means to flush system so installation of at least two fire hydrants would accomplish this as we as establish the ability to fight fires.	as O st t ese ese t f f	5	Ρ	Existing water system is in excess of 45 years old. System consists of primarly 2" galvanized steel piping in complete disrepair. Water has to be delivered to Raintree Ranch from Marston wells with a 3" blue bell pipe line approx. 2800' in length, that has been prone to extensive leaks due to age and installation problems. Water is held in an old concrete 30k in-ground reservoir that is grumbling. All water wells in the surrounding area are plaqued with high iron and manganese levels. Iron, manganese, and turbity have plaqued the system since its installation in the late 60's and early 70's. Currently having to extensively chlorinate system in order to stay with in legal parameters for drinking water.	350,000	27	310 14	San Diego	v	2009
3973 3700912	3700912-002	YMCA CAMP MARSTON/RAINTREE	YMCA Camp Marston Well #2 de-nitrification	Install de-nitrification system at well to include packag plant in a 10 x 16 bldg., develop back wash pond and other associated plumping and pumps to implement system with-in current water system.	ge O	5	Ρ	One well of three used to supply water to camps has exceeded Nirtrate levels on numerous occasions. Currently meeting blended level requirements as set by local DPH. Have on two occasions, come with-in 3 ppm of exceeding those set levels.	500,000	27	310 14	San Diego	V	2009
3974 1900831	1900831-001	DECKER CANYON YOUTH CAMP		INSTALL AN ADDITION TANK (15,000 GAL)	0	5	N	WATER STORAGE CAPACITY NOT LARGE ENOUGH	34,000	1	25 16	Los Angeles	IV	1998
3975 1300006	1300006-002	RED HILL MARINA	Red Hill Marina	Design and construct sludge removal improvements a filter improvements.	and O	5	Ν	Poor sludge removal from sedimentation basins; low rating of Giardia cyst and virus removal	1,500,000	3	30 14	Imperial	v	1998
3976 3410035	3410035-001	Lighthouse Marina Complex		Install new filter, new lines and new tanks.	0	5	Ν	Insufficient storage and the system is too old.	45,000	178	50 09	Sacramento	I	1998
3977 1502325	1502325-001	KERN CO P&R-TEHACHAPI MT PARK WATEF	3	REPLACE BOTH TANKS	0	5	N	BOTTOMS AND SIDEWALLS OF TWO 44,000 GAL. ARE RUSTING OUT.	120,000	45	350 19	Kern	III	1998
3978 3400173	3400173-002	NORTHGATE 880		Construct a new 1,200 gpm well and chlorine treatme system. Involves design and construction.	ent O	5	Ν	Low production wells and no emergency water supply. Low pressure complaints.	200,000	85	2,926 09	Sacramento	I	1998
3979 3400173	3400173-001	NORTHGATE 880		Construct a 500,000 gallon water storage tank. Involv design and construction.	ves O	5	Ν	Wells have a history of low water production. No emergency water supply is available and low pressure complaints.	500,000	85	2,926 09	Sacramento	Ι	1998
3980 1910041	1910041-006	THREE VALLEYS MWD	Martin Cienega Groundwater Treatment and Rising Water Mitigation	This multi-purpose project seeks to produce local groundwater from a basin that has historically exhibit water quality and rising water challenges. It is locatee within the Six Basins area, which includes cities in both Los Angeles and San Bernardino counties. The proposed project is specifically located within the Pomona Basin portion of Six Basins, overlying the citie of Claremont and Pomona. This project will enhance local water supplies by recovering groundwater with high levels of nitrate and contaminated with volatile organic compounds (VOCs). In addition to offsetting a like amount of imported surface water, extractions by this project will help mitigate the adverse impacts of rising groundwater in the immediate vicinity of the Martin Cienega located just west of the downtown arr of Claremont. Groundwater captured by this system will improve the overall water quality in the immediat vicinity of the project and will prevent further migratio of thine Groundwater to another area of rising wate (Palomares Cienega) located downgradient, at the southern end of the Pomona Basin. The proposed project is the first phase of a recommended program covering distinct areas within the Six Basins. In a report entitled Mitigation Alternatives to Rising Groundwater Study (May 2006), the Martin Cienega – referred to as Area 2 – is	O eed d h es ea ea ea ea ea ea r	3	C	The Six Basins area stradiles the Los Angeles-San Bernardino county line and includes six groundwater basins overlying the cities of Claremont, Pomona, La Verne, and Upland. The basins have experienced water quality problems in the past primarily due to high nitrate levels and volatile organic compound (VOCs) concentrations. Certain areas within the Six Basins have also historically exhibited rising water conditions. Areas called "cienegas", wherein high groundwater or artesian conditions are prone to occur, were identified many years ago but did not generally cause great concern when the area was primarily agricultural. Now these cienegas pose adverse impacts whenever high groundwater conditions occur because the region is much more urban. Additional extraction capabilities within targeted areas of the basins will allow the use of the local groundwater supply, reduce the potential adverse impacts of rising groundwater, and minimize the potential migration of large quantities of groundwater from affecting other downgradient areas that may be susceptible to the same rising water conditions. The Pomona Basin, within the Six Basins Area, is one such targeted area for extraction. With the nitrate and VOC contamination observed at existing area wells, the project will certainly require appropriate treatment.	10,500,000	11	0 07	Los Angeles	IV	2007

3981 1910128	1910128-011	COVINA IRRIGATION CO.	Baldwin Park Well #3 Pump to Waste	The proposed project is to bring this active source up to O current standards by the inclusion of additional piping necessary to deliver the water produced to a nearby flood control channel untill water quality is acceptable. The project will include water quality monitoring equipment and an additional flow meter to account for water loss. This project is (and has been) considered a high priority by CDPH following routine inspections.	0	с	This well was constructed in 1951 and does not include any provision for pump to waste upon start up, since piping only exists to deliver the water produced directly to the adjacent reservoir.	150,000	12	0 15	Los Angeles	IV	2009
3982 1910128	1910128-008	COVINA IRRIGATION CO.	Baldwin Park Reservoir Roof Replacement	The current roof is made of corrugated steel, which is or approximately 60 years old and beyond economical repair. Similar material and construction is recommended.	0	с	The roof covering this reservoir is in disrepair and has been identified by CDPH in a recent inspection as a priority needing to be addressed. Although no positive bacteriological sample results have been observed from the reservoir, the wells supplying it have had some positive results and replacing the roof would help ensure water quality leaving the facility.	1,250,000	12	0 15	Los Angeles	IV	2009
3983 4310027	4310027-013	Santa Clara Valley Water District	Water Treatment Plant I/C Cards and Trunk Cables	<ul> <li>The project will replace the treatment plants' I/O O modules with current technology.</li> </ul>	0	c	The input/output modules that are part of the Supervisory Control and Data Acquisition (SCADA) system and used to operate the treatment processes at the Distrct's three water treatment plants are obsolete and no longer supported by the manufacturer. If they failed, depending on which treatment processes are impacted, treated water quality may be negatively impacted and the treatment plants may have to be shut down to repair/replace the I/O modules.	6,002,000	25	0 17	Santa Clara	Ι	2009
3984 5710012	5710012-007	WOODLAND-DAVIS CLEAN WATER AGENC	Y WDCWA Water System Consolidation Project: Regional Treated Water Pipelines (Cr+6)	WDCWA will construct approximately 10 miles of water of pipelines to convey treated surface water from a new regional water treatment facility to the cities of Woodland and Davis. Surface water will largely replace groundwater supplies. This will allow the cities to consolidate water systems, comply with current and pending NPDES requirements for selenium, boron, and TDS, and nearly eliminate nitrates and other harmful constituents in drinking water. For example, groundwater wells indicate nitrate levels of between 2-40 ppm; Sacramento River water contains less than 1 ppm. To pay for the project and related project elements, the Woodland City Council recently adopted water rates that will triple water bills over a seven-year period ending in 2016. Davis is considering similar rate increases. SRF funding could help to lessen the projected rate impact on water quality treatment and supply options to address increasing nitrate contamination, along with other constituents. Objectives include improving water quality, improving water supply reliability, and maintaining compliance with drinking water and NPDES discharge requirements. Many years and millions of dollars later, it has been concluded and confirmed by independent experts that developing a new surface water supply to largely replace groundwater is the safest, most cost-effective	0	C	This application replaces Record ID 3984 submitted in 2010. Woodland and Davis, small urban communities located in the largely agricultural Yolo County in California, rely entirely on groundwater for drinking water supplies. Drinking water quality in both cities is threatened by aging water systems and degrading groundwater supplies. Nitrate levels are increasing and there are elevated levels of TDS, selenium, arsenic, iron, manganese and boron. Selenium, boron and TDS passed through to the wastewater treatment plant (WWTP) will fail to meet pending NPDES discharge requirements. Nitrates, in particular, are a current public health concern. So, too, are chromium 6 levels, which are among the highest in the Central Valley. Given the heavy agricultural operations in Yolo County, it is not surprising that both cities struggle to comply with MCLs for nitrates. Addressing Nitrate in California's Drinking Water, a study by UCD's Center for Watershed Study, documented similar problems in other agricultural communities. In Davis and Woodland, it is only through extraordinary efforts, such as abandoning wells, reducing production at problem wells and adding new wells, that violations of nitrate Ievels have been avoided. In fact, elevated nitrate levels have been the primary cause of well shutdowns and reduced production in both cities. In both Woodland and Davis, each of the wells destroyed due to elevated	36,000,000	30,677	0 09	Yolo	I	2012

#### 3985 4310027 4310027-014 Santa Clara Valley Water District

## Chemical System: The project will replace and upgrade O Treatment Plant Chemical the existing phosphoric acid and caustic soda system at System and Standby Power the treatment plant to continue to comply with EPA's Lead and Copper Rule minimzing risks of water quality Upgrade violations. The project will replace the 48-inch flow meter and backwash pump adjustable speed drive to improve plant reliability and to extend the useful life of the plant.Standby Power:The project is designed to provide a reliable standby power source at the plant. The project design and construction includes following:1. Relocation of existing equipment to a permanent location2. Construction of new concrete platform for the existing engine-generator, fuel storage tank, step-up transformer; and new concrete stairs and sidewalk.3. Electrical and control system installation for

### Installation of sound barrier6. Restoration of landscaping

relocated equipment4. Installation of new double-

containment fuel oil piping and accessories 5.

Chemical System: The Rinconada Water Treatment Plant's existing corrosion inhibitor facilities (caustic soda and phosphoric acid) do not meet the current seismic and fire codes and District Operations design requirements. The existing 48-inch diameter main treated water effluent flow meter is obsolete and inaccurate. The existing adjustable speed drive for the backwash pump is failing and no longer supported by the manufacturer. If the backwash pump adjustable speed drive failed, the filtration process would be negatively impacted, potentially affecting the treated water quality.Standby Power:The existing trailer mounted engine-generator and associated equipment were installed on a temporary/rental basis when California faced sporadic energy shortages throughout the state in 2001. The Board authorized staff to prepare the District to address electrical reliability against planned rolling blackouts and unplanned outagesTemporary installation is difficult to operate and maintain. An uninterrupted power supply is critical for operation of the plant to meet contractual water delivery.

WOODLAND-DAVIS CLEAN WATER AGENCY WDCWA Water System 3986 5710012 5710012-004 Consolidation Project:

WOODLAND-DAVIS CLEAN WATER AGENCY WDCWA (Regional

3987 5710012

5710012-001

## Facility (Cr+6)

Sacramento River Intake

cfs).

Structure)

Rinconada Water

facility to provide high-quality surface water for Regional Water Treatment municipal use in Woodland, Davis and UC Davis. Surface water will largely replace groundwater supplies. This will allow the cities to consolidate water systems, comply with current and future NPDES requirements for selenium, boron, and TDS, and nearly eliminate nitrates and other harmful constituents in drinking water. For example, groundwater wells indicate nitrate levels of between 2-40 ppm: Sacramento River water contains less than 1 ppm. The 40 mgd regional water treatment facility is expected to cost \$137 million (April 2012). To cover its share of costs, the Woodland City Council recently adopted water rates that will triple water bills over a seven-year period ending in 2016. Davis is considering similar rate increases. The cities combined have approximately 31,000 water connections. SRF funding would lessen the projected impact on water users. The water treatment process will include physicalchemical pre-treatment, filtration and disinfection. The pre-treatment will remove the majority of the sediment, some of the disinfection byproduct, and condition the water for effective filtration. Filtration is intended to remove bacteria and viruses that escape pretreatment. Primary disinfection and other treatments will inactivate Giardia and viruses that are common to surface water. Oxidants will be added in The new intake will be designed to allow up to 100 cfs 0

of flow to be diverted from the Sacramento River to

supply the WDCWA, and to comply with California

Department of Fish and Game (DFG) and National

Marine Fisheries Service (NMFS) provisions to prevent

the entrainment of migrating anadramous fish. The

intake will be equipped with one standby and three duty variable speed pumps, each with a capacity of 26.67 cfs with three pumps in service (for a firm capacity of 80 cfs), and a capacity of 25 cfs each with four pumps in service (for a nominal capacity of 100

WDCWA will construct a new regional water treatment O

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This application replaces Record ID 4056 submitted in 137,000,000 30,677

6.370.000

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0.09

Yolo

2010.Woodland and Davis, small urban communities located in the largely agricultural Yolo County in California, rely entirely on groundwater for drinking water supplies. Drinking water quality in both cities is threatened by aging water systems and degrading groundwater supplies. Nitrate levels are increasing and there are elevated levels of TDS, selenium, arsenic, iron, manganese and boron. Selenium, boron and TDS passed through to the wastewater treatment plant (WWTP) will fail to meet pending NPDES discharge requirements. Nitrates, in particular, are a current public health concern. So, too, are chromium 6 levels, which are among the highest in the Central Valley. Given the heavy agricultural operations in Yolo County, it is not surprising that both cities struggle to comply with MCLs for nitrates. Addressing Nitrate in California's Drinking Water, a study by UCD's Center for Watershed Study, documented similar problems in other agricultural communities. In Davis and Woodland, it is only through extraordinary efforts, such as abandoning wells, reducing production at problem wells and adding new wells, that violations of nitrate MCLs have been avoided. In fact, elevated nitrate levels have been the primary cause of well shutdowns and reduced production in both cities. In both Woodland and Davis, each of the wells destroyed due to elevated 30.400.000

# 30.677

Need to provide Intake facility on the Sacramento River with 80.3 cfs firm capacity (and 100 cfs instantaneous capacity) to divert WDCWA water permit and summer water supplies for conveyance of higher quality surface water supplies to the new WDCWA regional surface water treatment facility.

0.09 2011 Yolo

Santa Clara

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2009

2012

3988 5710012	5710012-005	WOODLAND-DAVIS CLEAN WATER AGI	ENCY WDCWA Water System Consolidation Project: Regional Intake Facility (Cr+6)	WDCWA will construct a new, regional intake on the Sacramento River to divert surface water for municipal use in Woodland, Davis and UC Davis. Surface water will largely replace groundwater supplies. This will allow the cities to consolidate water systems, comply with current and pending NPDES discharge requirements for selenium, boron and TDS, and nearly eliminate nitrates and other harmful constituents in drinking water. For example, groundwater wells have nitrate levels of between 2-43 ppm; Sacramento River water contains less than 1 ppm. The project will be jointly constructed and operated by WDCWA and Conaway Preservation Group. The WDCWA portion of the intake capacity will be 80 cfs. Conaway is to receive federal/state grant funding for its share of the project, but the cities must cover the local cost share. Toward that end, the Woodland City Council recently adopted water rates that will triple water bills over a seven-year period ending in 2016. Davis is studying similar rate increases. SRF funding would lessen the projected impact on water users. The regional project partners have long studied water quality treatment and supply options to address increasing nitrate contamination, along with other constituents. Objectives include improving water quality, improving water supply reliability, and maintaining compliance with drinking water and NPDES	0	C	This application replaces Record ID 4042 submitted in 2010. Woodland and Davis, small urban communities located in the largely agricultural Yolo County in California, rely entirely on groundwater for drinking water supplies. Drinking water quality in both cities is threatened by aging water systems and degrading groundwater supplies. Nitrate levels are increasing and there are elevated levels of TDS, selenium, arsenic, iron, manganese and boron. Selenium, boron and TDS passed through to the wastewater treatment plant (WWTP) will fail to meet pending NPDES discharge requirements. Nitrates, in particular, are a current public health concern. So, too, are chromium 6 levels, which are among the highest in the Central Valley. Given the heavy agricultural operations in Yolo County, it is not surprising that both cities struggle to comply with MCLs for nitrates. Addressing Nitrate in California's Drinking Water, a study by UCD's Center for Watershed Study, documented similar problems in other agricultural communities. In Davis and Woodland, it is only through extraordinary efforts, such as abandoning wells, reducing production at problem wells and adding new wells, that violations of nitrate KLS have been he primary cause of well shutdowns and reduced production in both cities. In both Woodland and Davis,	16,000,000	30,677	0 09	Yolo	I	2012
				discharge requirements. Many years and millions of			each of the wells destroyed due to elevated						
3989 4310027	4310027-009	Santa Clara Valley Water District	Rinconada Water Treatment Plant Compute Room Retrofit	The project will ensure that the computer equipment in O er the computer room of the Rinconada Water Treatment Plant is adequate anchored and cooled. Work will include replacing/upgrading the HVAC system, placing conduits and cables overhead to improve air flows to the equipment, seismically anchoring the essential equipment in the room, and designing and implementing a plan to relocate the equipment during the construction. Work will also include providing access per ADA requirements to the room. if required	0	С	The computer equipment that is used to control and monitor the treatment processes at Rinconada Water Treatment Plant and the treated water and raw water transmission and distribution facilitites is not adequately anchored. The HVAC system in the computer room is not properly designed to cool the computer equipment in the room. If the compuer equipment failed due to inadequate anchorage or cooling, the Rinconada treatment plant may be subjected to plant shutdown, and the remote control	1,538,000	25	0 17	Santa Clara	II	2009

and monitoring of the District's pipelines and pump stations may be interrupted jeopardizing the operations

of these facilities.

by the Town of Los Gatos' building codes.

3990 5710012	5710012-006	WOODLAND-DAVIS CLEAN WATER AGENCY	WDCWA Water System
			Consolidation Project:

## Regional Raw Water Pipelines (Cr+6)

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C This application replaces Record ID 4040 submitted in 2010.Woodland and Davis, small urban communities located in the largely agricultural Yolo County in California, rely entirely on groundwater for drinking water supplies. Drinking water quality in both cities is threatened by aging water systems and degrading groundwater supplies. Nitrate levels are increasing and there are elevated levels of TDS, selenium, arsenic, iron manganese and boron. Selenium, boron and TDS passed through to the wastewater treatment plant (WWTP) w fail to meet pending NPDES discharge requirements. Nitrates, in particular, are a current public health concern. So, too, are chromium 6 levels, which are among the highest in the Central Valley. Given the heavy agricultural operations in Yolo County, it is not surprising that both cities struggle to comply with MCLs for nitrates. Addressing Nitrate in California's Drinking Water, a study by UCD's Center for Watershed Study, documented similar problems in other agricultural communities. In Davis and Woodland, it is only through extraordinary efforts, such as abandoning wells, reducing production at problem wells and adding new wells, that violations of nitrate MCLs have been avoided. In fact, elevated nitrate levels have been the primary cause of well shutdowns and reduced production in both cities. In both Woodland and Davis, each of the wells destroyed due to elevated С Need to treat new surface water source (Sacramento River) that will become available in 2016 to replace groundwater supplies in Davis and Woodland that are past useful life expectancies and high in the following

	45,000,000	30,677	0 09	Yolo	I	2012
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n, ed						
ill						

3991 5710012 5710012-003 WOODLAND-DAVIS CLEAN WATER AGENCY WDCWA (New Regional Design and construct a new Regional Water Treatment O Surface Water Treatment Facility with a maximum 52 MGD capacity that meets Facility) both current and anticipated future drinking water quality regulations, is more aesthetically acceptable to

3992 5710012	5710012-002	WOODLAND-DAVIS CLEAN WATER AGENCY	WDCWA (New Regional
			Raw Water Conveyance
			Pipeline)

intended to inactivate Giardia and viruses that are commonly found in surface water supplies and comply Design and construct approximately 4.5 miles of dual 42- O inch raw water transmission pipelines to convey untreated surface water from the WDCWA's regional Sacramento River Intake Structure to its new Regional Surface Water Treatment Facility. Pipelines will be either cement lined and coated steel pipe or ductile iron pipe, and will be cathodically protected against external corrosion.

WDCWA will construct approximately 5.2 miles of dual 0

36-inch or 42-inch pipelines, size to be determined

based on an NPV analysis, to convey untreated surface

water treatment facility, which is to be located east of

surface water will largely replace groundwater supplies.

This will allow the cities to consolidate water systems.

requirements for selenium, boron, and TDS, and nearly

eliminate nitrates and other harmful constituents in

drinking water. For example, groundwater wells have

nitrate levels of between 2-43 ppm; Sacramento River

water contains less than 1 ppm.To pay for the project

and related project elements, the Woodland City

Council recently adopted water rates that will triple

water bills over a seven-year period ending in 2016.

users. The project partners have long studied water

quality treatment and supply options to address

constituents. Objectives include improving water quality, improving water supply reliability, and

increasing nitrate contamination, along with other

Davis is considering similar rate increases. SRF funding

would help to lessen the projected rate impact on water

maintaining compliance with drinking water and NPDES

discharge requirements. Many years and millions of dollars later, it has been concluded and confirmed by

customers, and reduces consumer costs associated

devices. The water treatment process is expected to

include physical-chemical pretreatment, filtration, and

remove the majority of the sediment load and a portion of the disinfection byproduct precursors ahead of the filtration process and in general, to condition the water for effective filtration. A supplemental purpose of pretreatment is to accommodate periodic addition of an oxidant and/or PAC in response to unusual Sacramento River water quality conditions. The filtration process may involve granular media filtration or membrane filtration, and is intended to remove most of the particulate matter and a portion of the bacteria and viruses that escape the pretreatment process. Using GAC as a component of the granular filter media provides the added benefit of removing a portion of the DOC and algae related taste and odor compounds. Filtration will be followed by primary disinfection. Primary disinfection and other treatment processes are

with water softeners and home water treatment

disinfection. Physical-chemical pretreatment will

comply with current and pending NPDES discharge

Woodland on the south side of I-5. Once treated.

water from a new Sacramento River intake to a regional

water quality constituents: total dissolved solids, nitrates total and hexavalent chromium selenium manganese, and boron. Arsenic is also a problem, limiting well development potential especially if the MCL is further reduced.

124,800,000	30,677	0 09	Yolo	I	2011

2011

С

Need to convey untreated surface water from the WDCWA's regional Sacramento River Intake Structure to its new Regional Surface Water Treatment Facility.

26,400,000 30,677 0 09 Yolo

3993 1910128	1910128-007	COVINA IRRIGATION CO.	Mortar Re-lining of S.B. Ro Transmission Line	d Most of the 4.5 miles of this line has already been relined in the past, with the remaining. 75 miles having yet to be addressed. This portion, which is at the extreme west end of the Company's transmission system, is subject to the highest pressure and often in excess of 110 psi. The solution is to apply a 3/8" mortar lining to the pipe in-place, which has proven effective with the other portions of the line.	O	0	с	This 28" transmission line is riveted steel and is approximately 65 years old. There have been several leaks and even a line failure over the past several years, resulting in down time and costly repairs. Since Covina Irrigating Company is a wholesaler, the reliability of the Company's infrastructure has become more critical as imported water supplies have become increasingly scarce.	250,000	12	0 15	Los Angeles	IV	2009
3994 1910041	1910041-001	THREE VALLEYS MWD		INSTALL A REGIONAL NITRATE REMOVAL PLANT.	0	0	с	HIGH NITRATE WELL WATER IN REGION. (NO REPORTED VIOLATIONS SINCE WELL WATER IS BLENDED WITH AVEC SURFACE WATER TO MEET THE STANDARDS)	5,000,000	11	0 07	Los Angeles	IV	1998
3995 1910087	1910087-011	Metropolitian Dist. of So. Cal.	Frank E Weymouht Treatment Plant Inlet Conduit Relocation and Rapid Mix Facilities	The project will relocate the Weymouth plant inlet conduit and washwater return line and add rapid mix systems to each treatment module. The scope of the project includes construction of a new plant inlet [13- foot by 15-foot concrete box) conduit, which is an initial element of the Weymouth Oxidation Retrofit Program; a connection to the Upper Feeder; four new connections to the existing treatment modules; new rapid mix facilities for each module; and new washwater return piping and pumps. The project also includes relocation of return washwater piping and sulfuric acid feeds, modification to existing chlorine injection facilities, yard piping, chemical trenches, grading and fencing for a Southern California Edison switchyard, electrical duct banks, piping connections, and other appurtenant work.	0	0	C	: Untreated water currently enters the 520-mgd Weymouth treatment modules through one of two 10- foot by 15-foot reinforced concrete box conduits which pass below the Administration Building. Constructed in 1939, the conduits were originally designed to industry standards at that time. Current seismic practice indicates that the conduits lack adequate lateral bracing and are highly vulnerable to seismic lateral bracing operations. Failure of these conduits may halt water flow into the treatment modules, and would inundate the building basement. Relocating the inlet conduit will eliminate this seismic vulnerability. At the end of the inlet conduit, raw water enters the plant's existing rapid mix facility, where coagulant is fed in a single dose to the entire plant flow. The rapid mix facility is located adjacent to the Administration Building; in order to relocate the inlet conduit, the rapid mix system must also be moved. Since the Weymouth plant has eight floculation and sedimentation basins with several different configurations, and two different filter designs, a modular rapid mix system is recommended. A modular rapid mix system yould allow the coagulation process to be optimized for the different basin configurations, and would provide operational	20,000,000	647	0 16	Los Angeles	IV	2009

flexibility to address varying source water quality likely

3996 4310027	4310027-011	Santa Clara Valley Water District	Rinconada Water Treatment Plant and Vasona Pumping Station Voice-Data Modifications	The proposed project consists of improvement to the system and related data and communication equipment, such as, the upgrade of the voice, data and SCADA cable infrastructure, the telephone system, the data system, as well as network routers and switches. Project related activities at the two sites include upgrading to fiber optic for data and SCADA systems and voice cables between buildings. Existing spare conduits will be used where available. Where spare conduit is not available, trenches will be dug for placement of conduit and cable. At the RWTP, trenching may be done to install conduit between the Maintenance Garage and the Belt Press Building on the east side of the plant. At the VP5, trenching will be done to install conduit between the Meters than the Pump Plant.Build out of the RWTP communication room includes installing a partition and two walls to seal off the room, repairing the floor, and installing new lighting. The communication rooms at il also be upgraded to accommodate a new floor rack-mounted communication system. New cable and conduits will be installed and tested and the old system will be switched over to the new system.		0	C	Except for minor improvements, the communications infrastructure for telecommunications, data and the System Control And Data Aquisition (SCADA) systems, at the Rinconada Water Treatment Plant (RWTP) and the Vasona Pump Station (VPS) exist as they were installed in the 1960's. The cabling systems are outdated and in need of upgrading. This infrastrure provides for all of the communications within and outside of the water treatment plant. The SCADA network controls all of the water transmission in the water treatment processes. In order to maintain an efficient and viable system in concert with other facilities operated and maintained by the District, the proposed project will upgrade the voice, SCADA and data transmission systems at RWTP and VPS to current standards.	1,942,000	25	0 17	Santa Clara	Π	2009
3997 3600108	3600108-001	Glen Helen Regional Park	New storage tanks	Construct 400,000 gallon and 1,000,000 gallon storage tanks	0	0	С	Inadequate storage capacity for fire fighting	1,000,000	4	25 13	San Bernardino	v	2006
3998 3510007	3510007-002	Hollister/Sunnyslope WTA	Ridgemark Na&Cl Compliance Lime Softenin Water Treatment Facility	The project will address Ridgemark area wastewater g salinity concentration limits in the RWQCB Waste Discharge Requirement (WDR) Permit. This project will include implementation of a Lime Softening Water Treatment Facility (2 million gallons per day). The lime softening project will be comprised in two major components: water treatment process to remove hardness and lime sludge treatment and disposal. The major elements of the water treatment facility will be lime application system, solids contact tanks, filtration, disinfection systems, and distribution pump station. Paste lime slaking system will convert a quicklime into a form of hydrated lime, which will be used in the process. Lime slaking system will convert a quicklime. Following by lime injection, soda ash will be added to the process. Soda ash will be stored in tanks. Solids conact tanks will provide rapid mixing, flocculation and sedimentation, which will allow chemicals to react with the ions in the water and precipitate calcium and magnesium hardness. The process will require two sedimentation tanks to handle large amounts of lime sludge. Softened water will be recarbonated by using carbon dioxide system, which will include carbon dioxide storage tanks, evaportation unit, and injection system. Following pH adjustment, water will be filtered		0	C	Existing potable water quality has a high concentration of total dissolved solids (800 milligrams per liter) and high concentration of total hardness (400 milligrams per liter). Lime softening will improve potable water hardenss so that home water softeners use can be significantly reduced. This will enable the District to meet the requirements of the Central Coast Regional Water Quality Control Board (RWQCB) permit. Beyond meeting WDR, this project will provide the higher water quality to the community, reduce overall salt impact on the groundwater basin, and reduce water softeners use in the SSCWD area. The reduction in salt load to the groundwater basin is critical to protecting beneficial groundwater use in the San Benito groundwater basin. The basin is a major water supply for the greater City of Hollister area and supports the vibrant agricultural economy in the region. The project is the first in a series of water quality projects to better protect the basin and reduce salinity wastewater effluent will support the development of recycled water use providing a more robust water supply for the region and limiting the need for future imports of water.	17,020,000	2	25 05	San Benito	I	2009
3999 3600108	3600108-002	Glen Helen Regional Park	Mainline replacement	Construct new water lines to provide a reliable water supply and enough for growth at the Glen Helen Rehabilitation Center and sheriff facilities	0	0	С	Existing waterlines are deteriorating and in need of replacing with larger pipe to provide enough water for growth	1,000,000	4	25 13	San Bernardino	v	2006
4000 5301201	5301201-001	Seymour's Mutual Water System		Install six 5,000 gallon water storage tanks.	0	0	с	Need additional water storage.	25,000	15	25 01	Trinity	1	1998
4001 1900961	1900961-001	WINTERHAVEN MOBILE ESTATES		Remove and contruct new reservoir.	0	0	С	125,000 gallon reservoir needs replacement due to age.	80,000	20	27 16	Los Angeles	IV	1999
4002 3901213	3901213-001	AVALOS, SILVIA		THEY ASK FOR TREATMENT; HOWEVER, CONNECTION WITH LARGE SYSTEM MUST BE EXPLORED FOR FEASIBILITY (PREFERRED). OTHER = DESIGN AND CONSTRUCTION	0	0	С	NITRATE ON VERGE OF EXCEEDING MCL IN SMALL, ONE WELL SYSTEM	30,000	15	30 10	San Joaquin	Ш	1998
4003 2300892	2300892-001	Covelo Mobile Home Park	Disinfection	Install blend tank and chlorination system for system's two wells	0	0	с	Well sources without disinfection. Occasional postiive TC samples	10,000	19	30 03	Mendocino	П	2004
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4004 4300630	4300630-001	Foothill Mutual Water	Water Main Replacement	Replace old pipes with new water pipes.	0	0	С	Original water lines breaking, needs replacement.	80,000	15	30 17	Santa Clara	Ш	2004
4005 0400003	0400003-003	NORTHWOODS MUTUAL WATER SYSTEM		Replace existing distribution system mains.	0	0	С	Distribution system has numerous leaks identified.	10,000	16	31 21	Butte	I	1998
4006 1500449	1500449-001	FOURTH STREET WATER SYSTEM	Planning Project	Drill second well;reranked to O from E; system drilled second well	0	0	С	Running out of water at times	10,000	24	35 19	Kern	Ш	2006
4007 4000749	4000749-001	TERRA DE ORO WATER COMPANY	Well Site Security	Terra De Oro Water Company has 2 well sitesSometime in the past, the operator or the landowner removed the security fence around one of the well heads. This fence needs to be replaced in order to secure and protect the well head from vandalism and more importantly, to prevent direct contamination of the soil around the we head. The project for this site is to replace the original foot high 20' x 20' chainlink fence topped with barbed wire with a suitable fence to apply equal security and maintain a reasonable appearance for the landowner. The fence around the other well head is in disrepair and needs to be fixed in order to assure continued security for the well, and in this location, the bulk chlorine tank and equipment that is used to treat the water supply. The project at this site is to repair th fence if economically feasible. It may end up being just as cost effective to replace the fence due to its dilapidated state.	e O e e e e t	0	C	Water security improvements needed.	10,000	17	35 06	San Luis Obispo	IV	2008
4008 4000749	4000749-002	TERRA DE ORO WATER COMPANY	Storage and Distribution Security	The 562 foot long security fence around the storage tank and distribution site needs to be repaired or replaced to assure continued security. This fence was not built to the original engineering plan specifications in 1985. The plans called for a 6' chainlink fence with 3 row barbed wire top. The current fence, which is in disrepair, and an be easily breached, is a wire farm type fence with barbed wire top. It is supported by wooden posts that have outlived their useful life. This fence ideally needs to be replaced.	O e	0	с	Water security improvements needed.	23,000	17	35 06	San Luis Obispo	IV	2008
4009 4900892	4900892-001	Summit View Ranch Mutual Water Co.		Add storage of 20 to 40,000 gals and associated plumbing linkage.	0	0	с	Inadequate storage- we have a 40,000 gal redwood tank for what will be a build out of 22 homes.	50,000	20	45 18	Sonoma	II	1998
4010 3110049	3110049-002	Tahoe Park Water Co - Skyland/Nielsen	Skyland/Nielsen Timberland Intertie	The project would provide a permanent intertie between Skyland/Nielsen and Timberland Water Co. The intertie will enhance service reliability to both systems. Skyland/Nielsen system will benefit by having Timberland serve as a secondary water source, and Timberland Water Co. will benefit from increased storage provided by Skyland/Nielsen. The project would consist of 2,400 LF of 8-inch transmission main. Between Timberland and Nielsen subdivisions, eight existing dwellings currently served by one or more private wells and within the Skyland/Nielsen service area would be given the opportunity of connecting to the intertie for domestic and fire service.	0	0	С	The secondary water source of Tahoe Park Water Co's Skyland/Nielsen system is unfiltered surface water from Lake Tahoe. The primary water source is a well. Water storage in the system is 60,000 gallons. When the well pump fails, storage is depleted in one day during peak demand periods, after which there is no choice but to provide unfiltered lake water to maintain continuous supply.Timberland Water Co. is immediately adjacent to Skyland/Nielsen system. The primary water source of Timberland Water Co. is a well. The secondary water source is a second well. Water storage in the system is 30,000 gallons.	400,000	85	50 02	Placer	I	2009
4011 0900655 4012 4900575	0900655-001 4900575-001	ROCKWATER APTS. Loch Haven Mutual Water Company		would like to upgrade Replace leaking tank and new tanks	0 0	0 0	c c	Very old well Provide additional storage, leaking tanks	100,000 16,000	24 19	50 09 50 18	El Dorado Sonoma	I II	2002 2000

4013 3500575	3500575-002	Springwood Estates MWC	replace 2 old steel water well tanks currenly leaking	we currenly have two 15,000 gal steel water tanks. these tanks will need to be removed and disposed of properly. replaced with 2 new tanks 15,000 gal steel tanks. these tanks will require proper foundations to the state code with proper permits for foundation, & earthquake stablization for potable drinking water. the current tanks will need to be removed and disposed of properly, all water sensors & gauges to run the tanks properly will need to be installed as well. the tanks will need to have cleanout ports and saftey ladders, and be up to california water code	0	0	C	the current steel water tanks 20+ yrs in age, have never been maintained properly they are currently leaking & currently being patched & repatched, to avoid contamination & we can only maintain the tanks due to lack of funds, for full replacement. with the economy and the high rate of unemployment in the county it is impossible to rasie the flat fee to cover any major repairs at this time we are playing catch up with the maintaing of the leaking tanks.	50,000	15	50 05	San Benito	II	2009
4014 3500575	3500575-001	Springwood Estates MWC	main waterline replacement from tanks to all indvidual meters	backhoe up all exisiting main water lines to all the properties, remove and dispose of all existing water lines. Install all new water lines to code, the waterlines cover approx 2 miles of slightly sloped terrain, state code may require appropriate filler to cover the new water lines.	0	0	с	20 year old water lines possbily leaking due to inconsistant meter readings from properties to pump readings. we are in an earthquake active area and suspect we have one or possibly several leaks in the main line from the well tanks to the indvidual properties.	80,000	15	50 05	San Benito	II	2009
4015 2702148	2702148-002	ASOLEADO MWC		Excavate underground tanks and replace, repair distribution system	0	0	С	leaking distribution system	200,000	35	52 05	Monterey	Ш	2002
4016 4200804	4200804-001	WALKING M RANCHES ASSN.		Either new well in different location or new non metal distribution system and well pump	0	0	С	Needs to upgrade the source or distribution system.	69,000	17	54 06	Santa Barbara	IV	1998
4017 4400692	4400692-001	ALLAN LANE WATER ASSOCIATION	Distribution System	replace distribution system, and install meters and	0	0	С	Has some coliform problems in distribution system,	250,000	16	54 05	Santa Cruz	Ш	2007
4018 2701888	2701888-002	CACHAGUA MUTUAL WS (#4)	opgrades	Design and construct new well, storage tank and	0	0	с	Fecal contamination	300,000	24	55 05	Monterey	Ш	2000
4019 4900846	4900846-001	Rolling Oaks Road Association		Descale and flush well casing. If this does not work,	0	0	С	Declining output of existing well.	20,000	16	55 18	Sonoma	Ш	1998
4020 4000741	4000741-002	H2O, INC	Install a pump house and add a security fence around our well	Build pump house and a security fence with a gate, around our facility.	0	0	С	Build a pump house to cover our well ,electrical facilities and a security fence.	12,000	22	60 06	San Luis Obispo	IV	2011
4021 4000741	4000741-001	H2O, INC	Replace and upgrade existing distribution lines	Install about 5000 ft of new 6 inch water pipe underground from our well head to our storage tanks area. Also Install operation shut off valves at various locations along the route.	0	0	С	We have a supply as you go system.We have a 4 inch and 6 inch line that feeds the costumer as the water is pumped to the tanks. That is not the way a system should work. this system has been added to for over 30 years as the development expanded.	425,000	22	60 06	San Luis Obispo	IV	2011
4022 4000741	4000741-006	H2O, INC	Do a survey of our water system	Prepare as-built plans of H2O water system,based on the field survey.	0	0	с	Our water system is over 30 years old with no plans or survey ever done. We need to survey the existing H2O water lines that go threw private as well as county property to serve our customers. The construction of H2O water system did not include a trace wire following the lines so they could be easily found.	75,000	22	60 06	San Luis Obispo	IV	2011
4023 4000741	4000741-004	H2O, INC	Replace water storage tanks	Remove two old tanks and replace them with new ones.	0	0	С	Our two storage tanks are old and need to be replaced. Due to the type of fill system we have we run low of water at peak demand times. Our system feeds 30 parcels. The two tanks are subject to failure because of their age, which would put the entire community out of water	400,000	22	60 06	San Luis Obispo	IV	2011
4024 4000741	4000741-003	H2O, INC	Up grade all existing water meters	Replace all the existing meters at H2o Inc. with new gallon reading water meters	0	0	с	The current water meters are from 10 to 30 plus years old they leak, they are hard to read and are not accurate.	50,000	22	60 06	San Luis Obispo	IV	2011
4025 4000741	4000741-005	H2O, INC	Install new fire Hydrants at 7 locations on new main line	: Install seven new fire hydrants to upgrade our existing system.	0	0	с	We have only three fire hydrants serving our community. We need to up grade to at least seven on the new line. To provide adequate coverage for all of our community.	72,000	22	60 06	San Luis Obispo	IV	2011
4026 4000741	4000741-007	H2O, INC	Back up generator for well	Install a propane back up generator at our well head.	0	0	С	We do not have an alternate power source at our wells in case of a major disaster or a power failure.	15,000	22	60 06	San Luis Obispo	IV	2011

4027 0707501	0707501-001	ANGLER S RANCH #3	Submersible well pump and water storage improvement	Increase water pressure Increase storage capability Encourage conservation by installing meters Improves water pressure by use of submersible pump Increases storage by adding storage tanks Installing meters to charge by volumn of water used	0	0	С	Low water pressure Lack of storage Need for meters to encourage conservation of water	78,800	30	60 04	Contra Costa	ΙΙ	2007
4028 1400066	1400066-002	Aspendell Mutual Water Company	Aspendell culdesac drain valves	This project involves digging out the end of the water lines on each cul de sac and installing a drain valve. Primary equipment needed would be a backhoe.	0	0	C	The community of Aspendell is in the Eastern High Sierra Mountains at an elevation of 8500 feet surrounded by National Forest. In past years almost half of the homes were occupied by full time residents using water on a daily basis. Mpre recently, the homes have been purchased by part time vocationers. As a result, we have three cul de sacs that have no full time residents and with no way to drain the lines. The water sits in the lines for months at a time. The Inyo Coounty Health Department has written this up as a deficiency on the last two inspections. We would like help on installing drains at the end of these three lines.	10,000	92	60 13	Inyo	v	2007
4029 3900569	3900569-001	EL RIO MOBILE HOME PARK		DRILL WELL, INSTALL PUMP, MAINS AND PRESSURE	0	0	С	SYSTEM WANTS A SECOND WELL PRESSURE TANK AND	40,000	28	60 10	San Joaquin	ш	1998
4030 2702256	2702256-001	NORTH SHORE ESTATES WS	Source capacity project	Drill new well or equip existing well with new pump	0	0	С	Water outages and pressure problems. Only one well, and water table appears to be dropping.	75,000	33	60 05	Monterey	Ш	2003
4031 3600345	3600345-002	West End Mutual (Willow Wells)	West End Mutual Water grant funding Sept. '08	Our secondary well which is a sealed well, and works in tandem with our primary well, was installed in 1958 as was everything that goes with it (pump, etc.). While we do have another well we need to have 2 working wells in good repair to service our customer base. Additionally, our tanks were installed, at our cost, in 1999 and are in need of internal inspection. We are planning on installing, at Geo-Monitor's request, sampl testing points (4) in our system to provide accurate and timely tests throughout the system each month. While our 1958 well seems to currently be in good working order, we are nearing the end of it's life cycle and are concerned about it's actual working condition. At the very least we need to inspect both the sealed well itsel to determine it's condition and present needs as well a inspect our tanks for any problems that may be festering there. The sample points are mandatory. However this is the least expensive of our concerns. Back in 2007 we had a leak near the well site which was repaired for the second time and has so far held up to the conditions here in the desert. However, this was not redone as part of the system upgrade of 1999. We already know the pipe is too thin and is in sub-standard repair. Apparently we have already put i a pre-app for a leak and our distribution system. I haw tried to research who put in the pre-app but have not yet found out who this person is. So, I am only guessin	n O e d e f s s r e g	0	C	Our secondary well which is a sealed well, and works in tandem with our primary well, was installed in 1958 as was everything that goes with it (pump, etc.). While we do have another well we need to have 2 working wells in good repair to service our customer base. Additionally, our tanks were installed, at our cost, in 1999 and are in need of internal inspection. We are planning on installing, at Geo-Monitor's request, sample testing points (4) in our system to provide accurate and timely tests throughout the system each month. While our 1958 well seems to currently be in good working order, we are nearing the end of it's life cycle and are concerned about it's actual working condition. At the very least we need to inspect both the sealed well itself to determine it's condition and present needs as well as inspect our tanks for any problems that may be festering there. The sample points are mandatory. However this is the least expensive of our concerns. Back in 2007 we had a leak near the well site which was repaired for the second time and has so far held up to the conditions here in the desert. However, this was not redone as part of the system upgrade of 1999. We already know the pipe is too thin and is in sub-standard repair. Apparently we have already put in a pre-app for a leak and our distribution system. I have tried to research who put in the pre-app but have not yet found out who this person is. So, I am only guessing	98,400	18	63 13	San Bernardino	v	2008
4032 2300743	2300743-001	Dolphin Isle Marina	Dolphin Isle Project	we will be replacing well pump. This will entail removin the roof from the pump building, pulling the old pump out and replacing it with a new pump. Then we will replace the roof of the building. I recently replaced the control panel for the pump, so it should still be good.	ng O	0	с	I am requesting funds to replace existing well pump. The one in there now was originally installed in 1962. It may fail at any moment, probably at the worst possible time.	10,000	80	65 03	Mendocino	II	2008
4033 4200822 4034 1500507	4200822-001 1500507-001	SANTA RITA WATER CO ST. CLAIR RANCHOS MUTUAL WATER CO.		Install meters at each service Have new water lines installed with new connections.	0 0	0 0	c c	Upgarde the distribution system. Deterioration of existing lines due to age	20,000 50,000	20 27	66 06 68 19	Santa Barbara Kern	IV III	1998 2004
4035 1400072	1400072-002	North Lone Pine Water District	Design and construct	fire hydrants-valves, etc. Design and construct a replacement backup well	0	0	с	Backup well has insufficient capacity and sheared casing	165,000	32	70 13	Inyo	v	2002
			replacement backup well											

4036 3700933	3700933-002	PALOMAR MOUNTAIN MUTUAL WATER C	<ol> <li>Palomar Water System Improvement, Reliability and Security Project</li> </ol>	Project will replace the old and failing remote water line with a reliable 4" line, replace old tanks with a new one doubling the storage capacity and installing a remote portable generator for reliable water supply especially in winter when wells are not accessable.	0	0	с	system is old and failing with non-standard, undersized iron lines partially exposed to mountain extreme elements. Lines and tanks are leaky and eperience frequeing failures resulting in lengthy water outages due to the fact that the line crosses remote and hard to access areas, especially in the winter snows, The well site is inaccessible in the winter except by snow mobile. It cannot meet fire demand and has no back up power.	834,973	196	70 14	San Diego	V	2009
4037 4900673	4900673-001	Athena Terrace Mutual Water Company	Replace old redwood storage tanks with concrete tanks	The two redwood storage tanks, built 40 years ago, are now surrounded by homes and yards, making access for demolition and construction very difficult. The two old tanks and their concrete pad would need to be demolished, and two new concrete tanks poured in the same location. Special small-sized demolition equipment would have to be used, and the debris hauled down a hill to a debris box. This process would take at least a few weeks to complete, and our system would have to create a temporary water source while the work is done. A temporary plastic storage tank with temporary plumbing would be necessary. The tanks would need updated electric and plumbing when completed.We are a small water system with 22 homes. The cost of this project is quite high for this small number of families.	0	0	c	Our system has two 12,000 gallon redwood storage tanks that are 40 years old. They need to be replaced. They leak, they have steel bands that are rusting through, and inlet/outlet pipes that are rusting off. The inside of the tanks get a slime on the walls. The roof of each tank is sagging down, and the redwood at the bottom of the tanks is deteriorating. I have had to increase our chlorination levels to pass the monthly water quality tests.	40,000	22	74 18	Sonoma	Π	2008
4038 1200587	1200587-002	Briceland C.S.D.	Briceland CSD Transmission Line and Storage Improvement Project	Project would require planning and feasibility studies and an engineering assessment. The project itself would require trenching and laying of suitable water line to a point on the existing distribution system. At that point a new totalizing meter and pressure reducing mechanism. Acquisition of property or permission of the property owner to install these devices may be necessary. The placement of additional storage would require a survey to identify treatment facility boundaries, engineering assessments and the construction and plumbing required to tie into existing storage.	0	0	c	During the heavy rains at the end of March 2012 our main transmission line broke on two occasions resulting in a loss of service to the entire system. The break was the result of earth movement on a steep section of land which for more than twenty years had been stable. This section of land is now suspect for future slippage and we are seeking an alternate route for our transmission line under our access road. This new route would be about half a mile in length and require the installation of a new meter and pressure reducing mechanism at the new junction with the town distribution system. At the present time we have a 260' section of above ground 3" PVC pipe to avoid the effects of earth movement. Increased storage capacity would allow us to hold hold sufficient storage in the event of storage loss or high turbidity event. Our turbidity issues have been addressed in another application.	200,000	26	75 01	Humboldt	I	2012
4039 3301528	3301528-001	OAK HAVEN ASSOCIATION	Distribution System Replacement	Replace Distribution System.	0	0	с	System was put in in 1976. Pipes and equipment are aging and deteriorated.	75,000	40	78 20	Riverside	v	2002

4040 3200509	3200509-003	Clio Public U.D.	installation of new water tank and transmission line	This project will include the installation of a new, larger (100,000 gallon) water tank to replace our current (12,000 gallon) water tank to replace our current (12,000 gallon) tank. Our currrent tank would then be used as a backup or removed from the premises. In all probability the new tank will have to be placed in a close, but different location than our present tank. Reasons are twofold. First, the new tank will most likel not fit in the current location. Second, the current tank is located next to a stream which is subject to flooding. Relocating the tank will necessitate some repiping from our main line, through our valve system and chlorinato In addition to the new tank, we are seeking funds to replace our water line from the tank to town, approximately 1.5 miles. Presently the existing line is not buried deep enough and is subject to breakage and freezing. Currently our tank and transmission lines are either on Sierra Pacific Industries or United States Forest Servive land. The existing tank easement may need to be altered to provide room for a larger tank	r O y c n y r.	0	C	Install a new 100,000 gallon tank to replace our existing 12,000 gallon tank. Including replacement of old (approx. 35 years) water transmission line from the tank to town (approx. 1.5 miles). The reasons for this are twofold. First, to supply adequate back up in case our flow is interrupted to the tank. Second, have an adequate water supply to our fire hydrants in case of a fire emergency. Our present tank does not have enough capacity to meet the fire flow obligation for the required time limit. That could result in a catastrophic loss of lives and homes if a wildfire came through our town. A new tank would most likely be placed at a different location than our present tank. The current location would not have enough space. In addition it is presently located beside a stream bed which is susceptible to flooding. Moving the tank woul necessitate some repiping. We are seeking funds for all phases of our project from planning, EIR's engineering to actual construction. We are a very small district (48 residential hookups) and our only source of income is derived from monthly water bills. We have just enough money to maintain at the present level of service. This project is not being undertaken as a result of any drinking water standard, regulation or DHS directive violation.	600,000	47	79 02	Plumas	1	2007
4041 1500550	1500550-001	WEST VALLEY MUTUAL WATER COMPANY		Working into chlorinating the system or possibly	0	0	С	Dead ends in the distribution system causing bad water	15,000	40	79 19	Kern	ш	2004
1012 5001122	5001122 001	TICO MUTUAL WATER CO		rerouting water routes to eliminate dead ends.	•		6	samples during warm summer months	50.000	20	05.00			1000
4042 5601122	0400012-007		Tank to Tower	Acquisition and installation of water meters	4 0	0	C	We currently have a storage tank that was put in 45	145.000	38	95 06 100 21	Butto	IV	2011
				to replace a failing 95 year old 65K gal tank. The 65K tank has been springing small leaks and they are appearing more rapidly lately. The tank is 24' tall. We are concerned about catastrophic failure. We look to convert the pump house to a maintenance shop. The wells that service this pump house are #1 and #4. Well 3 used to also but tested positive for fecal coliform and total coliform enough times that we had to abandon th well. This well had production of 60gpm. Well #1 is 40gpm. Well and #4 is 20gpm. Well #1 was drilled in 1965 and probably close to the end of its usable life. This well has tested positive for total coliform in the recent past. To keep this pump house in operation we will need to drill another well to replace the aging #1 well. Well #4 doesn't put out enough water at 20gpm t keep the tank full all by itself. The 95 year old tank needs replaced soon. With these things in mind we loo to replace a pump house, tank and well with a water tower and well in a high ground location. We look to build a 100' to 110' tower that will hold 30k to 40k gallons of water. With that height we would have pressure equal to what we now put out of our pressure tanks. For the new well we are looking for a well outpu minimum of 40gpm. We may have to drill two to achieve this. We would like to fence the tower with chain link fencine. This set un would our ut enertrical hills i	# d to to ok e tt			years ago. The storage tank was 40 to 50 years old when it was installed. So the tank age is 95-100 years. The tank is 68k gal running over and normally operates at a 65k capacity. This tank is fed by two wells, #1 which is over 40 years old and #4 which is 3 years old. Well #1 is 40 GPM and well #4 is 20 GPM. Well #1 tested positive for total Coliform twice in 2009, in previous years also. We expect tank failure in our future and as leaks seem to continue to appear and odd looking buckles in the metal tank we feel it will be sooner than later. When our development is fully built out, we will have 159 connections. Our terrain varies a little over 100', so we use pump houses to build that pressure. As we can either put in another tank in that location, we are pumping mostly up hill. We would like to instead use a high point of our property to drill a new well and put in a water tower. The electrical savings would be 1/2 of the current system, also being able to eliminate all the components that boost water pressure, i.e pressure tank, system pressure pumps, tank pressure pump, all the circuitry and plumbing the house has in it. We would be looking at 30-50k gallon tower and a new well. So, we would replace an old well and a very old tank and put up a new Tower which would be at least 50% but probably closer to 60% more efficient than the current numing.						
4044 0510004	0510004-003	C.C.W.D. Sheep Ranch	Sheep Ranch Pipeline	200 feet of new pipeline is required as a permanent	0	0	С	200 feet of pipeline was destroyed by a landslide.	100,000	48	100 10	Calaveras	ш	2003
4045 1500209	1500209-001	ALTA SIERRA MUTUAL WATER CO.	Project	solution. Install new storage tank and distribution pipeline.	0	0	с	Four redwood storage tanks on USDA National Forest property. Also, low water pressure due to undersized	258,000	215	100 19	Kern	ш	2001
4046 1900975	1900975-001	WHITE ROCK LAKE RV PARK		REPLACE GALVANIZED PIPES TO PLASTIC PIPES.	0	0	с	mains. OLD WATER PIPES NEED REPLACEMENT	58,000	50	100 16	Los Angeles	IV	1998

4047 3205003	3205003-001	GOLD MOUNTAIN CSD	Upper Site Storage Tank Construction	The District has set a goal fire flow of 750 gpm in addition to peak hour potable demands throughout a large part of the system. In order to meet this flow capability, constructing parallel lines or replacement of existing lines with larger diameter lines will need to occur. This, in conjunction with storage located above 5,250 feet AMSL, will provide such flows, eliminate the need for the distribution system booster pumps and provide for significant fire fighting support. The District has estimated that approximately 20,000 lineal feet of existing line will need reinforcing and seven (7) new pressure reducing stations will need to be constructed. Supervisory Control and Data Acquisition (SCADA) and FM radio telemetry will also be required. In addition, the construction of 1,000,000 gallons of storage to meet the storage requirements. This will include two new welded steel tanks, utilizing the existing welded steel tanks as emergency backup and peaking supply for the lower pressure zones. The construction of tanks at the higher elevation will increase significantly reliability of the distribution system which currently relies on a series of seven booster pump stations for the transmission as well as distribution pressures throughbout the system. The possibility of fexet marcesures dronoing helow	°	0	C	The Gold Mountain Community Service District's water system was designed and approved with predicted well water yields that were sufficient for this small community. However, currently, the two existing wells that the District owns and uses produce approximately 30 to 35 gallons per minute (gpm), though one well is currently inoperable due to an equipment failure. This diminution of flow has left the District in a difficult position. The existing summer time peak flows far exceed the production capacity of the District, presenting a declining water storage tank volume condition, which can only be overcome by pumping of the existing wells around the clock (i.e. 24/7). This, with the inability to adequately and efficiently manage water throughout the distribution system, due to the numerous (seven) pump stations, and a complete lack of a transmission system, present the operations staff with a daunting if not near impossible scenario. Typically, a water system, especially a small system, is designed to be able to manage water production, treatment and storage separate from the distribution system. For example, the water sources (i.e. wells or effluent from a water treatment plant) will pump directly via a transmission system to the storage facility. From the storage facility, which is typically a structure lorated at the bipeter leavations of the system the	1,500,000	41	100 02	Plumas	I	2007
4048 1502670	1502670-003	Fairview Water Company, LLC	Interconnection between Fairview Water Co and Stallion Springs Water system	possibility of system pressures dropping below Construction of an emergency intertie with the Stallion Springs CSD (SSCSD) consisting of about 1.5 miles of 8" pipeline, a pressure regulating station(SSCSD to Fairview) and a booster pump station (Fairview to SSCSD).	o	0	С	located at the highest elevations of the system, the Fairview Water Company LLC serves a rural community within the Cummins Valley Water basin. The water company currently has no provision for emergency source of supply in case of well system and or source of supply failure. The Water Company is proposing an emergency intertie pipeline with another local water purveyor so that the two districts can mutually supply water in an emergency. (Paul if your system intends to utilize the emergency supply intertie for contaminant mitigation you should include a section that outlines your current well contaminant issues)	400,000	84	100 19	Kern	Ш	2008
4049 2310012	2310012-002	Irish Beach Water District	New well connection lines power, source, distributio	; This project addresses source water needs for the n district that have not been otherwise available until new and successful wells were drilled and developed. The project is to connect one well to electric power and provide piping to storage and extend the watermain to connect to the source. The distance to connect is approximately 3250 feet. Trench utilities include source lines, distribution lines, power and control lines.	0	0	с	This project is to replace, in part, source water that would have been otherwise provided under a surface water permit from the Water Resources Control Board. Our existing permit was revoked and wells have been drilled and tested with adequate capacity, but need to be connected to power and water lines that will allow the water to go to storage and then in to the system.	320,000	190	106 03	Mendocino	II	2009
4050 4100512	4100512-007	LOMA MAR MUTUAL	Addition of storage capacity	Install additonal 40,000-gallon reserve storage tank	0	0	с	Need to add addition storage capacity to meet system demands, fire flow and CA Waterworks Standards	40,000	36	108 17	San Mateo	II	2006
4051 4100512	4100512-008	LOMA MAR MUTUAL	Upgrade underground piping system and valves	Make upgrades to existing underground distribution systm piping and valves	0	0	с	Old (50-75 years old ) distribution system pipes with maintenance problems and exposed to potential bacteriological problems	360,000	36	108 17	San Mateo	II	2006
4052 1000018	1000018-001	EASTON ESTATES WATER COMPANY		WELL NEEDS TO BE REDEELOPED & BOWLS, BEARINGS AND SHAFT NEED RESTORATION	0	0	с	JOY ST. WELL PUMPS TOO MUCH SAND AND SEDIMENT	30,000	106	109 23	Fresno	Ш	1998
4053 5000099	5000099-001	DEL RIO EAST HOA WATER SYSTEM		THEY PROPOSE TO DRILL A NEW WELL. CITY OF MODESTO HAS PUBLIC WATER ABOUT 1000 TO 2000 FEET FROM THIS SYSTEM. THEY SHOULD CONNECT TO THE MODESTO DEL RIG SYSTEM.	0	0	С	BACK-UP WELL IS CONTAMINATED WITH DBCP IN EXCESS OF MCL	75,000	55	110 10	Stanislaus	ш	1998

and new pipeline site selection, test well(s) to confirm best location of new well, water quality testing to confirm groundwater is not under the influence of surface water, design of the disinfection system and a 1.5 mile transport pipeline to deliver water to the current distribution system, and any required environmental reviews prior to construction. The construction phase will include drilling and completing the final well, installing the required pump and booster pumps necessary to transport the water 1.5 miles, installing a pump control system, a disinfection system, a pump house structure for safety and security, and trenching and installing the 1.5 mile 6" PVC pipeline and any required air evacuation devices.			and has rising arsenic levels. Both active wells pull from the same aquifer which has a documented sustainable 5 feet per year average decrease in static water level. At the same time the source arsenic level is increasing and is approaching the MCL of 0.01 mg/L per the Primary Drinking Water Standards and now requires quarterly monitoring. The community drinking water system requires a new water source from a more reliable groundwater aquifer. The proposed new well site is located in an aquifer that is recharged by nearby Lopez Lake and periodic releases into the nearby Arroyo Grande creek.						
Sierra King Water System: PROJECT DESCRIPTION O Critical Repairs, Upgrade the existing, aged Sierra King water system to Corrections, and Expansion provide adequate water supply, storage, distribution, and fire protection to the present users on developed properties. Improve ability and efficiency of maintenance activities. Expand the system to serve anticipated needs by planned development in the subdivision. Exact equipment and priorities to accomplish this are being determined by a study now being arranged with a water-system engineer.	0	с	Infrastructure of the Sierra King water system is aged, inadequate, and breaking. It does not provide a dependable domestic water supply to existing homes, and increased demand is being made of it by new homes within the subdivision. A temporary emergency moratorium on adding homes has been instituted due to problems with the system, and a volunteer board is struggling to find solutions and funding to address several critical issues.	1,500,000	40	120 12	Tulare	Ш	2007
<ul> <li>Replace:</li> <li>The two defective, leaking, 40-year-old 10,000-gallon pressure tanks.</li> <li>Underground main valves and pipe in the paved road to allow isolation of sections for maintenance without draining the entire system.</li> <li>Three existing drains/hydrants.</li> <li>Add: <ul> <li>A well(s), as the closest neighboring system is too far away for consolidation.</li> <li>Storage tank(s).</li> <li>Hydrants for fire suppression.</li> </ul> </li> </ul>			<ul> <li>system:</li> <li>Serves 75 lots within 3 tract units in a steep area; none are commercial.</li> <li>42 developed homesites are using water; 33 are as yet undeveloped (5-6 of those are expected to request water in the immediate future (as soon as the moratorium is dropped).</li> <li>1 well pumps directly into</li> <li>2 10,000-gallon galvanized storage tanks on the same site.</li> <li>From there, a booster pump fills</li> <li>2 10,000-gallon pressure tanks, one at the well site.</li> <li>A second booster pump (20+ years old) at the well- site pressure tank (1430' elevation) distributes water to homes in the upper tracts AND fills the upper pressure tank (at 1680') via a single pipe line.</li> </ul>						
	<ul> <li>and new pipeline</li> <li>site selection, test well(s) to confirm best location of new well, water quality testing to confirm groundwater is not under the influence of surface water, design of the disinfection system and a 1.5 mile transport pipeline to deliver water to the current distribution system, and any required environmental reviews prior to construction. The construction phase will include drilling and completing the final well, installing the required pump and booster pumps necessary to transport the water 1.5 miles, installing a pump control system, a disinfection system, a pump house structure for safety and security, and trenching and installing the 1.5 mile 6<sup>°</sup> PVC pipeline and any required air evacuation devices.</li> <li>Sierra King Water System:</li> <li>PROJECT DESCRIPTION</li> <li>Upgrade the existing, aged Sierra King water system to devices.</li> <li>Sierra King Water System:</li> <li>PROJECT DESCRIPTION</li> <li>Upgrade the existing, aged Sierra King water system to and fire protection to the present users on developed properties. Improve ability and efficiency of maintenance activities. Expand the system to serve anticipated needs by planned development in the subdivision. Exact equipment and priorities to accomplish this are being determined by a study now being arranged with a water-system engineer.</li> <li>Replace:</li> <li>Nhe well(s), as the closest neighboring system is too far away for consolidation.</li> <li>Storage tank(s).</li> <li>Hydrants for fire suppression.</li> </ul>	<ul> <li>and new pipeline site selection, test well(s) to confirm best location of new well, water quality testing to confirm groundwater is not under the influence of surface water, design of the disinfection system and a 1.5 mile transport pipeline to deliver water to the current distribution system, and any required environmental reviews prior to construction. 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Exact equipment and priorities to accomplish this are being determined by a study now being arranged with a water-system engineer.       • Replace:         • Replace:       • The two defective, leaking, 40-year-old 10,000- galion pressure tanks.       • Inderground main valves and pipe in the paved road to allow isolation of sections for maintenance without draining the entire system.       • Three existing drains/hydrants.         • Add:       • Adel:       • Adel       • Aveil(s), as the closest neighboring system is to far avay for consolidation.         • Aydrants for fire suppression.       • Hydrants for fir	and new pipeline site selection, test well(s) to confirm best location of evell, water quality testing to confirm groundwater is is on under the influence of surface water, design of the disinfection system and a 1.5 mile transport pipeline to deliver water to the current distribution system, and any required environmental reviews proto to construction. 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Cast equip without casing by adving distribution, and free protection to the present tases on device properties. Incrove adving Market system engineer. Signal tases on device properties. Incrove adving Market system to subdivision. Cast equip system, adving distribution, and free protection. The device mention of adving Market system. Provide adving Market system to serve anarcine well set of a source system engineer. Signal tases and the sing market system engineer. Signal tases and the sing market system engineer. Signal tases and the sing market system to serve and free proteids and difference of a source system engineer. Signal tases and ta	and new pipeline site selection, text wells, lot controm best location of the disfinite areau level. 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4056 5200534	5200534-002	PASKENTA COMM. SERVICES DIST.	Paskenta CSD Water Treatment and Storage Improvements	The project includes preparation of a Preliminary E- ngineering Report that will identify the most cost effective solution. At this time, the anticipated solutions include the following: 1. Construction of a slow-sand filtration unit to pre-treat water from Thomas Creek during periods of elevated source water turbidity; 2. Construct a raw water conveyance pipeline from Digger Creek such that higher quality source water may be utilized during storm events. The length of such a pipeline would be approximately 3/4 mile. 3. Construct or install a packaged water treatment plant that is capable of adequately treating high turbidity source water; 4. Construct a much larger treated water storage tank such that the existing treatment plant may be shut down for the duration of the high turbidity events. The cost estimate for the project includes preliminary engineering, environmental documentation, and preparation of final plans and specifications. Also included in the cost estimate are costs associated with easement acquisition, project management, and labor compliance considerations.	0	0	C	The source water for Paskenta CSD is Thomas Creek. Treatment includes coagulation, flocculation, filtration, and disinfection. The existing treatment plant capacity is approximately 100 gpm. Treated water is stored in a 40+ year-old 250,000 gallon bolted steel tank. The system serves 67 active connections. Source water from Thomas Creek is subject to elevated turbidity levels during storm events sometimes exceeding 300 NTU. The existing water treatment plant cannot meet the turbidity standard under the Surface Water Treatment Rule when Thomas Creek is carrying storm related turbidity loads. The water treatment plant must be shut down during storm events and the system must rely on stored water to meet customer's needs. Water levels in the tank fall to dangerously low levels leaving the community without adequate fire protection and the possibility of running out of water entirely. System operators routinely struggle to adequately treat the source water by shutting down the WTP during the worst of a storm event, then reduce the flow rate through the plant during the aftermath of the storm event. The system has nearly run out of stored water on several occasions.	2,000,000	67	120 21	Tehama		2011
4057 4200891	4200891-001	BOBCAT SPRINGS MUTUAL WATER CO		replace 3000 feet of 6 inch line	0	0	C	Replace deteriorated distribution pipes	20.000	31	120.06	Santa Barbara	IV	1998
4058 4300522	4300522-004	Lake Canyon Mutual Water Company	Installation of 6-inch line i	n	0	0	C	Lower half of the water system serviced by	250,000	56	125 17	Santa Clara	II	2008
			distribution system (2008)	)				watermain, which does not meet current fire department requrements, resulting in low water pressure						
4059 2100519	2100519-003	ESTERO MUTUAL	Well 12 conditioning	Well 12 would be bailed out to remove excessive build up at bottom of well. Acid treated to help remove excess iron bacteria build up in well and rock stratum. Replacement of surface casing and installation of new pump and motor.	0	0	c	Well 12 requires conditioning and replacement of old pump and rusted surface casing to improve water supply and safty. Rusted surface casing may allow intrusion of foreign material, that could contaminate the well. Iron bacteria build up often clogs pumps and rock fractures, greatly reducing water production. The well needs to be reinstated. Scott Callow R.S. Marin County Health Department personal communication.	10,000	110	125 18	Marin	ΙΙ	2007
4060 4300522	4300522-003	Lake Canyon Mutual Water Company	replace storage tank & upgrade distribution	replace tanks; replace water mains	0	0	с	Water storage tanks failing; undersized water mains	450,000	56	125 17	Santa Clara	П	2007
4061 2700503	2700503-002	ASSISI MWC		update all the system pipes	0	0	С	replace old transite pipes in system	150,000	42	126 05	Monterey	П	2007
4062 2700503	2700503-001	ASSISI MWC	Source capacity project	Rehabiliitate or replace well to provide adequate source capacity.	0	0	С	Insufficient well production.	11,630	42	126 05	Monterey	II	1998
4063 4200837	4200837-001	RANCHO YNECITA MUTUAL WATER CO		Acid clean well and replace pump, motor etc.	0	0	С	Wells needs to be rehabilitated.	25,000	39	126 06	Santa Barbara	IV	1998
4064 4300562	4300562-001	Roseview Heights Mutual Water Company	Tank Replacement	Replace tanks and design a new system to turn on pumps when tanks need filling.	0	0	C	Tanks are old and need to be replaced. Need to design a more modern system to tell pumps when to start.	200,000	49	130 17	Santa Clara	П	2002
4065 4700542	4700542-001	Abrams Lake Mobile Estates		System replacement	0	0	С	Various water system components are old and near the end of their useful life.	50,000	86	135 01	Siskiyou	I	1998
4066 5500042	5500042-001	BELLEVIEW OAKS MUTUAL WATER CO		INSTALL 5,800 FEET OF 6 INCH DIAMETER LINE FROM THE WELLS TO THE STORAGE TANKS.	0	0	С	NO DIRECT PIPELINE EXISTS FROM THE WELLS TO THE STORAGE TANKS. NO CHLORINE CONTACT WILL BE PROVIDED IF DISINFECTION IS EVER REQUIRED.	290,000	100	140 11	Tuolumne	ш	1998
4067 3900701	3900701-001	CURRIER ESTATES WATER CORP	Currier Estates Well Project	Add treatment or replace well with elevated arsenic.	0	0	С	Elevated arsenic in well	100,000	37	148 10	San Joaquin	Ш	2007
4068 2701705	2701705-001	TASSAJARA SPRINGS WS	Tassajara Springs spring boxes replacement	Replace two spring boxes with new construction and plumbing.	0	0	с	Integrity of our two spring boxes compromised by cracks and leaks. Sedimentation is diminishing their capacity.	25,400	70	150 05	Monterey	II	2011

4069 2700766	2700766-004	STRAWBERRY RD WS #06	Replace 30+ year old Storage Tanks for Small Water System	The plan is to contract with a reputable contractor who will provide equipment, materials and labor to extend the cement foundation to accommodate at a minimum three (3) 10,000 poly storage tanks. They will drain the one 15k tank and dispose of the tank, install two of the three 10k poly storage tanks and connect to the system After completing the first phase, they will drain and remove the last 10k steel storage tank and install the remaining 10k poly storage tank. The installation of new float switch assembly and a system manager, alon with the complete connections to the existing system vill be accomplished. Backhoe service to create an access road for the crane truck and footings for the nex tank foundation extension, a disinfection cycle and bacteria analysis will also be necessary. Tank delivery, disposal of the two old steel tanks and sales tax have been built into the projected cost.	9 0 	0	c	The Strawberry Water System provides water to 27 households. Currently there are two storage tanks (one 15,000 and one 10,000 gallons). Both tanks are more than 30 years old and are aged. The tanks have developed holes that have been repaired on several occasions and due to the loss of the protective coating, have developed rust. When the Water Co-op was first formed, the water storage capacity met the standards for distribution because there was no foilage/growth and there were a few less houses. However with the growth and new fire protection standards, the Co-op suffers a lack of necessary protection due to the insignificant volume of water stored at any given time (less than 1,000 gallons per household). The Monterey County Health Department insists that the storage tanks be replaced. In fact, this has been amajor issue when the Health Department conducts their annual review of our system. Within the last four years, the Co- op has replaced both the pump and motor (twice) for the well totaling in excess of \$21,000. Taking into consideration the housing crisis as well as the high energy costs nationwide, the Co-op's reserves have been depleted.	40,000	27	150 05	Monterey	I	2008
4070 2701068	2701068-001	IVERSON & JACKS APTS WS		Install storage tanks.	0	0	с	Water system has no storage. Needs 65,000 gallons	80,000	31	150 05	Monterey	Ш	2000
4071 3301512	3301512-002	Pinyon Pimes County Water Dist	Pressure Tank Replacement	Removal and replacement of aging 10,000 gallon pressure tank with 15,000 gallon pressure tank (volume increase to help with area fire supression)	O n	0	с	storage. Current 10,000 gallon pressure tank is in need of replacement due to material fatigue	98,000	80	160 20	Riverside	v	2008
4072 2300590	2300590-001	Surfwood Mutual Water Corporation	Raw Water Storage Tank & Back-up Wells	Construction of 100K raw water tank to allow intake to be shut down. Construction of four wells to serve as backup to surface water source.	0	0	с	Creek intake subject to contamination from spills into creek from adjacent highway	150,000	121	160 03	Mendocino	Ш	2003
4073 3600400	3600400-001	Apple Valley Village MH Est		Construct filtration system	0	0	С	High calcium and magnesium	20,000	93	180 13	San Bernardino	V	1998
4074 4300560	4300560-004	Green Mountain Water Company	Development of additiona storage capacity and booster pump	development of additional storage capacity	0	0	С	development of additional storage capacity	250,000	49	190 17	Santa Clara	Ш	2003
4075 4200560	4200560-001	CA CITIES WTR SISQUOC #1		Construct new 10,000 gallon reservoir.	0	0	С	10,000 gallon reservoir is deteriorated and needs to be upgraded.	10,000	68	200 06	Santa Barbara	IV	1998
4076 5000066	5000066-001	MODESTO MOBILE HOME PARK, LLC		Connect to City of Modesto	0	0	С	Back up well does not meet nitrate and DBCP standards.	220,000	150	200 10	Stanislaus	Ш	1998
4077 2701926	2701926-001	MORO RD WS #09	Moro Road Water System #9 - tank replacement	Replacement of the 3 - 20,000 gallon tanks is required. New tanks will be placed in the same area. The existing pads will be checked to see if they need to be replaced at the same time.	O	0	с	The system has 6 storage tanks 3 -20,000 gallon tanks installed in 1979 and 3 -17,000 gallon tanks installed in 1997. The 3 - 20,000 gallon tanks have increasing shown signs of increased rusting inspite of regular painting & maintenance.	80,000	70	210 05	Monterey	II	2007
4078 4200881	4200881-001	OAK TRAIL ESTATES MUTUAL WATER		Drill and install new 100 HP pump and 12 inch well.	0	0	С	Needs to improve source capacity.	125,000	63	210 06	Santa Barbara	IV	1998
4079 0510019	0510019-001	Wallace Community Services District	Surface Water Ready Treatment Facility	This refurbishment project will consist of the following elements.a. Design a modified Water Treatment Plant that will treat surface water as well as ground water.b. Procure and install an ultra-filtration system, sized appropriate for near term needs, but expandable to meet future needs.c. Install input line from the holding lake to the treatment plant.d. Reconfigure the existing treatment system to operate in conjunction with the ultra-filtration system.e. Document the system with "a built" drawings, operations manuals and Maintenance repair manuals.	0 3 4 15- &	0	с	The District currently provides potable water service to approximately 100 residences utilizing groundwater sources. The State of California and County of Calaveras have consistently urged the District to operate from reliable surface water. While the source of surface water has not yet been obtained (two sources are within 1/2 mile of the Water Treatment Plant (WTP), the WTP can and must be re-built to treat ground water and/or surface water.	1,698,000	75	220 10	Calaveras	111	2009

4080 5601104	5601104-002	CASITAS MUTUAL WATER COMPANY	Distribution System Upgrades and Fire Hydrants	Project DescriptionThis project will replace the overall water system of the Casitas Mutual Water Company. This will include the following items:1. Replacement of 2500 linear feet 8" CL150 C-900 PVC pipe line.2. Replacement of 2500 linear feet 6" CL150 C-900 PVC pipe line.3. Replacement of eleven (11) gate values.4. Install two 75,000 gallon water storage tanks including tank plumbing, grading, site prep.5. Upgrade existing well pump, motor and controls.6. Replacing pipe to box culvert at existing crossing.8. Reconnection of eighty four (84) service connections.9. Installing ten (10) wet barrel fire hydrants.WITHIN THE LAST FIVE YEARS, THIS COMMUNITY WAS DEVASTATED BY A MAJOR FLOOD. DUE TO THIS FLOOD, SEVERAL OF THE SEPTIC SYSTEMS WERE RENDERED USELESS. HOME OWNERS WITHIN THE CASITAS MUTUAL WATER COMPANY CHOSE TO INSTALL A MAIN SEWER LINE AND INSTALL INDIVIDUAL SEWER LINES ON THEIR OWN PROPERTIES. THIS WAS A VOLUNTARY ACTION AT THEIR OWN COST TO PROTECT OUR AQUAFIR.	O f N	0	C	The water system problems that this project is intended to address are as follows:1. This project is intended to upgrade the existing system to provide sufficient volume & pressure so that we can install fire hydrants for fire protection that will be used by the fire department in emergencies. At this time, we are not in compliance with current fire department requirements because we have no fire hydrants to service our community. Our rural community interfaces with wild lands and open space and poses an extreme wild fire danger. We have no fire hydrants.2. This project will alleviate the problem of insufficient volume and water pressure for the homes that Casitas Mutual Water Company services. Eleven of the 84 homes are using a two inch main line and are located at a higher elevation than our pump station. To correct this problem we would need to upgrade to a six inch main with two 75,000 gallon storage tanks, which would be located on property within our water company. The two tanks will be located at a higher elevation so that gravity flow will eliminate the need for an additional pump station.If additional funds are available, we would like the upgrade to include solar panels at the tank storage area to offset electrical costs.	1,300,000	84	229 06	Ventura	IV	2009
4081 4200870	4200870-002	CASMALIA COMM. SERVICE DIST.	Distribution System Rehabilitation	The project will consist of distribution system repairs to replace portions of the delivery system and approximately 60 service laterals. A distribution system evaluation needs to be done to determine if the main is in serviceable condition. Costs include plan; specifications and estimates; construction; construction contingencies; and construction engineering.	o O n is	0	с	The distribution system is in dilapidated condition, leaks continuously, and breaks frequently. They have frequent water outages due to distribution system failure. There are approximately 60 water service laterals that need replacement from the main to the meter.	400,000	55	234 06	Santa Barbara	IV	2007
4082 0103041	0103041-001	Trailer Haven Mobilehome Park	Storage Tank/Pump System	New pump system for maximum water pressure and fo the fire Dept. hook up in case of emergency	or O	0	С	Storage tank is out dated and nonfunctional.	50,000	200	240 04	Alameda	II	2002
4083 3901216	3901216-001	SANTOS RANCH PWS #5-CSA #35		CONNECT TO CITY OF TRACY WATER AND BLEND. (APPEARS TO BE INTERCONNECTION, NOT CONSOLIDATION). OTHER = DESIGN AND CONSTRUCTION	0	0	С	HIGH TDS IN WELL 1	600,000	105	250 10	San Joaquin	Ш	1998
4084 1500544	1500544-001	ENOS LANE PUBLIC UTILITY DISTRICT		LOOP THE SYSTEM	0	0	с	PART OF SYSTEM HAS DEAD END WATER LINES	500,000	82	250 19	Kern	Ш	1998
4085 4900667	4900667-001	College Park Mutual Water Company		Drill new well	0	0	С	Well collapsing	100,000	70	250 18	Sonoma	П	2000
4086 5100109	5100109-001	Wildwood Mutual Water Company		Replace old lines when needed.	0	0	с	Old lines subject to cause problems any day. Some valves are frozen and thus cannon be operated.	100,000	85	255 21	Sutter	I	1998
4087 1000078	1000078-003	FCWWD #42/ALLUVIAL & FANCHER	New Water Source	Drill well, provide electrical power, obtain easements, construction design, inspections, locate well site, geological evaluation and possible destruction of contaminated source.	0	0	С	Primary water source has exceeded MCLs for nitrates. California Department of Health (local office) has directed this source be taken offline. This is a violation of Title 22 CCR 63341	150,000	24	255 23	Fresno	Ш	2008

4088 3100058	3100058-004	DUTCH FLAT MUTUAL	DFMWC - Security	This project is to provide an adequate fence and O security lighting system for the water plant and storage facilities. Currently this is the only available water source for the community so protection is very important. The water treatment plant has a 6 foot security fence surrounding it. The area which contains the 150,000 gallon storage tank does not have an adequate security fence (currently 4 strand barb wire fence and gates). Neither area has an all-weather security lighting system which will operate when the power fails ( for example - longest loss of power in 2008 - 10 days in a row). We would like to install approximately 950 linear feet of chain link fence with two gates. We would also like to install a security/emeergency lighting system for both the water treatment plant and all storage tanks.	0	c	Water security improvements needed.	34,250	94	290 02	Placer	I	2008
4089 3100058	3100058-003	DUTCH FLAT MUTUAL	Dutch Flat - Drought Contingency	O gallons per day. Summer use may be as high as 91,000 gallons per day. Summer use may be as high as 91,000 gallons/day. Approx 80% of this 71,000 gallon difference is for the irrigaion of landscaping, small gardens or small orchards or approximately 9 million gallons or 27 acre feet per year. The DFMWC drought contingency planning effort would consist of four tasks: a. Development of preliminary conservation measures for existing customers. b. Distribution of information to customers. c. Assisting customers to install high efficiency irrigation systems by subsidising the system design and installation. d. Preparation of a long term drought management plan.Installation of turbidometers. The current treated water turbidity monitoring is conducted at the clear well stage. Grap samples are collected at the other 3 in-line filters. The current turbidometer and three others to comly with turbidity monitoring compliance requirements.	0	c	A combination of monitoring (control replacement) and feasibility study - drought planing.High water demand in the summer through early fall is causing the plant to operate near peak capacity. If this increase in usage continues will need to repace non-existant/obsolete controls on the four in-line filters. Threee in-line filters have no controls at this time - the last does. We would like to reduce usage and upgrade controls to meet current requirements.	21,890	94	290 02	Placer	I	2008
4090 3110028	3110028-001	Northstar C.S.D.		Develop groundwater storage. Involves study, design O	0	С	Inadequate water supply. Need additional wells.	250,000	1,737	300 02	Placer	I	1998
4091 3110042	3110042-004	Tahoe Swiss Village Utility	Tahoe Swiss Village Utility/Tahoe Park Water- Skyland Nielsen #3110049 intertie	TSVU proposes to intertie the two water company's: O Tahoe Park Water/Skyland-Nielsen (TPSN) to the north would require obtaining an easement over United State Forest Service (USFS) land and working within a power line easement. A surveyor would have to describe and easement over approximately 1800 linear feet. The proposed infrastructures would require approximately 1800 feet of pipe with valves, one hydrant within USFS land. Additionally, there would be a 6° Cla-Valve #90-20 pressure reducing valve that would be a permanent intertie. With a 10 psi drop in pressure from either water system the automatic valve would open and allow water to flow to the failed system.	0	c	Tahoe Swiss Village Utility TSVU is in the middle of tow adjacent small water company's that each have only one source of supply for their customers.Madden Creek Water to the south and Tahoe Park Water-Skyland- Nielsen to the north. Tahoe Park Water is agreeable to TSVU applying for this preapplication and request for economic stimulas funds under this program. An intertie between these three systems would enhance the public health and safety with potentially backup sources for all three companies combined. Each of the three companies have had water outages lasting several hours to more than a day. Skyland-Nielsen has one well source of supply, one unfiltered lake source and 60,000 gallons of storage. Presently, TSUV has two groundwater sources, one unfiltered surface water source and four water tanks with a total capacity of 93,000 gallons. With the combination of these resources for potable water supply the public health and safety will benefit substantially.	396,000	378	300 02	Placer	I	2009

4092 3110043	3110043-002	Madden Creek Water Company	Madden Creek = Tahoe Swiss Village Intertie	upgrade main and connect to neighboring water co.	0	0	с	system has insufficient/no backup water supply	440,000	154	300 02	Placer	I	2009
4093 3110042	3110042-007	Tahoe Swiss Village Utility	Tahoe Swiss Village/Madden Creek DPHS#3110043	TS proposes to intertie the two water company's:Madden Creek to the south would require within TSVU's service area the installation of approximately 1000 feet of 8" pipe with valves, three hydrants, 13 new water lateral with meter pits. The proposed improvement would abandon 1000 feet of aging and problem "five leaks" 4 inch old steel main in the TSVU service area. This improvement would be installed within the county road ways. Additionally, there would be a 6" Cla-Valve #90-20 pressure reducing valve that would be a permanent intertie. With a 10 PS drop from either system the valve would open and allow water to flow to the failed system. The cost of this intertie would be approximately \$366,000.	0	0	C	Tahoe Swiss Village Utility (TSVU) is in the middle of two adjacent small water company's that each have only one source of supply for their customers. Tahoe Park Water-Skyland to the north and Madden Creek to the south. Madden Creek is agreeable to TSVU applying for this preapplication and request for economic stimulas funds under this program. An intertie between these three systems would enhance the public health and safety with potentially backup sources for all three companies combined. Each of the three companies from time to time has had to issue boil water orders, they have had water outages lasting several hours to days.Madden Creek has one well source of supply and one 100,000 gallon storage tank. Presently, TSVU has two approved and one unfiltered surface water source. For storage TSVU has four tanks with a total capacity of 933,000 gallons. With the combination of these resources for potable water supply both of the water company customers will benefit	366,000	378	300 02	Placer	I	2009
4094 3700071	3700071-002	HEAVENLY OAKS	Heavenly Oaks Well Project #4Special Funding	Drill a new well. We currently have 2 working wells. Well number 2 produces 25 gallons per minute of low quality water, high in Iron and high gross alpha. While well number 1 produces high quality of water but it only produces 11 gallons per minute. Well Number 3 (off line) is also high in UraniumThe plan is to drill Well Number 4 next to well Number 1. The new well will be much larger and we hope will produce enough water to supply the water system without relying on Well 2. If w can attain +20 gallons per minute from well 4 then we can ellimate the need for well 2.	0	0	с	The water system has had a High Gross alpha count on more than one occasion. Our moving average gross alpha for the trailing 4 quarter is above the MCL. We are currently sampling every quarter. This is a great burden on the low income residents that are serviced by the water system.	150,000	102	300 14	San Diego	V	2009
4095 4300517	4300517-001	Chemeketa Park Mutual Water Company	New large storage tank	Our current storage system capacity is about 180,000 gallons for a community of approximately 320 people. Processed water is pumped to the storage facility at the highest point in the community and distributed by gravity. The primary proposed new tank site for processed water would be proximate to Moody Creek, one of the two creeks from which we draw our raw water. The site is within several hundred feet of our existing intake dam, filter plant and pumphouse. Finished water would be pumped to this new tank. This tank's contents would then be pumped to the existing storage facility as required and distributed via our existing distribution system. The proposed tank would more than double our system storage capacity. The project will require (estimates in parentheses). EIR's (\$50K). Soils testing and engineering (\$100K). Mechanical engineering (\$250K). Road access and clearing (\$200K). Foundation (\$240K). Piping and trenching (\$100K). Tank, glass-fused steel, 200K gal, including erection (\$1.6M). Control system & alarm (\$160K). Electric drop (\$50K). Certification by DHS (\$20K). Project management (\$120K)Preliminary estimated total cost \$2.89MInitial estimate is based upon the experience of our water operator with a similar installation for Aldercroft Heights County Water District, and is subject to change.	0	0	C	Our system has insufficient primary storage capacity (~180kgal) to deal with more than one house fire at a time to protect our 143 residences. This was demonstrated by a two-alarm house fire that occurred here in January 2007, which temporarily reduced our stored volume by 35 to 50%. Maximum recovery rate for our filter plant is on the order of 70,000 gal/day; several days were required to restore us to capacity. Large winter storms may require suspension of filter plant operation and substantially increase recovery time. Summer drought conditions reduce available raw water supply, also increasing recovery time. Even under optimal supply conditions, multiple simultaneous house fires would quickly deplete our system. As a mountain community within the Urban Wildland Interface, we are vulnerable not only to individual house fires, but to ignition by wildfire. We are committed, along with sister communities in this area, to reduce our vulnerability to wildfire by reducing available fuel sources, such as dry brush and dead timber, but at this time a wildfire could easily overwhelm our current storage capacity.Our water quality is excellent and not an issue; community safety is now equated with fire protection.We have a site available for an additional large storage tank that will provide the increased capacity we require. This project would enable design, procurement and installation of this storage facility.	2,890,000	143	320 17	Santa Clara	Π	2009

4096 4300517	4300517-002	Chemeketa Park Mutual Water Company	Replace aging storage tanks	Our system serves 143 households; typical daily consumption is from 60 to 70kgal, peaking in late summer. During dry years, both voluntary and mandatory conservation have been instituted. We pump from the filter plant to our current storage facility at the high end of our community, and distribute to our members using gravity feed. Total current main storage capacity is 160kgal from 3 steel bolted tanks, one of which (40kgal) is designated a fire emergency tank; two 60kgal tanks provide daily supply. The two 60kgal tanks, which were quite used when purchased, are at the end of their service life. We believe they originally may have been painted with lead-based paint. One tank's roof has deteriorated, allowing incursion of debris and chipped paint. We plan repairs and are contemplating installation of liners as stopgap measures, but these will not suffice long-term. We must replace these tanks, but the community has already borne large expenses and daken on debt to improve and optimize our sources and our filter plant. The requested funds would replace the two worst tanks. Our request presumes that the existing pads and some of the plumbing could be retained; the new tanks would have the same capacities as those being replaced. However, no engineering studies have been performed yet.	0	0	c	Our main storage tanks are at the end of their service life and are deteriorating. One tank has a failing roof, allowing entry of debris and chipped paint. e need to replace at least two of our three primary tanks.	180,000	143	320 17	Santa Clara	U	2011
4097 1800534	1800534-002	Spaulding/Eagle Lake MWC		Add loop. Construct new mains between existing mains.	0	0	С	Lack of circulation	50,000	77	325 02	Lassen	I	2001
4098 3301879	3301879-001	Sharondale Mesa HOA	Sharondale water service Line Replacement	1" copper pipe will be installed to replace leaking 1" plastic service lines. 1" corporation stops will be installed at the distribution pipeline to do away with the unvalved connections.	0	0	с	Existing 1" plastic service lines are leaking in street creating substantial damage to street as well as loss of water. Plastic service lines need to be replaced with 1" copper pipe.	350,000	220	330 20	Riverside	v	2008
4099 3700866	3700866-001	DEL DIOS MUTUAL WATER COMPANY	Water tank, Fire hydrants and distibution	To comply with the Rancho Santa Fe Fire Protection District's laws and ordinances, the Fire Department is recommending the following:Install 4250 LF of 8" water mainInstall 4280 LF of 6" water mainInstall 16 fire hydrantsInstall a 500,000 gal welded steel tank	0	0	С	The community of Del Dios, served by the Del Dios Mutual Water Company, lost 27 homes in the Witch Creek Fire of 2007. In this fire and previous fires, the system has run out of water to fight the fires. The recommendations for the upgrading of our system come from the Rancho Santa Fe Fire Protection District that service the community of Del Dios.	2,558,513	156	330 14	San Diego	v	2009
4100 1500251	1500251-002	RIVERKERN MUTUAL WATER COMPANY	Emergency Power Generator Installation	This project involves sizing, purchasing and installing emergency electrical generation equipment with sufficient capacity to drive existing water pumps and pressure systems during power outages. Emergency power generation is a less costly alternative than acquiring additional land and installing new tanks at an elevation high enough to produce adequate water pressure during power outages.	0	0	c	Power outages currently result in no water for drinking or flushing toilets for residents in this community. Depending on cause and duration of power outages, boiling notices and corrective water treatment are sometimes required.On July 26, 2010, the town of Riverkern was encircled by the "Bull Fire", and six houses burned to the ground. Loss of power and water pressure during the fire made fire-fighting efforts more difficult. While an emergency power generator probably would not have saved more homes, it would definitely have made surviving homes livable much sooner after the fire. This project involves installing an emergency power generator of sufficient size to drive pumps and pressure systems during power outages.	20,000	102	336 19	Kern	Ш	2011

4101 5100107	5100107-006	Sutter Co. WWD#1 (Robbins)	Water Main Replacemen Project	t The Sutter County WWD#1 is responsible for providing O water service to the Community of Robbins. The water system currently operates one active ground water well, one backup ground water well and one storage tank that provides the Community's residents with potable water. Water is distributed through a system of mains ranging from 3" to 12" in diameter. The current system is comprised of approximately 4 miles of water piping and valves, and 94 lateral connections. The active ground water well incorporates treatment for iron and manganese. The system provides municipal drinking water to approximately 336 year-round residents. Robbins lacks the fiscal resources to fund the infrastructure improvements necessary to continue providing a safe, reliable water supply. The project will replace 6,800 lineal feet of aging galvanized pipe with PVC C900 to current adopted County standards. The distribution pipe size will be increased to allow better fire flow capacity. The improvements will also include the addition of thrust blocks, gate valves and fire hydrants at 500-foot spacing. The distribution line increase will not result in additional service opportunity; it is only to provide for the fire supply needs. Replacing the mains will increase flow capacity for fire protection.	0	c	Portions of the Robbins water distribution system are nearly 60 years old and nearing the end of their service life. The aging sections of the distribution system are experiencing frequent leaks, restricted flows due to increased internal scale and rust, and poor water quality resulting from iron bacteria and iron/manganese getting into the water supply. This is leading to costly repairs and many failures. Many portions of the system have dead-end lines leading to secondary water quality issues. Public safety is also a concern due to a lack of fire hydrants in some sections of the community. In many areas, existing water mains run through private property without associated easements.	1,207,500	94	336 21	Sutter	I	2011
4102 3702354	3702354-003	WARNER SPRINGS ESTATES	Warner Springs Estates/Stone Ridge Wate Distribution	Removal of 2" pipe lines and installation of 6" pipe lines O er will be done on four streets containing approximately 56 lots: Ironwood, Manzanita, Octillo and Octillo Court. This will involved digging trenches, pipe installation, appropriate replacement of valves, updating turn-off systems, engineering and a project manager, plans, permits obtained, resurfacing of effected streets, disposal of construction materials and hazardous waste, as well as other costs resulting from contracted/sub- contracted professionals. It may be possible to install a looping system on these streets; however, professional engineering and other consultations will determine the project. Providing water storage trucks during construction/installation in these areas may be necessary.	0	c	Warner Springs Estates/Stone Ridge was constructed approximate 35 years ago. At that time, present codes were not in place and four streets/areas in the communityIronwood, Manzanita, Ocotillo and Ocotillo Court-do not have adequate water line connections to individual homes. This affects approximately 56 lots out of 300. The other water line connections are 6" pipes; these four streets have 2" pipes. Should a fire occur on one of these streets and two or more fire boxes be turned on, it is predicted that the resulting drop in water pressure would prevent use of a fire hose. The four streets have a total of 12 fire boxes out of 78 installed througout the community. Each fire box is equipped with a 50' hose. Use of other community fire boxes would not be possible due to this constraint. There are three fire agencies in our immediate area: Sunshine Summit Volunteer Fire Department, located approximately 1 mile to the north; U.S. Forest Service in Oak Grove, 6 miles to the north; and CAL FIRE in Warner Springs, 8 miles south. The first responder would be the	400,000	227	340 14	San Diego	v	2007

volunteer fire department, depending on availability, which would be true of the other two agencies. It is critical that residents be able to operate their nearest

4103 2100508	2100508-001	MUIR BEACH COMMUNITY	Muir Beach CSD Upper Water Tank	Construct a new Water Tank, increasing the storage capacity to 200,000 gallons, at the same site as the existing tank. The new tank should be made of concrete.Muir Beach currently gets all of its water from a groundwater source in the valley, where it is pumped up to two water storage tanks, and is then available to residents through the distribution. The Upper Tank site is at the Muir Beach Overlook and is the highest elevation point in Muir Beach.Our storage tanks are obviously a vital part of the system. As it is right next to the ocean, and the air is always wet due to the fog, the tank must be durable enough to handle the adverse weather conditions. Moreover, since Muir Beach is near the San Andreas fault, the Water Tank must be able to withstand seismic events.	0	0	c	Muir Beach CSD currently has a 150,00 gallon Redwood Tank that is over 40 years old and is near the end of useful life.	450,000	148	350 18	Marin	Π	2009
4104 3110029	3110029-001	Alpine Springs County Water District		Replace the redwood tank with a steel tank. Involves design and construction.	0	0	с	Redwood tank that is source of contamination to the drinking water.	500,000	670	380 02	Placer	I	1998
4105 4400617	4400617-001	SUMMIT WEST MUTUAL WATER CO.		Replace existing tanks with one new, optimally located tank of adequate capacity	0	0	С	System has many poorly located small storage tanks that are aged or were damaged in 1989 earthquake.	250,000	139	400 05	Santa Cruz	II	2002
4106 2110007 4107 1300616	2110007-001 1300616-003	Coast Springs - Cal. Water Service (PUC) PALO VERDE COUNTY WATER DIST.	plant equipment storage	Replace with new reservoir. construct storage facility	0 0	0 0	C C	Old reservor leaking and corroded. equipment storage needed	100,000 20,000	255 161	400 18 410 14	Marin Imperial	II V	1998 2005
4108 2310013	2310013-002	Point Arena Water Works	Pumping Equipment, Replace the 15 HP submersible pump at Garcia River	Acquisition of 15H.P. submersible pump to operate as a backup pump should the currently installed 15H.P. submersible pump at the Garcia Well 02 (which is the only source of water for the system) fail. It would take a minimum of two to three days to have a new pump located, shipped, and installed. To be able to continually provide water service, Point Arena Water Works, Inc.	0	0	С	Replace a 15H.P. submersible pump at the Garcia River. The pump is located on a raised pad 250 feet northwest of the old existing well, which floods during the winter time. When the river floods, it is impossible to get to the pump because the field is under water. The fields flood three or four times per year. Replace water heater on fire pump.	13,700	210	465 03	Mendocino	II	2007
4109 3103835	3103835-001	LAKEVIEW HILLS COMMUNITY ASSOC		Replace water line infrastructure to 150 residents.	0	0	С	Water sytem was designed as a dual system (irrigation and domestic) due to older and leaking infrastructure domestic lines lose water pressure; therefore increasing risk of cross connection with irrigation system.	3,000,000	146	499 02	Placer	I	2002
4110 4910020	4910020-009	Sonoma County Water Agency	SCADA System Security Enhancement	The Sonoma County Water Agency (SCWA) is a wholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water system contractors. SCWA operates a Supervisory Control and Data Acquisition (SCADA) system that serves as the computer-based machine interface that controls the related mechanical and electrical assets of the water system, based on real-time feedback and pre- programmed data.The SCWA EPA-approved Vulnerability Assessment (VA) identified the SCADA system as a significant critical asset vulnerable to cyber terrorism and recommended security countermeasure improvements. The VA documented numerous existing SCADA security measures but also identified the weaknesses that increase the cyber terrorism risk to water system operation:o A router connects the SCADA LAN to the SCWA Dienses network and Internet used by more than 200 employeeso Use of short passwords and lack of password renewal systemo Remote computer equipment used to access SCADA may not always be secure This project proposes to implement water system security countermeasure improvements recommended by the VA that have not as yet been implemented:o Disconnect the SCADA LAN from the SCWA business LAN and restrict access to only those operators who are responsible for SCADA operation o	0	0	C	Water security improvements needed.	50,000	136	500 18	Sonoma	Π	2008

4111 4910020	4910020-011	Sonoma County Water Agency	New Upgraded Infra-red Motion Detection Cameras	The SCWA EPA-approved Vulnerability Assessment ( identified the need to purchase and install new upgraded infra-red motion detection cameras to significantly improve detection and delay potential threats. Early warning technology in the form of infr red motion detection cameras will assist in detecting threats more effectively, delaying or discouraging adverse intrusions, and responding rapidly and reversing the effects of adverse tactics. These upgrar cameras would be video surveillance cameras for ar of particular concern, such as the Headquarters/SCA center, vehicular access points, pump stations, resen hatches, chlorine storage, fuel storage, and other hi security areas. Cameras would use the existing SCAE connectivity to report to the SCADA Control Center.	(VA) O ra- g ded reas ADA rooir ruoir JDA	0	c	The Sonoma County Water Agency (SCWA) is a wholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water system contractors. The SCWA EPA-approved Vulnerability Assessment (VA) identified the need to purchase and install new upgraded infra-red motion detection cameras to significantly improve detection and delay potential threats. The VA reported that history has proven that terrorists can be expected to thoroughly research targets well before attacks occur and SCWA should not rely on the government alert level to predict with certainty when attacks may occur or when security measures are increased. The SCWA water system and SCADA system operate continuously. The SCADA system gathers data, monitors a multitude of process parameters, operations, and alarms, and maintains water reliability. Cameras are connected to the SCADA system contractors depend on SCWA to provide a continuous supply of potable water to serve 700,000 people. The reliability and security of the water system are critically important to SCWA's operations. Terrorism could result in intrusion and other detrimental adversarial tactics. The mechanical and electrical assets of the water system could be water system could be water serve could be brached	50,000	136	500 18	Sonoma	Ι	2009
4112 4910020	4910020-008	Sonoma County Water Agency	Emergency Mobile SCADA	The Sonoma County Water Agency (SCWA) is a wholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water syst contractors. SCWA operates a Supervisory Control a Data Acquisition (SCADA) system that serves as the computer-based machine interface that controls the	O e and e	0	С	Water security improvements needed.	150,000	136	500 18	Sonoma	II	2008

related mechanical and electrical assets of the water system, based on real-time feedback and preprogrammed data. The SCWA EPA-approved Vulnerability Assessment (VA) identified power and the SCADA system as the most significant critical assets to water system security. The VA found these assets vulnerable to terrorism and adversarial tactics and recommended security countermeasure improvements. This project proposes to implement one of the recommended improvements that has not yet been implemented.SCWA has the ability to operate its system from the operations center and main administration building. There are redundant power supplies (generators) and protections against power surges (uninterrupted power supplies). However, the VA indicated that in the event SCWA's operations center became nonfunctional, radio communications to its main administration building would not likely be maintained. Global processing, remote control, and

monitoring of system activity would be compromised by

4113 4910020	4910020-007	Sonoma County Water Agency	New Upgraded Infra-red Motion Detection Camera	The Sonoma County Water Agency (SCWA) is a swholesale potable water provider to 700,000 people (including transients and tourists) in two counties (Sonoma and Marin) through nine public water system contractors. The SCWA EPA-approved Vulnerability Assessment (VA) identified the need to purchase and install new upgraded infra-red motion detection cameras to significantly improve detection and delay potential threats. These upgraded cameras would be video surveillance cameras for areas of particular concern, such as the Headquarters/SCADA center, vehicular access points, pump stations, reservoir hatches, chlorine storage, fuel storage, and other high security areas. Cameras would use the existing SCADA connectivity to report to the SCADA Control Center. The VA reported that history has proven that terrorists can be expected to thoroughly research targets well before attacks occur and SCWA should not rely on the government alert level to predict with certainty when attacks may occur or when security measures are increased. Early warning technology in the form of infr red motion detection cameras will assist in detecting threats more effectively, delaying or discouraging adverse intrusions, and responding rapidly and reversing the effects of adverse tactics. The SCWA wate system and SCADA system operate continuously. The	o a.	0	c	Water security improvements needed.	50,000	136	500 18	Sonoma	U	2008
4114 3110019 4115 2800521 4116 4810010	3110019-003 2800521-002 4810010-002	Squaw Valley Mutual Water Comp CIRCLE WATER DISTRICT SID - Gibson Canyon	Bascherini Reservoir Concrete Bottom Lining- Phase 2 (No. G.1.a)	SCADA system gathers data, monitors a multitude of Replace old well with new one. Storage Tank & Pump Station This project will first remove the deteriorated existing tar bottom liner and aquatic vegetation. Next equipment will be used to re-grade the bottom and remove the excess earth spoils. Fiber reinforced concrete will be pneumatically placed over a 40 mil. high density polyethylene geomembrane. Concrete lining the bottom would not only reduce the seepage losses, it would reduce the aquatic growth and thereby reduce the THM potential in the distribution system. This would maximize the water source for the District's current and future potable water customers. Due to its depth, large size and time restriction, this is a very labo intensive project.	O O O	0 0 0	c c c	Old wells. Needs additional wells. Storage tank in poor condition Surface water from the Putah South Canal is pumped from the Eldredge Pumping Plant to this reservoir on its way to serve Gibson Canyon, Pleasants Valley and the Uhl Lateral. It has a surface area of 2.2 acres and a capacity of 21.1 acre feet of water. In 1992 the reservoir was manually cleaned and the sides were concrete lined with fiber reinforced shotcrete. Concrete lining the bottom would not only reduce the seepage losses, it would reduce the aquatic growth and thereby reduce the THM potential in the distribution system. This would maximize the water source for the District's current and future potable water customers. Due to its depth, large size and time restriction, this is a very labor intensive project.	300,000 400,000 2,000,000	263 190 159	500 02 500 03 518 04	Placer Napa Solano	1 11 11	1998 2000 2009
4117 3400172	3400172-002	TOKAY PARK WATER CO	Pipelines	Replace piples and valves.	0	0	с	Pipes are too old and cause emergency, costly repairs.	950,000	190	525 09	Sacramento	I	2002

4118 3600260	3600260-004	Smiley Park Country Club	Smiley Park Corrosivity Treatment System	A recommended treatment to reduce corrosivity is an aeration system which allows dissolved CO2 to be released resulting in raising the pH and, hence, reducing the corrosivity. An aeration system is preferred over treatment system that add chemicals to the water because there is little maintenance required by an aeration system. Chemical addition relies on precision, testing, and repeatability of chemical feed systems. Smiley Park Water System has only a part-time employee to handle maintenance. Each well requires a separate aeration treatment system, sized for its rate of production. We propose to install two aeration treatment systems - one for our existing well and a second for a new well which is planned to be drilled in 2008. Each unit will cost approximately \$15,000 for a well producing 20 gallons per minute.	0		C	Smiley Park Country Club is a private community in the San Bernardino Mountains near Running Springs. This is a community of 165 building sites (125 currently have water connections) in an area of 265 acres. Smiley Park maintains a private water system which is monitored by the county. We maintain our own wells, distribution system, and water quality program. Smiley Park Water System currently has only one well to serve its customers (125 connections, 300 residents). We are planning to drill an additional well within the next year if funds are available. We have monitored copper levels within the homes of our customers since 1993 as required by regulation. Beginning in 1997 and every year following with the exception of 2003 and 2004, the test results have exceed the action level (1300 micrograms/liter). The current tests for 2007 show 1800 ug/l for the 90th percentile. We have further tested the source water in Smiley Park for several years and have found the water to be moderately corrosive with a pH which is slightly acidic. To reduce the corrosivity of the water supplied to the homeowner we need to treat the source water.	30,000	106	530 13	San Bernardino	v	2007
4119 1909006	1909006-005	WEST VALLEY COUNTY WATER DISTRICT	West Valley CWD - Meter	s The proposed project is to purchase and install 250 O electronic read meters.	0	I	с	The system needs to comply with state metering requirements.	115,000	274	530 22	Los Angeles	IV	2012
4120 3600260	3600260-003	Smiley Park Country Club	Smiley Park Tank Monitoring System	We propose to install an automatic, digital tank level monitoring system which will indicate when the tank is both very low and when it is close to overflow. The digital information will be sent wirelessly to allow monitoring. In additon, during overflow, the wireless signal will automatically shu off the well pump to prevent overflow. A wired system which would require burial in a trench is not feasible due to the distance to the pump and the topology of the area (steep hills and canyons).	0		C	Smiley Park Country Club is a private community in the San Bernardino Mountains near Running Springs. This is a community of 165 building sites (125 currently have water connections) in an area of 265 acres. Smiley Park maintains a private water system which is monitored by the county. We maintain our own wells, a 100,000 gallon storage tank, distribution system, and water quality program. Smiley Park Water System currently has one well to serve its customers (125 connections, 300 residents). The well feeds a 100,000 gallon storage tank to provide gravity feed to its customers. The well is located approximately one-quarter of a mile distant from the storage tank. Currently in order to determine the level of water in the tank to maintain sufficient supplies and pressure to customers and to prevent overflow of the tank, we rely on visual inspection. When the tank is close to overflow, the well pump must be shut-down. Smiley Park Water System has only a part-time employee to handle maintenance of the system including the visual inspection of tank levels. This employee is only on site during the normal work week (Monday through Friday). We need to install an automatic tank level sensor with a remote control of the well pump when overflow conditions exist.	10,000	106	530 13	San Bernardino	V	2007

4121 3110023	3110023-005	North Tahoe PUD - Carnelian Woods	Carnelian Woods Well Building Rehabilitation	This project will reconstruct and enlarge the existing well building. The new well building will use fire resistive construction including walls, doors and roof. Standby power in the form of a self contained engine/generator set will be housed within the structure to provide continuous pumping capability in the event of commercial power loss due to fire or other natural or manmade conditions. Remote control valvin operated over the District's radio based Supervisory Control and Data Acquisition (SCADA) system will be provided in order to allow operator intervention during a disaster without placing operating personnel at risk. The building will also be designed for emergency use or future regulatory requirements to chlorinate this source. Process control and monitoring equipment for disinfection capability will be included in the SCADA system.	O g s	0	c	The Carnelian water system consisting of 407 connections is reliant on a single well source. This well, constructed in 1971, is housed in a wood framed structure which is in a location vulnerable to wildland fire. The service area has limited backup water supply from an adjacent privately owned water system in the event of loss of the well. In the event of catastrophic wildfire the availability of a backup supply cannot be relied upon.	269,250	273	600 02	Placer	1	2008
4122 3810001	3810001-018	San Francisco Regional Water System		CONSTRUCT AN ENTIRE NEW INFRASTRUCTURE OF 8", 12", AND 16" DUCTILE IRON MAINS IN A PHASED PROGRAM CONSISTENT WITH PROPOSED DEVELOPMENT.	0	0	С	Hunters Point distribution system needs upgrades.	15,000,000	200	600 04	San Francisco	II	1998
4123 3810001	3810001-149	San Francisco Regional Water System		Develop and construct a "backbone" pipeline system fo	r O	0	С	Backbone Pipeline System Development	1,015,000	200	600 04	San Francisco	Ш	2002
4124 3810001	3810001-150	San Francisco Regional Water System		reliability. Replace Crystal Springs #2 pipeline	0	0	c	Crystal Springs #2 Pl replacement in City	20 000 000	200	600.04	San Francisco	ш	2002
4125 4000222	4000222-006	AVILA BEACH COMM SERVICE DIST	Valve replacement	Replace valves and distribution piping	0	0	C C	Valves don't operate due to corrosion	250.000	171	600 06	San Luis Obispo	IV	2002
4126 3810001	3810001-143	San Francisco Regional Water System		To develop a program enabling the best utilization of water from the Harry Tracy WTP. In particular, this program will address the possibilities of Hetchy and Sunol source outages or insufficient supply requiring backfeed of pennisula water to the south	0	0	c	Pennisula improvement project.	515,000	200	600 04	San Francisco	I	2002
4127 3810001	3810001-079	San Francisco Regional Water System		Replace manual valves with automated/motorized valves	0	0	с	Manual valves need to be replaced. Takes up to 8 hrs to isolate a reservoir this way. Valves are in poor condition and are over 50 years old.	3,780,000	200	600 04	San Francisco	II	1999
4128 3810001	3810001-045	San Francisco Regional Water System		Replace the plastic water mains with ductile iron piping Reconfigure some of the existing network of water mains to compartmentalize the Treasure Island system.	. 0	0	С	Treasure Island system distribution rehabilitation.	35,000,000	200	600 04	San Francisco	II	1998
4129 3810001	3810001-015	San Francisco Regional Water System		Study capacity increase, existin piping and valving arrangement which is aging and poses certain operational difficulties.	0	0	С	Need pump to pipeline to move CS water directly to HTTP.	32,000,000	200	600 04	San Francisco	II	1998
4130 3810001	3810001-107	San Francisco Regional Water System		Provide chlorine monitoring of the Hetch Hetchy aqueduct supply in the Coast Range Tunnel, storage and transmit the monitoring data to appropriate Water Supply and Treatment facilities.	O d	0	С	Indian Creek Chlorine Monitoring: Indian Creek Shaft has been identified by Water Operations as a desirable location to install chlorine monitoring capability for operational feedback when controlling the disinfecting process on the Hetch Hetchy sup.	222,000	200	600 04	San Francisco	II	1999
4131 3810001	3810001-097	San Francisco Regional Water System		Provide a concrete lining in sections of the canal to eliminate turbidity and the potential contamination of the Mocassin Reservoir. In addition, concrete repairs will be made to the Mocassin Powerhouse where errosion has occurred.	0	0	С	Grizzly Creek Canal Upgrade: lower sectio of the creek is adjacent to Mocassin Reservoir. Often during heavy periods of rain runoff into Grizzly may cause the creek to overflow and introduce storm flow into Mocassin. Serious turbidity problems.	1,160,000	200	600 04	San Francisco	Ι	1999
4132 3810001	3810001-007	San Francisco Regional Water System		Replace BDPL # 1 with new welded steel pipe from	0	0	С	Replace BD pipeline #1 from Irvington.	225,000,000	200	600 04	San Francisco	Ш	1998
4133 3810001	3810001-023	San Francisco Regional Water System		Irvington Portal to Pulgas Portal. REPAIR AND REPLACE EXISTING DOORS, TUNNEL AND	0	0	с	Tunnel access audits inadequate for regular access.	9,980,000	200	600 04	San Francisco	Ш	1998
4134 3810001	3810001-133	San Francisco Regional Water System		ACCESS RUADS. Add new parallel pipeline from the Crystal Springs Bypass Tunnel in the south to the Crystal Springs Road	0	0	с	Crystall Springs Bypass Line	20,000,000	200	600 04	San Francisco	Ш	2002
4135 3810001	3810001-137	San Francisco Regional Water System		in the north, Construct a new paralell San Joaquin pipeline. Will also include development and evaluation of alternative projects, field investigations. Etc	0	0	С	San Joaquin Pipelines. Unreliable experiencing sudden ruptures, flooding, leaks and service outages.	20,000,000	200	600 04	San Francisco	II	2002

4136 3810001	3810001-004	San Francisco Regional Water System	Provide cleaning of exposed reinforcing steel and patching of concrete where needed.	0	0	С	BD pipeline needs repair.	1,368,000	200	600 04	San Francisco	Ш	1998
4137 3810001	3810001-109	San Francisco Regional Water System	Provide Baden Pump Station with standby power, seismic retrofit, fire protection and security access.	0	0	С	Replacement of valves on the manifold and transmission line piping in the Baden Pump Station vard.	7,995,000	200	600 04	San Francisco	II	1999
4138 3810001	3810001-005	San Francisco Regional Water System	Remove existing deteriorated coal tar/mortar coating and apply new protective coating. Repair leaky expansion joints.	0	0	с	BD pipeline lining needs repair/replacement.	350,000	200	600 04	San Francisco	II	1998
4139 3810001	3810001-164	San Francisco Regional Water System	Extend the Noe Valley pipeline to serve low pressure zones.	0	0	С	Noe Valley Transmission Main Phase 2	7,837,740	200	600 04	San Francisco	Ш	2002
4140 3810001	3810001-082	San Francisco Regional Water System	Construct about 4500 LF of 84 inch steel pipeline adjacent to existing prestressed pipeline. Addition of this line will allow WD additional operational felxibility.	0	0	с	84" Steel Crystal Springs Bypass PL at Polhemus: this project is to provide additional operational flexibility.	4,025,000	200	600 04	San Francisco	II	1999
4141 3810001	3810001-135	San Francisco Regional Water System	Seismically strengthen the reservoirs, also water qualit improvements (sampling and disinfection), erosion control, drainage concrete repair venting and liners or coatings and cleanup of the reservoir beds.	уO	0	С	Iniversity Mound Reservoir-Seismic Upgrade/Rehab	20,000,000	200	600 04	San Francisco	Ш	2002
4142 3810001	3810001-008	San Francisco Regional Water System	Build a fifth pipeline in existing city right of way from Irvington Portal to Pulgas Tunnel. Perform study of pipeline route.	0	0	с	Add fifth BD pipeline to meet maximum demand.	195,000,000	200	600 04	San Francisco	II	1998
4143 3910018	3910018-001	San Joaquin River Club Inc	TAKE SURFACE WATER FROM SAN JOAQUIN RIVER AND TREAT WITH SURFACE WATER TREATMENT PLANT. OTHER = DESIGN AND CONSTURCTION	0 0	0	с	EXTREMELY HIGH TDS WATER.	750,000	400	600 10	San Joaquin	Ш	1998
4144 3810001	3810001-132	San Francisco Regional Water System	Lake Merced emergency treatment study.	0	0	С	Lake Merced Emergency Supply Improvements	154,500	200	600 04	San Francisco	Ш	2002
4145 3810001	3810001-130	San Francisco Regional Water System	Design and construction of a new reservoir to serve the northeastern part of the city.	e 0	0	с	Northwest Reservoir	913,341	200	600 04	San Francisco	Ш	2002
4146 3810001	3810001-050	San Francisco Regional Water System	Thoroughly analyze the performance of the plant to identify unit processes which limits the plant's capabili for extended periods of time.	O ty	0	С	Harry Tracy WTP unit processes dificiencies to operate at design capacity.	27,000,000	200	600 04	San Francisco	II	1998
4147 3810001	3810001-104	San Francisco Regional Water System	Will address obvious seismic hazards at San Antonio Pump Station. Improvements will include suspended tanks and duct work, retrofit of pump switchgear, generator and compressor anchorages ans installation of flexible couplings.	0	0	С	Seismic hazards at San Antoinio Pump stations to tanks, retaining walls, building, and other structures.	2,000,000	200	600 04	San Francisco	II	1999
4148 3810001	3810001-102	San Francisco Regional Water System	The facility will be constructed according to the construction documents.	0	0	С	Chloirne Station Refurbishment: Currently, there are twelve City chlorination stations that have various levels of operation and control capabilities ans safety provisions. This project includes a needs assesment and providing recomm. For improv.	650,000	200	600 04	San Francisco	II	1999
4149 3810001	3810001-129	San Francisco Regional Water System	Development of an emergency response plan for majo seismic events.	r O	0	С	Pipeline repair plan and readiness improvement.	3,607,574	200	600 04	San Francisco	Ш	2002
4150 3810001	3810001-154	San Francisco Regional Water System	Pipeline rehabilitate Mountain Tunnel	0	0	С	Mountain Tunnel Repairs	2,060,000	200	600 04	San Francisco	Ш	2002
4151 3810001	3810001-085	San Francisco Regional Water System	Upgrades covered in this project are: roof repair, expansion joint replacement, painting coating paving, and tank replacement. This project will lead to improvements in water quality operations and emergency operation benefits.	0	0	С	Seismic Protection on City Reservoirs:completing site surveys, and internal inspections for all in-city reservoirs and tank facilities. Seismic, corrosion, and other areas that failure might occur.	47,977,000	200	600 04	San Francisco	II	1999
4152 3810001	3810001-101	San Francisco Regional Water System	Conduct a study to define criteria for chemical types, doses, methods of addition and site selection. Construction drawings and specifications will be developed from these recommendations. The facility will then be built according to these drawings	0	0	С	Caustic Soda -Fluoride Chemical: Construction of a chemical feed station is necessary in order to optimize corrosion control and to provide a consistent fluoride residual in the treated water that is delivered to the City of San Francisco.	1,000,000	200	600 04	San Francisco	II	1999
4153 3810001	3810001-099	San Francisco Regional Water System	Replace those pipes that are in corroded condition.	0	0	с	Replace mound pipe: Pipes are supported on concrete saddle, but have no anchorage against movement potentially caused by a large earthquake.	1,551,846	200	600 04	San Francisco	II	1999
4154 3810001	3810001-139	San Francisco Regional Water System	Enhance system reliability in the event of disruption to Hetch Hetchy and Sunol Water supplies. The project requires analysis of the Capuchino valve lot to identify necessary improvements for backfeed capability of up to 80 mgd. Project also includes se	0	0	с	Capuchino Valve Lot Capacity improvements.	1,345,339	200	600 04	San Francisco	II	2002

4155 3810001	3810001-022	San Francisco Regional Water System	INVESTIGATE EXISTING SYSTEM AND DEVELOP LISTING OF MOST VIABLE CANDIDATES FOR MORTAR LINING. REPLACE, REPAIR, AND RELINE OF THE MORTAR AND FEEDER MAINS.	0	0	с	Large mortar lined pipes very old.	540,000	200	600 04	San Francisco	II	1998
4156 3810001	3810001-163	San Francisco Regional Water System	Rehabilitate Lake Merced pump station.	0	0	С	Lake Merced Pump Station essential upgrade.	20,000,000	200	600 04	San Francisco	П	2002
4157 3810001	3810001-026	San Francisco Regional Water System	DETERMINE NEED FOR MODIFICATIONS TO THE INLET/OUTLET PIPING TO ASSURE ADEQUATE MIXING TO ALLEVIATE WATER QUALITY PROBLEMS AND TO ENHANCE OPERATION AT EACH RESERVOIR.	0	0	с	Reservoir inlet/outlet close to each other.	10,000,000	200	600 04	San Francisco	II	1998
4158 3810001	3810001-145	San Francisco Regional Water System	Increase hydraulic capacity of raw water facilitied for Harry Tracy WTP for system reliability.	0	0	с	Crystal Springs PS and CS - SAPL Capacity	20,000,000	200	600 04	San Francisco	Ш	2002
4159 3810001	3810001-100	San Francisco Regional Water System	Develop a facilities master plan to implement new water supplies in the SFPUC delivery system, and to integrate the facilities plan with ongoing SFPUC capital planning efforts.	0	0	с	SFPUC and BAWUA are cooperatively developing the WSMP to provide customers of the SFPUC water system with alternative water supply and demand management options that meet future water needs, and a framework for joint decision-making.	1,500,000	200	600 04	San Francisco	II	1999
4160 3810001	3810001-064	San Francisco Regional Water System	Design improvements at Tesla Portal and Thomas Shaft (back-up chlorination station) to provide reliable treatment of Hetch Hetchy Water in accordance with SDWA regulations.	0	0	с	Improve and provide back-up for chlorination.	1,130,000	200	600 04	San Francisco	II	1998
4161 3810001	3810001-127	San Francisco Regional Water System	Seismic upgrades, and the replacement of approximately 275 feet each of existing pipelines. Install shutoff and bypass valves at both ends of the fault zone.	0	0	С	Seismic upgrade of BDPL's at Hayward Fault (control #128)	20,000,000	200	600 04	San Francisco	II	2002
4162 3810001	3810001-148	San Francisco Regional Water System	Rehabilitate Merced Manor Reservoir.	0	0	с	Merced Manor Reservoir - Seismic upgrade and Rehabilitation.	5,791,775	200	600 04	San Francisco	Ш	2002
4163 3810001	3810001-146	San Francisco Regional Water System	Sample Station for Thomas Shaft for process control.	0	0	с	Tesla Portal & Thomas Shaft Disinfection	955,000	200	600 04	San Francisco	Ш	2002
4164 3810001	3810001-134	San Francisco Regional Water System	Bay Division pipeline improvements.	0	0	С	Bay Division Pipelines Reliability Improvements	20,000,000	200	600 04	San Francisco	П	2002
4165 3810001	3810001-128	San Francisco Regional Water System	Repair/rehabilitate Foothill Tunnel.	0	0	С	Foothill Tunnel	2,185,454	200	600 04	San Francisco	П	2002
4166 3810001	3810001-106	San Francisco Regional Water System	Replace R60 at San Pedro Valve Lot.	0	0	с	Flow through San Andreas Pipeline No.2 is controlled by a gate valve designated as R60. During shutdown of San Andreas Pipeline No.2, valve R60 leaked so badly that SAPL No. 2 had to be shut down at the Baden Pump Station isolating BPS from the sys	850,000	200	600 04	San Francisco	II	1999
4167 3810001	3810001-157	San Francisco Regional Water System	Expand Sunol W/TP capacity with new processes	0	0	C	Enlarge Sunol Treatment Canacity to 240 mgd	20,000,000	200	600.04	San Francisco	Ш	2002
4168 3810001	3810001-089	San Francisco Regional Water System	Provide the necessary facilities to support the SCADA project by adding telemetry to the pump station which will be tied into the Lake Merced Pump Station . Construct a pump station to provide adequate supply to each of the In-City Reservoirs.	0	0	c	Upgrade of In-City Pump Stations to ensure system reliability. Upgrading of the switchgear, electrical system, pumps and other items. Standby emergency generators.	12,775,000	200	600 04	San Francisco		1999
4169 3810001	3810001-158	San Francisco Regional Water System	Seismic upgrade work and other structural and general rehabilitation at the South basin of the Sunset Reservoi	0 r	0	С	Sunset Souuth Reservoir - Seismic Upgrade & Rehab.	20,000,000	200	600 04	San Francisco	Ш	2002
4170 3810001	3810001-098	San Francisco Regional Water System	Repair and replace the existing transmission main lines and bypass valves.	0	0	с	Irvington Portal Valve Actuation: Transmission main line and bypass valves are old and deteriorated. The BDPL's cross the Hayward Fault. Rupture of these pipelines @ these locations could cause significant flooding.	715,000	200	600 04	San Francisco	II	1999
4171 3810001	3810001-166	San Francisco Regional Water System	Replace Richmond District supply main.	0	0	С	Fulton $\overset{\sim}{ ext{@}}$ Sixth Ave. 30 inch steel Main Replacement	3,129,061	200	600 04	San Francisco	Ш	2002
4172 3810001	3810001-095	San Francisco Regional Water System	Address the need to design and construct water quality improvements will allow for the unimpeded operation of Moccasin Reservoir as a balancing forebay for the Foothill Tunnel. Detail design for Cherry Rock Trap Cleaning.	0	0	с	Moccasin Reservoir Dredging: water quality improvement needed.	2,293,939	200	600 04	San Francisco	II	1999

4173 4500210	4500210-002	LASSEN PINES MUTUAL WATER CO	LPMWC Emergency Generator Replacement/Installation	The project will entail the placement of a new 85KW- 100KW, 3 or 4-tier generator and automatic transfer switch in an existing block building built with LPMWC funds for that purposeexcept that part of the cost of installing will entail the installation of a roll-garage-type door to place, and later to access the generator. The primary cost is the cost of the generator and automatic transfer switch (roughly \$55,000). The hook-up costs are expected to be roughly \$30,000, including necessar permits and compliance costs. The remaining \$5,000 is needed for demolition and removal of the existing generator, wiring and outdoor facility in which it is now housed.	O e ry s	0	C	Lassen Pines Mutual Water Co. (LPMWC) is dependent upon a WWII surplus generator to provide emergency power to the three (3) pumps used to retrieve water from the company's three wells during PG&E power outages.LPMWC is located at 4,200 ft elevation in eastern Shasta County and experiences frequent weather related power outages each winteralong with fire and other outages during the summer season.The current generator is frequently breaking down and parts for this vintage generator are very difficult to find, and are costly when they are found. During the past winter, the generator was broken down for approximately three and a half months, during which time LPMWC was required to rent a backup generator for emergenciesalso very costly. Without generator backup, LPMWC would be unable to provide water to the 500 or so residents of the LPMWC service area. So far, however, with patchwork fixes and backup generator rentals, the Company has never been in that situation. Being an hour (in good weather) from the closest main city (Redding) capabile of providing emergency backup generating capability, it is, under the current circumstances, only a matter of time, however.	90,000	155	600 02	Shasta	I	2011
4174 3810001	3810001-159	San Francisco Regional Water System		Replace mains between Stanford Heights and Twin Peaks.	0	0	с	Feeder Main Stanford Heights/Twin Peaks.	3,654,530	200	600 04	San Francisco	II	2002
4175 3810001	3810001-066	San Francisco Regional Water System		Obtain property for the new reservoir; Construct new 500,000 gallon reservoir including all necessary connection piping and ancillary facilities.	0	0	С	Need additional storage in Bernal Heights.	4,060,000	200	600 04	San Francisco	II	1998
4176 3810001	3810001-162	San Francisco Regional Water System		Construction of a new treated water storage reservoir (Balboa).	0	0	С	Balboa Reservoir and Related Facilities.	20,000,000	200	600 04	San Francisco	II	2002
4177 3810001	3810001-086	San Francisco Regional Water System		This project involves conceptual engineering hydraulic modeling, physical modeling, detail design and construction.	0	0	С	Improvement of reservoir inlets must be connected to both basins of Sutro Reservoir to provide for maximum circulation.	14,230,000	200	600 04	San Francisco	II	1999
4178 3810001	3810001-168	San Francisco Regional Water System		Redundant transmission pipeline for the Sunset Zone into CCSF	0	0	С	Lincoln Way Transmission Line.	9,887,876	200	600 04	San Francisco	Ш	2002
4179 3810001	3810001-030	San Francisco Regional Water System		INSTALL TWO CONTROL VALVES ON EACH PIPELINE AT THE PULGAS VALVE LOT. INSTALL A BYPASS AROUND INDIVIDUAL VALVES TO REGULATE LOW FLOWS.	0	0	C	Controls inadequate at Pulgas valve lot.	775,000	200	600 04	San Francisco	II	1998
4180 3810001	3810001-081	San Francisco Regional Water System		The problem is in the process of being analyzed and remedial measures will be taken to reduce the risk of damage from slope failure thereby protesting the pipeline from damage.	0	0	С	Calaveras Pipeline is exposed to possible damage due to the large steep unstable slope next to the east side of pipeline. The pipeline is above grade and is exposed to possible damage from failure of the slope.	460,000	200	600 04	San Francisco	II	1999
4181 3810001	3810001-165	San Francisco Regional Water System		Extend the San Andreas Pipeline to the Sunset Reservoir.	0	0	С	San Andreas Pipeline	20,000,000	200	600 04	San Francisco	Ш	2002

4182 3810001	3810001-170	San Francisco Regional Water System	Pulgas Balancing Reservoir Structural Rehabilitation and Roof Replacement	The project consists of the seismic retrofit of the reservoir walls, installation of a new steel frame roof, and repair of concrete cracks and exposed reinforcing steels. The project scope also includes the design and installation of a new ventilation system and sampling ports, replacing utility piping, and upgrading the electrical system. Upon completion, the project will provide a structurally sound, seismic-resistant reservoir that will be in compliance with the latest California Waterworks Standards. It will also improve the water quality in the reservoir, and allows the SFPUC to better profile various water quality parameters within the reservoir.	0	0	C	Although the San Francisco Regional Water System has about 600 retail customers, it is a wholesale water system that serves a total of 2.4 million customers in the counties of Alameda, San Mateo, Santa Clara, and San Francisco. The Pulgas Balancing Reservoir is seismically vulnerable, has sanitary defects (holes in roof), and requires general rehabilitation of miscellaneous structural, mechanical, and electrical systems. During the shutdown to enable inlet/outlet construction, a general condition assessment was conducted that documented the areas of general structural deterioration on the interior of the reservoir. The project is intended to respond to the concerns described in the Engineering Report of the 2004 Drinking Water Supply Permit for the Regional System. On Page 22 of the Engineering Report, the CDPH describes that "the Pulgas Balancing Reservoir is a relatively new facility but contains numerous small holes on its roof and coliform bacteria have been periodically detected in this reservoir. The SFPUC has not corrected this deficiency because the Pulgas Balancing Reservoir is considered a critical facility and can only be removed from service for short periods when system demand is low. Nevertheless, the SFPUC should develop a plan and schedule to seal the holes on the roof of the Pulgas Balancing Reservoi" In addition, improvements to dechloramination facilities	10,000,000	200	600 04	San Francisco	Π	2009
4183 3810001	3810001-093	San Francisco Regional Water System		Construct, replace or extend feeder mains/distribution	0	0	С	Improvement in DIM in-City distribution system.	100,000,000	200	600 04	San Francisco	П	1999
4184 3810001	3810001-091	San Francisco Regional Water System		A new pump station will meet the CDD's standards for reliability and efficiency. The station will be equipped with back-up pumps, emergency power and SCADA compatability.	0	0	с	Bay Bridge Pump Station: Needs to be relocated, at present time it interferes with seismic retrofitting of the bay bridge. Also needs a new pump station.	6,830,000	200	600 04	San Francisco	II	1999
4185 3810001	3810001-136	San Francisco Regional Water System		Construct a second Crystal Springs (Pulgas) Balancing Reservoir for reliability.	0	0	С	Crystal Springs Balancing Reservoir	20,000,000	200	600 04	San Francisco	Ш	2002
4186 3810001	3810001-090	San Francisco Regional Water System		Outer reaches of Sunset zone can be eliminated, a freeboard of 10-25 feet at the Sunset Reservoir could be utilized to improve water circulation and reduce the accumulation of THM'S.	0	0	с	Upgrading of pump station.	4,250,000	200	600 04	San Francisco	II	1999
4187 3810001	3810001-039	San Francisco Regional Water System		Develop master plan. Design of SCADA system covering the high priority remote site identified in the master plan.	0	0	с	SCADA needed for system monitoring.	26,046,275	200	600 04	San Francisco	II	1998
4188 3810001	3810001-105	San Francisco Regional Water System		Replace or repair the deteriorated trestles.	0	0	с	Timer Trestle Repair: Trestles supporting the Bay Division Pipeline Nos. 1 & 2 alignment from Newark Valve House in Fremont to Ravenswood Valve House in Redwood City have deteriorated.	125,733	200	600 04	San Francisco	II	1999
4189 3810001	3810001-155	San Francisco Regional Water System		Harry Tracy WTP filter control improvements.	0	0	С	HTWTP Short-term improvements filtration	10,365,571	200	600 04	San Francisco	Ш	2002
4190 3810001	3810001-169	San Francisco Regional Water System		Study of alternative disinfectants to meet new regulations.	0	0	С	WQ Ozone/UV Treatment	20,000,000	200	600 04	San Francisco	Ш	2002
4191 3810001	3810001-088	San Francisco Regional Water System		Modify the piping and valving at the San Antonio Pump to further increase the flexibility of operations and maintenance.	0	0	с	Cross Connection: San Antonio Pump Station needs improvements to have the ability to isolate zones of the station manifold. Piping and valving modifications are also needed.	1,114,000	200	600 04	San Francisco	II	1999
4192 3810001	3810001-065	San Francisco Regional Water System		Construct improvements at Tesla Portal and thomas Shaft.	0	0	С	Need chlorination feed improvements and back-up.	9,350,000	200	600 04	San Francisco	II	1998
4193 3810001	3810001-167	San Francisco Regional Water System		New cross town transmission pipeline for the CCSF.	0	0	С	Cross Town Transmission Main	14,422,987	200	600 04	San Francisco	Ш	2002
4194 3810001	3810001-068	San Francisco Regional Water System		<ol> <li>Westside basin groundwater mgmt; 2). Lake Merced lake level mgmt; 3). Salt water intrusion monitoring; 4).</li> <li>GG Park and zoo well installation and development; 5).</li> </ol>	0	0	С	Need to develop ground water for drought contingency.	18,000,000	200	600 04	San Francisco	II	1998

West Basin water supply 6). Lobos Basin invest.

4195 3810001	3810001-080	San Francisco Regional Water System		Connect the Palo Alto Pipeline, including the Redwood City Service, to Bay Division Pipelines Nos. 1 and 2 west of valves A60 and B 60.	O	0	С	Palo Alto Pipeline Redundant Connection: the existing connection is east of valves A60 and B60 only, which limits the flexibility of the WD to repair these lines and to service the communities in the area served by these lines	641,501	200	600 04	San Francisco	II	1999
4196 3810001	3810001-027	San Francisco Regional Water System		PROVIDE REDUNDANT CONNECTION OF PALO ALTO PIPELINE, INCLUDING REDWOOD CITY SERVICE TO BAY DIVISION PIPELINES #1 AND #2.	0	0	С	Palo Alto pipeline needs redundant connection.	334,000	200	600 04	San Francisco	II	1998
4197 3810001	3810001-108	San Francisco Regional Water System		Install two throttling stations on Pipeline #2 downstream from Oakdale Portal.	0	0	с	San Joaquin PI #2, Throttling Station: To gain ability to reduce the flows in Pipeline #2 from 80 mgd to 20 mgd from the current fixed flow of 80 mgd. This capability will increase Hetch Hetchy's ability to regulate water deliveries.	1,973,000	200	600 04	San Francisco	II	1999
4198 3810001	3810001-156	San Francisco Regional Water System		Rehabilitate Sunset North Reservoir.	0	0	С	Sunset North Reservoir - Seismic Upgrades	20,000,000	200	600 04	San Francisco	Ш	2002
4199 4210022	4210022-001	Golden State Water Company - Lake Marie	Lake Marie - Vineyard Wel #6	I This small system is currently only supplied by two wells, and a third source of supply is needed for backup and to meet current and future demand.	0	0	С	This small system is currently only supplied by two wells, and a third source of supply is needed for backup and to meet current and future demand.	2,100,000	211	630 06	Santa Barbara	IV	2009
4200 4210022	4210022-002	Golden State Water Company - Lake Marie	Lake Marie - Lake Marie Well #4	This small system is currently only supplied by two wells; one of those wells has serious structural issues, such as a hole in the casing, and needs to be replaced. A new well will be drilled, equipped, and connected to the treatment and distribution system in replacement of the damaged well.	0	0	С	This small system is currently only supplied by two wells; one of those wells has serious structural issues, such as a hole in the casing, and needs to be replaced.	2,200,000	211	630 06	Santa Barbara	IV	2009
4201 3200104	3200104-004	Grizzly Lake RID-Delleker	Rehabilitate existing pipeline to bring water from Phillipini springs	What we would like to do is bring water from Phillipini springs to our district to better serve our customers. In order to do that we either need to rehabilitate or reconstruct the existing pipeline that has been out of service for at least ten years. We will also need a lift station, a redundant power source, an equalization basin, emergency disinfection equipment, flush hydrants, engineering fees, several easements through private and public land, and all.	0	0	с	We have abundant non-surface influenced water available from the existing springs. The nearest city to us has a treatment plant designed to treat Lake Davis water for their drinking water supply and we aren't connected to it. With testing and some engineering we could provide enough water from the Fillipini spring to cover future growth and fire protection.	500,000	199	657 02	Plumas	I	2011
4202 5610006	5610006-005	YERBA BUENA WATER COMPANY	New well and storage tank	2 new 250,000 gal tanks to be installed at a site within the existing ybwc easement area. 1 new well to be drilled (300-400 ft deep), including well house, operating equipment and distribution lines.	Ο	0	с	YBWC has over 240 service connections, including multi- unit housing complexes and youth camps serving up to 500 children at one time. All water is obtained from 3 wells pumping from a single aquifer. Our consultants have advised that a new 300-400 ft well located approx 600 ft west of existing wells could provide an additional source of water for this community. The storage tanks need to be replaced due to age and corrosion and the most cost effective approach is to replace and relocate tanks at a higher elevation, which will also improve water pressure throughout the community and add to fire protection. Sites for the new well and tank are available within ybwc's existing water easement.	500,000	240	690 06	Ventura	IV	2009
4203 2110001 4204 2110001	2110001-001 2110001-002	Inverness Public Utility Dist Inverness Public Utility Dist		Replace old finished water tanks. Purchase and install another microfiltration membrane package unit capable of producing an additional 50 gpn	O O n	0 0	c c	Old redwood tanks leaking. End of useful life. Treatment plants occasionally cannot meet demand.	225,000 140,000	501 501	702 18 702 18	Marin Marin	 	1998 1998
4205 3000825	3000825-001	South Midway City Mutual Water Co.	Water Productioni System Improvement Project	Finish the installation of hydro-pneumatic pressure tank; well re-hab; site security improvements (entry gate, pump enclosure and fencing); install emergency back-up power and solar power system.	0	0	С	Aged infrastructure/equipment and insufficient site security	120,000	64	717 08	Orange	v	2007

4206 3000825	3000825-002	South Midway City Mutual Water Co.	Security Improvement Project	Currently, we are seeking funds to make improvements to the "Production" side of our operation with our "Water Production Security Improvement Project". Following, is a prioritized list of improvements, including estimated costs and total: 1. Re-hab existing in-active (south) well, including new pump and motor, to bring on line as an alternate for emergency/maintenance repairs on active (north) well. \$150,000. 2. Re-hab existing active (north) well, including pull and check pump, switch over to product (water) lube from oil lube, perform any needed clean up of well, and replace 25 year old electric motor with energy efficient model. \$100,000 3. Install emergency, back-up power system, including diesel powered generator and electrical improvements. \$50,000 4. Install monitoring system (SCADA), including computer/telephone. \$25000. 5. Make site security improvements, including installation of new automatic facility entry gate, (wrought iron, track, controller, and (Knox Box), pump enclosure, and fencing. \$25,000.	0	0	c	We hope to achieve improved water production security by replacing aged infrastructure/equipment, installation of emergency back-up power system, and by making site security improvements. Unfortunately, we do not have sufficient reserve fudns to achieve this goal. In the year 2000, when the current Board of Directors took over management of the Water Co., we owed more than \$40,000 in operational costs to various agencies. Today, all operational costs are paid in full and we are building our reserve funds as rapidly as possible, but because of our aging infrastructure and inadequate reserve fund, we are seeking grant funding to make these critical improvements to maintain operational stability. To date, we have successfully applied for and received grant funding through OCHCD for our "Water Distribution System Improvement Project". The project includes design and construction of approx. 4000 In ft of 6" pvc water main with appurtenances, emergency interconnect with city of Westminster, and installation of new hydro-pneumatic pressure tank. The project approx. 75% complete and we are continuing to pursue additional grant funding from OC to complete the project.	350,000	64	717 08	Orange	V	2007
4207 1500231	1500231-001	VICTORY MUTUAL WATER COMPANY	Nitrate correction project of Victory MWC/intertie with East Nile CSD	A treatment or intertie with East Niles CSD is needed to solve the nitrate problem.	0	0	С	Victory MWC has one well with nitrate problem.	1,500,000	172	740 19	Kern	Ш	2008
4208 1610006	1610006-001	Stratford PUD	Stratford PUD	Two 50,000 gallon above ground storage tanks along with a pressure pump and a stand-by generator.	0	0	C	We recently drilled a new well due to the constant water level drop in our area, We completed the project in June of 2004. However the problem we have come across is that the well is producing a large of air along with the water. Our only source of pressure is a 30,000 gallon elavated storage tank, due to the small growth and having exhausted all of our funds in the const. of the new well we are now looking for funding for the above ground storage. With the addition of two 50,000 gallon above ground tanks i believe we can solve two of our problems. 1.) Storage for fire protection 2.) Dentention time for the air in the water to vent. With the tanks we would also need a pressure pump and stand by generator for power outages	200,000	294	837 12	Kings	11	2008
4209 5400542	5400542-004	DUCOR CSD	Well Abandonment, instal Meters, and Gate Valve Replacement	CSD proposes to replace all defective and non- functional water meters, properly abandon old north well, and replace defective gate valves	0	0	С	North well is no longer usable and must be properly abandoned. All existing meters in the community have stopped functioning and are not being read. Community needs new meters to monitor use and conserve diminishing groundwater supply. CSD also needs to replace water system gate valves.	277,500	125	850 12	Tulare	III	2009
4210 4910010	4910010-001	Sonoma County CSA 41-Fitch Mountain		Install 30,000 gal tank on an easement near the top of the mountain. Install a higher head pump at the booster station and extend the water line up to the new tank.	0	0	С	Too much air is dissolved in the water at the booster pump station.	60,000	335	900 18	Sonoma	II	1998
4211 1010042	1010042-003	MALAGA COUNTY WATER DISTRICT	SCADA	INSTALL SCADA SYSTEM. OTHER - DESIGN AND CONSTRUCTION	0	0	с	WELLS OPERATE INDEPENDENTLY AND DO NOT HAVE AVAILABLE REMOTE MONITORING OR CONTROL. POTENTIAL PROBLEMS DUE TO LOSS OF POWER OR MECHANICAL FAILURE.	100,000	472	900 11	Fresno	Ш	1998

4212 3310040	3310040-002	Fern Valley WD	Tahquitz Pines Water Project	We have a serious capacity problem that not only effects our operation, but also the agencies that we have agreed to support in the event of an emergency (CDF and the Red Cross). Our local well and system is shut down and we are currenly using city water. We need to drill a new and deeper well (ours is currently dry). We will need to drill down to at least 500-600 feet. We will also need to put in a larger water storage tank, estimated to be at least 60,000 gallons by the local fire agencies for our acreage (22 acres) and 65 buildings, which include 2 conference centers with full kitchens, bathrooms and meeting centers. We also have extra offices that can be used as a control center with wireless data networks. We will also need to install a new submersible pump in the well. We will also need to trench and install new water lines from the well to the storage tanks. We will also need to run electrical to the well pump and to the pump house that boosts the pressure of the water in the system. We need two booster pump to supply between 30-60 psi. A monitoring system needs to be put in place to monitor the level of water in the tanks, the flow of water from the pumps and the outgoing flow. Such a monitoring system must be capable of	r S	0	C	We are a not-for-profit conference center and camp at about 5600 feet elevation. The local area has been getting drier and drier over the last 5-10 years. Our current and only well is dry at 320 feet. We only have 7900 gallons of storage with 2 tanks and we cannot keep them full. We are a conference center and can have 200+ people at any given week or weekend throughout the year. At present we are drawing water from the Fern Valley Water district and they are at Stage 1 water alert. The surrounding water districts are at Stage 2. We need a deeper well and larger tank for fire control of our 65 buildings and our surrounding neighbors and to insure that we do not drain the local resources. We need a new well at about 500 feet, well pump, electrical to the well, trenching and lines run from the new well to the storage tanks (60,000 gallons at minimum), switching station to switch from our supply to support the city and visa versa, storage tanks and booster pumps to insure the correct water pressure and a backup generator in the event of a disaster and power loss. Install a monitoring and control system to monitor and store the data for all water flow and useage throughout the year. Several years ago the CDF used our facility while they remodeled their offices. During such time they cleared out all of dead trees and declared our site a Fire Safe	185,000	1,174	900 20	Riverside	V	2007
4213 1910075	1910075-008	LOS ANGELES CO WW DIST 21-KAGEL CAN	YON	REPLACE 3000 FT OF 4" DISCHARGE MAIN.	0	0	с	THE EXISTING DISCHARGE PIPELINE FROM THE DISTRICT NORTHERLY WELL (NO. 5) IS AGED, UNDERSIZED, AND IN NEED OF REPLACEMENT. THIS WELL HAS THE HIGHEST PRODUCTION, LOW NITRATE LEVEL, AND IS NECESSARY FOR SUCCESSFUL NITRATE BLENDING WITH OTHER SOURCES.	340,000	249	998 16	Los Angeles	IV	1998
4214 1910244	1910244-003	GREEN VALLEY CWD	Solar Powered Water Tank Circulator	A Solar Powered Water Tank Circulator would be installed at each of the six water storage tanks.	0	0	C	The District's water storage tank systems are designed so that the water enters and exits the tank near the bottom through the same pipeline. During periods of low water use, the water at the top of the tank is not always used. By mixing the water in the tank, stagnation should be prevented, and the residual chlorine should not be lost as fast so the chlorine usage should be lower and the chance of formation of disinfection by-products lessened. Thermal stratification should be reduced over and above the mixing effect of normal inflow and outflow. Less tank cleaning should be required because side walls and bottom is being constantly disinfection.	180,000	485	1,000 15	Los Angeles	IV	2007
4215 1910244	1910244-002	GREEN VALLEY CWD	Security Vulnerability Protection	We are a rural isolated community completely surrounded by the Angeles National Forest. All of our well locations are secured by a well house and chain lin fence. Our water storage tanks and booster pump stations are located throughout the town some in very isolated areas. Securing these areas would deter vandalism and make these are as less vulnerable to terrorist acts. The proposed fencing installation would be at three of the tank locations and at one booster pump station. The installation would be approximately a total of 2,300 lineal feet of 6' chain link with razor wire on top with a set of double gates at each site.	O k e	0	c	Security Project	77,000	485	1,000 15	Los Angeles	IV	2007

4216 1910244	1910244-006	GREEN VALLEY CWD	Nitrate Removal	In the future, to install nitrate removal units on wells that begin to have nitrate in excess of the MCL. At the present time it does not appear feasible to construct a centralized community treatment unit so "well head" treatment units would be proposed for any wells that are out of compliance. The usual method of treatment for small systems such as this is ion exchange. There is no sewer collection system for disposal of the brine developed as treatment takes place so a method for temporary storage and removal will be provided. An engineering report would be developed which would indicate a more detailed description of the necessary treatment system and its construction cost.	d	0	c	The dwelling units within the Green Valley County Water District all use on site sewage treatment and disposal units (septic systems). As all the water wells in the valley are clustered in the lower valley area, the possibility exists that the well water could experience increased levels of nitrate over the years. In fact one of the wells had an elevated level of nitrate (72 mg/l) for a short period of time. The District received a citation in 2005 for a nitrate violation. The areas available for water wells within the District are very limited due to proximity to septic systems and to the locations where producing water wells can be constructed.	400,000	485	1,000 15	Los Angeles	IV	2007
4217 1910244	1910244-005	GREEN VALLEY CWD	Additional water source – Drill alluvial well	The project involves the drilling of a test well and if successful the drilling and development of the production well. The installation of the pump, panel and pipeline to existing pipelines would follow the completion of the well. Location of the well would be on property already owned by the District. The well location would be in conformance with DHS standards, Los Angeles County standards and plumbing code requirements.	0	0	с	All the District's wells pump a total of approximately 200 gpm and deliver it into the lower zone tanks. Customer demand is furnished from the 800,000 gals of storage which are in three pressure zones. An additional well would increase the production capacity available and would allow the wells to be pumped at a lower rate to increase their life span. As well as provide backup supply in case of pump or motor failure or a problem with the temporary water quality in one or more of the wells.	110,000	485	1,000 15	Los Angeles	IV	2007
4218 4010028	4010028-001	SLO CSA NO. 16 - SHANDON	Distribution lines	Replace existing water distribution lines	0	0	С	existing distribution lines are inadequate for providing fire flows and pressures	700,000	344	1,030 06	San Luis Obispo	IV	2006
4219 4710010	4710010-002	City of Tulelake	Tulelake water system renovation	steel main line needs replacementin line valves need replacementground level tank needs renovationwater tower tank needs renovationcommunity needs emergency generator	Ο	0	с	The City of Tuelake is a low income farmworker community in the Klamath basin. The drinking water system in old with steel pipe in the distribution system and a tall water tower along with a ground level water tank requiring rehabilitation.Steel main distribution line needs to be replaced, in line main valves need replacement. Water tower and ground level water tank need renovation and the communities needs a 150kW emergency generator keep system in operation during an emergency.	305,000	484	1,058 01	Siskiyou	1	2011
4220 4510004	4510004-002	Shasta Co. Service Area #6	Plant Control Upgrade Jones Valley CSA 6	The proposed project will replace the obsolete electronic controls with a new PLC and updated software and parts to better automate plant operation. The controls upgrade will prevent excessive water waste by properly controling plant backwash cycles and correctly reading and responding to storage tank levels tank overflows are not uncommon with the existing system.	0	0	С	The Jones Valley water treatment plant has had ongoing telemetry and control problems. Some of the electronic valves are now obsolete-parts are not available for repairs. The existing software will not interface properly with the plant resulting in tank overflows, excessive backwashing of the filters, and unnecessary service calls to operate the plant manually. These problems are wasting water and money on after hours service calls.	80,000	377	1,119 02	Shasta	I	2007

4221 4710006	4710006-011	McCloud C.S.D.	Lower Elk Springhouse Rehabilitation	Identified improvements from a 2006 engineering report include the need to: Construct missing sections of the interior concrete retaining wall to keep the sprin area intact. Uncover the spring inside the building by removing dirt over the existing French drain area. Cap the spring area with support beams and concrete/steel deck. Install 3 screened air vent/overflow pipes above the concrete cap. Replace the existing 10° WS inlet pip from the Upper Elk Spring with a new 16° WS fusion- bonded epoxy coated pipe and install rubber strips underneath the pipe to prevent damage on the pipe coating by pipe supports. Replace riveted steel surge tank with a new WS fusion-bonded epoxy coated tank approximately 3.5° in diameter and 8° tall. Provide a sealed cover and install a new baffle wall inside the tank. Replace the 12° WS pipe that discharges from surge tank to concrete distribution box with a new 16° WS fusion-bonded epoxy coated pipe. Replace 10° Lower Elk Spring outlet pipe from the spring with a new 10° WS fusion-bonded epoxy coated pipe. Install a new gate valve on the pipeline. Replace existing concrete distribution box with a new weir box and connect the new Lower Elk Spring outlet pipe and 16° pipe from the distribution box to the Lower Elk Spring Pipeline with a new 24° WS fusion-bonded epoxy coated pipe. Install a new 16° WS fusion-bonded epoxy coated pipe. Install a new 16° WS fusion-bonded epoxy coated pipe.	O I e v v	0	c	The Lower Elk Springhouse, McCloud CSD's largest water supply source, has a number of deficiencies that need correction to address the potential for water contamination that can affect the Upper and Lower Elk Spring water supplies. Samples taken in 2011 by CDPH tested positive for total coliform, and a 11/10/11 CDPH letter recommended the lower Elk Springs be bypassed until a solution is in place. The emergency bypass was completed in October 2011. The appropriate long term to put this source back into service includes complete rehabilitation of the structure. A 2006 engineering study determined that the springhouse is beyond its remaining useful life, dilapidated, does not provide a secure water supply source and is accessible by rodents and other animals. The 2011 annual inspection by CDPH indicated that a significant amount of soil had eroded from the upslope side of the protective concrete dam such that the overflow pipe adjacent to the collection pipe was exposed. Pooled surface water was also partially submerging the concrete junction box. The proposed rehabilitation project will address these significant concerns and restore a safe and reliable drinking water supply for the residents of McCloud.	550,000	641	1,300 01	Siskiyou	I	2012
4222 4710006	4710006-012	McCloud C.S.D.	McCloud Water Distribution System Replacement	Installation of a new water delivery system in the northwestern corner of the District's service area which includes approximately 12,410 linear feet of 6"-12" PVC pipe, two connections into the existing Phase 2 Bypass Pipeline system, three railroad crossings and 123 public water service lines. This installation will be performed within Siskiyou County road right-of-ways with minimal easement acquisitions necessary. This installation constitutes a new infrastructure footprint since the existing, antiquated system runs helter-skelter through private properties and under residential structures. Thi installation will require open trench construction.	O h C c l is	0	C	The project is located in the northwestern section of the boundaries of the McCloud Community Services District. McCloud's company-owned mill town legacy includes deeded inheritance of approximately 12,410 linear feet of piping in this area of the water distribution system predominantly installed in the 1940s without benefit of design planning or engineering. The existing helter-skelter pipelines include mains running through now private properties since the company divested itself of ownership. Homes sit atop infrastructure. Valves are located on private properties and frequently lie under residential structures. Infrastructure was deeded to McCloud with minimal documentation to facilitate accurate location of water mains, service lines and appurtenances. Although MCSD employees have developed a map book based on the minimal documentation provided and additional field observations, it is difficult and sometimes impossible to accurately establish the location of lines or appurtenances. An inordinate amount of staff time must be spent performing open trench investigations of infrastructure prior to performing what should be minor repairs or replacements since unknown factors often cause significant, negative consequences. A 2006 engineering report identified multiple causes of concern in the distribution system including an estimated 65% water loss attributed to age, deterioration and high	4,200,000	641	1,300 01	Siskiyou	1	2012
4223 4010003	4010003-004	SAN MIGUELITO MWC		Research feasibility of local groundwater basin (hot	0	0	С	Needs to improve sources.	10,000	611	1,385 06	San Luis Obispo	IV	1998
4224 4010003	4010003-003	SAN MIGUELITO MWC		Test existing Hot Well and East Harford wells for treatability and production.	0	0	с	Needs to improve sources.	15,000	611	1,385 06	San Luis Obispo	IV	1998

4225 4910021	4910021-002	Bodega Bay Public Utility District	Bodega Bay Public Utility District Bodega Harbour High Zone Intertie	The project involves construction within the Bodega Bay public water system of an interconnection between two independent water service pressure zones within the Bodega Bay community. The independent water pressure zones are identified as Bodega Harbour North and Bodega Harbour South. Each zone is now served by a booster pump station that pumps water from a lower pressure zone to the upper pressure zone. Each zone also is served by a water storage tank placed at approximately the same elevation. Project components would include construction of approximately 2,300 feet of 8-inch diameter water main, installation of valves and accomplishing two connections to existing water mains. A portion of the project would be constructed within existing streets and the balance would be through undeveloped land. Crossing of a seasonal creek would be required with that portion of the project potentially being constructed with directional drilling methods. The project also requires crossing California State Hwy. 1. The planned construction method for crossing Hwy. 1 would be directional drilling.Preparation of an initial study is underway for the Bodega Harbour High Zone Intertie Project and adoption of a Mitigated Negative Declaration by the Board of Directors of the Bodega Bay Utility District is anticipated in June of 2009. Proposition 218 has been satisfactorily addressed for the project by edoption in November of 2008 of new fee ordinances		0	c	The town of Bodega Bay is the largest unincorporated commercial and residential center in western Sonoma County located along Highway 1, on the County's southern coast. Historically, the town was primarily a fishing village with relatively few permanent residents. The surrounding hillsides consisted largely of rangeland for sheep and cattle grazing. In recent times, Bodega Bay has evolved into a popular tourist destination with associated commercial development. In the mid-1970s, Bodega Harbour Subdivision, a major housing and golf course project was developed. Today, due to the desire to live at the coast, the town includes a broader cross-section of full and part-time residents. The Bodega Bay water system is classified as a small water system and serves residential and commercial customers. The approximate number of existing residential equivalent units (RUE) is 1900. The District is a publicly-owned utility with the Board of Directors elected by registered voters living within the District boundary. The District operates the water and wastewater facilities within Bodega Bay. Development within the District is guided by the Sonoma County Local Coastal Plan/Sonoma County General Plan and the Sonoma County Zoning Ordinance. There are two water pressure zones within the District thin appropriate pressure ranges for use by customers. The high pressure cone is further divided geographically into	480,000	1,032	1,423 18	Sonoma	1	2009
4226 5510002	5510002-003	TUD - Ponderosa	MONITORING & RELIABILITY UPGRADES (CLARIFIER AND FILTER)	UPGRADE THE PLANT, ADD ANOTHER CLARIFIER AND FILTER, AND INSTALL MONITORING EQUIPMENT.	0	0	с	THE WATER TREATMENT PLANT OPERATES AT NEAR THE 3.0 GPM/FT2 MAXIMUM FILTRATION RATE SPECIFIED IN THE SWTR. SOME OF THE PLANT'S MONITORING AND RELIABILITY FEATURES NEED TO BE UPGRADED.	470,000	611	1,461 11	Tuolumne	Ш	1998
4227 5410011	5410011-006	Springville PUD	Water Treatment Plant Scada and valve control upgrade	Replace Water treatment plant scada system programmable logic controller and electrical components with current versions and reprogram scada program to be compatible with new components are obsolete, no longer supported by manufacturer and are beginning to fail. Replace Air actuated process/backwash valve actuators and controls with electric actuators and controls	O	0	С	Water treatment plant scada system components are obsolete, no longer supported by manufacturer and are beginning to fail. Air actuated valve controls are obsolete and need to be replaced with electric controls.	175,000	369	1,500 12	Tulare	Ш	2008
4228 1910023	1910023-001	AVERYDALE MWC		Drill a replacement well.	0	0	с	Our #3 Well produces water with very fine particles of clay. Several attempts to clean up the water have failed. Both of our other two wells are over 30 years old	100,000	291	1,500 16	Los Angeles	IV	1998
4229 5410011	5410011-005	Springville PUD	Springville P.U.D water system infrastructure improvement project	Demolition and reconstruction of unrepairable treated water storage tank. Replacement and rehabilitation of distribution line between storage tank and distribution system.	0	0	с	Replace storage capacity by rebuilding abandonded storage tank and distribution line to system	5,000,000	369	1,500 12	Tulare	Ш	2008
4230 2110004	2110004-003	Stinson Beach County Wtr Dist		Construct additional treated water storage capacity	0	0	С	Minimal treated water storage capacity	250,000	721	1,500 18	Marin	П	1998
4231 5610035	5610035-003	RIO MANOR MUTUAL WATER CO	Hydrant replacement	Replace hydrants	0	0	С	Two old hydrants are corroded and need replacing due	10,000	282	1,500 06	Ventura	IV	2003
4232 1210008	1210008-008	Garberville Sanitary District	Rivercrest Mutual Water Company Consolidation	We hope to be able to hook up to Garberville Water. To do this it requires us to attach a line to a bridge and cross the Eel River.	0	0	с	We have a surface water system that we would like to improve. We do not have a boil water order. We currently have a chlorine injection system.	64,000	409	1,500 01	Humboldt	I	2009
4233 2110004	2110004-002	Stinson Beach County Wtr Dist		Storage tank coating system repairs.	0	0	С	Extensive treated water storage tank coating system failures	115,000	721	1,500 18	Marin	Ш	1998
4234 5510003	5510003-006	TUD - Tuolumne City Water System	Particle counters for	INSTALL PARTICLE COUNTERS	0	0	С	LACK OF PLANT MONITORING EQUIPMENT FOR CRYPTO	18,000	669	1,576 11	Tuolumne	Ш	1998
4235 1610007	1610007-001	Home Garden CSD	erypto monitoring	Remove rust and recoat tanks. Replace electric motor and pumps. OTHER - Design and Construction	0	0	С	Need new storage tanks	200,000	450	1,750 12	Kings	Ш	1998

4236 4710002	4710002-004	City of Dunsmuir	Dunsmuir Water System Improvement Project	Project components include design and construction. The 1994 Master Water Plan and 2010 draft Preliminary Engineering Report have identified the following problem areas:Dunsmuir Water Project Summary Estimated Cost _ Bush Street Water Main \$165,000North Dunsmuir Water Main \$360,000Willow Street Water Main \$130,000Oak Street Water Main \$64,000Blackberry Hill Water Mains \$1,130,000Prospect/Scenic/Needham Water Mains \$1,754,000 _ Total \$4,306,000Historically, the City's water supply from Mossbrae Springs has been able to supply the City's maximum hour demand (MHD), with some exceptions. On a few occasions, the Lookout Booster Pump Station lost suction pressure and the Upper Zone was out of water for 8- to 10-hour periods. The inadequate suction pressure condition at the Lookout Booster Pump Station occurred a number of times during summer 1992, which was at the end of a five-year drought. Therefore, if the spring supply was not meeting the estimated MHD of 1.55 MGD, it can be concluded that the effective supply capacity of the spring system was about 1.5 MGD during those drought conditions.According to California Department of Public Health (CDPH) Standards, the effective capacity of a spring shall be "the lowest anticipated daily yield, based on adequately supported and documented data."		0	C	The City's 1994 Master Water Plan (MWP) investigated supply, storage, distribution, and internal pumping facilities, and recommended immediate, near-term, and long-term improvements. City completed all of the recommended immediate improvements, but none of the near-term improvements. These improvements are now ten years beyond the time in which implementation was originally recommended. As such, many deficiencies, including inadequate system pressures and fire flows, currently pose health and safety risks. Approximately 34,000 feet of 4-inch to 18-inch mains in the City are 60 to 70 years old. These include the North Dunsmuir Water Main Replacements and the Downtown Water Main Replacements and the Downtown Water Main Replacement projects. The Bush Street water main is located in the same trench, and in some cases below the existing sewer main. When the water main is depressurized during leak repairs, significant public health risks exist. The Dunsmuir Avenue water main is primarily located on private property and traverses under existing large trees, landscaping, and structures rendering access for repairs difficult. The deteriorating pipeline and poor access increase the health and safety risks to the City. Currently, the Dunsmuir Elementary School is fed by the Downtown Pressure Zone, which obtains pressure	4,500,000	1,285	1,923 01	Siskiyou	1	2012
4237 1710010	1710010-007	Lower Lake County Water District	Groundwater Recharge	Cache Creek intake, microfiltration unit and recharge well.	0	0	с	Aquifer level decreasing. May soon be too low for existing Cache Creek wells to continue to be viable system sources.	2,000,000	886	2,025 03	Lake	II	2002
4238 5610058	5610058-001	CRESTVIEW MUTUAL WATER CO		Add secondary treatment of either ozone or biological filtration to remove TOC & color.	0	0	С	Main Source (deep well) has >3.0 mg/l of TOC causing high THMs and discoloration of plant product water.	600,000	630	2,100 06	Ventura	IV	1999
4239 3610048 4240 3610048	3610048-001 3610048-002	TERRACE WATER CO TERRACE WATER CO	Replace pipeline Terrace Water Company Emergency Interconnection Project	Replace pipeline Terrace Water Company is seeking support from the CDPH, Division of Drinking Water, to replace the system's emergency interconnection. Our previous connection was abandoned as a result of line upgrades by our partnering system. Therefore, for reasons beyond our control, Terrace Water Company is currently without an interconnection to service customers in an emergency. We have partnered with Riverside Highland Water Company (RHWCO) to replace this interconnection and have a signed letter of agreement from their General Manager. RHWCo has higher water pressure than Terrace Water Company, so parties have agreed that the main beneficiary of this intertie would be Terrace Water Company. If in the future RHWCo has the need for water from Terrace, a booster will be installed to overcome the pressure differences. Terrace Water Company will pay for all materials and installation, including an RP backflow prevention device and a meter, while RHWCO will provide their as-built water plans. This connection will likely occur along Rancho Avenue in the City of Colton. Terrace Water Company would like to install a 10 inch intertie with RHWCO. This construction will include hot tapping both existing lines and installing a 10-inch C900 PVC lateral from RHWCO main to the Terrace Water Company meter. Materials will include the 10-inch lateral, a 10-inch saddle type meter, a 10-inch reduced		0 0	C C	Old pipelines in need of replacement Terrace Water Company is currently without an emergency interconnection. For many years, the Company had an intertie with a neighboring system. When the system replaced lines in the area, the intertie was abandoned without notification. Without prior knowledge of the connection termination, Terrace Water Company was left without an emergency interconnection to service residents. Terrace Water Company has built a relationship with Riverside Highland Water Company, which operates within a close proximity. They have agreed to allow Terrace Water Company to establish a new interconnection with their system.	750,000	574 574	2,200 13 2,200 13	San Bernardino San Bernardino	v v	2002 2008

4241 5610015	5610015-009	VENTURA CWWD NO. 19 - SOMIS	County of Ventura Waterworks District No. 1 - Well #4 Facility Treatment	The Contractor shall furnish all materials, equipment, C 9 tools and labor for the construction of an operational facility to pump raw water at a rate of 1200 gpm from existing Well No. 4, (drilled and constructed in late 2007), and receive filtration to remove excess concentrations of Iron and Manganese, before supplying water to the 745 pressure zone and the existing 1 MG Balcom Canyon Reservoir. Work includes construction of the following: Well Pump, Booster Pump Station, Filtration System, Chemical Containment Area, Reclaimed Water Tank and Pumps, Electrical and Instrumentation, and Site Work. When completed this project will also reduce energy costs, conserve the water supply, and reduce dependence on imported State water.	2	0	C	Ventura County Waterworks District No. 19 (Distict) provides water service to the community of Somis. Well #4 was drilled in December 2007. When the well water was originally tested, it had excessive concentrations of Iron and Manganese secondary contaminants. To comply with California Department of Public Health standards, the water will require treatment prior to delivery to the system. The well is needed to provide additional local water supply for domestic needs and fire protection to the 745 pressure zone in the District.	2,500,000	775	2,266 06	Ventura	IV	2009
4242 5610015	5610015-004	VENTURA CWWD NO. 19 - SOMIS		Construct a 4,500 LF of 10-inch water line to replace C existing 8-inch CI water line.	C	0	С	Needs to replace the deteriorated distribution pipes.	297,000	775	2,266 06	Ventura	IV	1998
4243 5610015	5610015-008	VENTURA CWWD NO. 19 - SOMIS	Ventura County Waterworks District No. 1 Infrastructure Improvement	The project goal is to provide a reliable high quality Q 9 water supply in compliance with Federal and State requirements and to provide fire flow. This infrastructure improvement project in District No. 19 would implement a replacement program based on an established priority for pipeline replacement, replacing old and deteriorating waterlines in the system that have exceeded their economic life.	D	0	C	Ventura Waterworks District No. 19 (District) provides water service to domestic and agricultural customers in the Somis community and the surrounding areas. The District was established in 1981 when it assumed the ownership of the Rancho Las Posas Mutual Water Company. Many of the waterlines in the system are over 75 years old and have exceeded their economic life. Mainline breaks are occurring frequently, which results in interruptions in service and unnecessary loss of water.	12,100,000	775	2,266 06	Ventura	IV	2007
4244 5610015	5610015-006	VENTURA CWWD NO. 19 - SOMIS		Construct 2,200 LF of 8-inch water lines to replace C	D	0	с	Needs to replace inadequate size distribution pipes.	131,000	775	2,266 06	Ventura	IV	1998
4245 5610015	5610015-014	VENTURA CWWD NO. 19 - SOMIS	Ventura County Waterworks District No 1 Reservoir Safety Upgrade	<ul> <li>Existing water mess.</li> <li>This project is to install Safe-T-Climb Devices, extend</li> <li>existing ladders, provide enclosures for security and</li> <li>safety, and install/repair liquid level indicators.SolarBee</li> <li>type circulation equipment will also be installed.Once</li> <li>completed, this project will comply with all OSHA</li> <li>requirements and provide for a safer environment for</li> <li>employees, and protect the health and safety of</li> <li>customers.</li> </ul>	D	0	с	Ventura County Waterworks District No 19 (District) provides domestic water and fire Protection for the community of Somis. The District has various reservoirs that are inadequately equipped and not in compliance with OSHA regulations such as ladders with no fall arresting device, or lanyards to prevent injury from a slip or fall while climbing the reservoirs (many of them are over 30 feet tall).Stratificaiton and stagnant zones are causing loss of disinfectant residualsAlso, there are District reservoirs that do not have functioning liquid level indicators.	375,000	775	2,266 06	Ventura	IV	2009
4246 5610015	5610015-011	VENTURA CWWD NO. 19 - SOMIS	Ventura County Waterworks District No. 1 - SCADA Upgrades	The project will include the installation of SCADA C 9 hardware consisting of Remote Terminal Units, radios for data communication, antennas to transmit the data to the main SCADA control station, and pressure transmitters to read the water pressure at the station or the level of water in the reservoir. This data will be used by SCADA to control the wells, booster pump stations, and pressure reducing stations. Completion of this project will ensure a reliable source of water for District customers; this project will also reduce energy costs, help conserve water, and reduce dependence on imported State water.	2	0	C	Ventura County Waterworks District No. 19 (District), which provides water service to the community of Somis, has a Supervisory Control and Data Acquisiton (SCADA) system to monitor and control various facilites. The District's water supply comes from both imported and local sources. The District is striving to reduce its dependance on imported water, prices of which are escalating at alarming rates. In order to manage locally produced well water in a cost effective and efficient manner, it is imperative that the SCADA system be upgraded to connect facilities not currently on SCADA.	200,000	775	2,266 06	Ventura	IV	2009
4247 5610015	5610015-003	VENTURA CWWD NO. 19 - SOMIS		Construct 2,500 LF of 12-inch water line to replace C existing 6 inch CML steel water line.	C	0	С	Replace deteriorated distribution pipeline.	182,000	775	2,266 06	Ventura	IV	1998

4248 4710013	4710013-001	Lake Shastina C.S.D		Install appropriate equipment at each groundwater source that would facilitate automatic chlorination when pumps come on line.	0	0	с	Have had coliform problems in distribution system suspected to be caused by biofilms.	45,000	1,013	2,400 01	Siskiyou	I	1998
4249 1910241	1910241-001	MESA CREST WATER CO.		See attached recommendations. Project involves: Design to solve problem and Construction	0	0	С	Recoat and reconstruct a 1/2 million gallon reservoir (see attached paperwork) south tank Meadow View Drive. La Canada 91011 (priority 1).	50,000	710	2,500 16	Los Angeles	IV	1998
4250 1710008	1710008-001	Nice Mutual Water Company		To increase reliability, connect to Upper Lake CWD wit 20,000 ft of 8 to 12 inch pipe and booster pump station	h O ı.	0	С	One source of supply - Clear Lake.	1,900,000	1,059	2,500 03	Lake	II	1998
4251 1910241	1910241-002	MESA CREST WATER CO.		See attached recommendations. Project involves: Design to solve problem and Construction	0	0	С	Recoat and reconstruct a 1/2 million gallon reservoir (see attached paperwork) north tank Meadow View Drive, La Canada 91011 (priority 2)	50,000	710	2,500 16	Los Angeles	IV	1998
4252 4510002	4510002-008	Mountain Gate C.S.D.	South Reservoir Project	The Project would be to establish a South Pressure Zon by installing a separate 8-inch Main from the existing South Reservoir to a South Zone and installing a check valve between the Main Zone and the South Zone. The Project would also include adding a "new pressure reducing station" on an existing 6-inch Main Line in the same area.	e O	0	с	The South Reservoir is not functioning to control the downstream pressure or to provide equalizing storage during MHDs. A new feeder line should be installed from the Main Line because of the the problem of over- pressure. The District has been informed by its engineering company that these pressure control issues can be resolved by creating a new Pressure Zone.	115,000	664	2,500 02	Shasta	I	2011
4253 4410018	4410018-003	Central Water District	Valencia Road Water Main Replacement Project	The project plan is to replace the 6600 lineal feet of 6 inch World War II era thin-wall steel pipe water main with 6600 lineal feet of 8 inch C900 Class 200 PVC water main pipe. This project will also include the replacement of all isolation valves as well as the upgrading of hydrants. The project planning of the new water main will incorporate the most current design and technologies in order to maintain structural integrity of the pipeline, in particular so that the pipeline will withstand natural disasters such as earthquakes.Additionally, replacing this water main wi help facilitate the transfer of water to District interties with other local water agencies.	O er W	0	с	The existing six inch (6 ") water main was constructed in the 1950s and is constructed of World War II era thin- walled steel pipe. The water main has been compromised in several locations over the past decade. The pipe line has exceeded its service expectancy and is overdue to be replaced.	660,000	808	2,700 05	Santa Cruz	Ι	2011
4254 2110006	2110006-028	North Marin WD - Pt. Reyes	Coast Guard Well Salinity Monitors	The project proposes the installation of a salinity monitor at the Coast Guard Wells in Pt Reyes Station. This monitor would send feedback via SCADA to the central Operations center for identification and alert. This system would eliminate the need for staff to manually measure salinity levels entering the distribution system and would help prevent the exceedence of secondary Maximum Containment Leve in the distributed water.	O	0	C	North Marin Water District's (NMWD) West Marin Distribution System services Point Reyes Station, Olema, Bear Valley, Paradise Ranch Estates and Inverness Park. The Town of Inverness also benefits because it has an emergency water supply connection to the NMWD West Marin Distribution System. The existing primary supply source (Coast Guard Wells) for the sole treatment plant serving this distribution system is under the influence of flows in the tidal reach of Lagunitas Creek. The water supply is thereby subject to periodic salinity intrusion during high tides and low stream flows. This problem has worsened over the last year after the Giacomini Ranch was inundated with Tomales Bay water as part of Point Reyes National Seashore's Giacomini Ranch Wetland restoration project. NMWD has adopted a policy of avoidance pumping where no water is pumped from the wells 3 hours before or after a high tide. However, the frequency of the salinity intrusion has increased and now requires more staff monitoring to forecast avoidance pumping schedules. Chlorides will generally exceed 100 mg/l during these events and have also exceeded Secondary Maximum Containment Level (SMCL) of 250 mg/l. When elevated salinity is encountered in the Coast Guard Wells, the District has adopted a policy of customer notification.	12,000	762	3,000 18	Marin	Π	2009

4255 3010068 4256 5010039	3010068-002	East Orange County WD - RZ EOCWD New Well Pro	ect The 1926 Well is encountering bacteriological problems O and during the last cleaning, the contractor advised that the casing is "fragile" and should not be brushed again. This has limited our ability to resolve the bacteriological issues and we have taken the well out of service. Because of reduced demand at this time of year, this loss of supply has not caused service reductions or interruptions at this time. However, we anticipate that the reduced availability of existing imported water supplies that we may experience this problem as early as July, due to imported water reductions that have been projected by the Metropolitan Water District of Southern California. Complicating this is the limited availability of nearby agencies to "lend" or otherwise assist us by supplying water as they have their own supply issues to deal with.The New Well Project is the most cost effective solution and will supply the District with a safe and reliable source of supply. It is being sized so that if the District's other well, the 1946 well, also experiences reliability problems, the District's entire demand can be produced from that well. The Project itself is comprised of drilling a new well and supplying the pumping equipment, variable speed motor, connection piping, valving, sampling station and instrumentation and controls. The well drilling itself cannot commence until the winter months because the actual drilling will impact the nearby 1946 well. We The Western Hills Water District (WHWD) owns and operates the water system that serves the community of Diablo Grande. The system is located in a rural area within western Stanislaus County. The original designers of the system did not take into account security and vulnerability issues. Studies conducted by the WHWD identified several key areas where the raw water supply and the treatment and distribution system were vulnerable to disruption or security breach. Critical to supplying water pump stations, which draw	0	c	The East Orange County Water District serves two functions: 1) it provides wholesale imported water to over 100,000 people directly served by three public and one private retail water agencies and, 2) it provides groundwater and a small amount of imported water to 1,200 retail customers located in an unincorporated area of Orange County, California. The retail customers are primarily single and multi-family residential developments; there are only two commercial establishments and and one elementary school in the District. The primary source of water for retail customers is provided by two wells: one drilled in 1926 and the other in 1948. Both were agricultural wells that were converted to municipal use as the area developed in the 50s and 60s. The useful life for a well is generally considered to be 50 years; these wells have exceeded their life by 33 and 11 years, respectively. While they both are still producing water, given the 1926 well's age, it could fail catastrophically at any time, permanently leaving the District without an important source of potable water. The 1926 well is encountering increasing bacteriological issues. We have experienced repeated positive coliform counts at the well, and did have one positive result in the distribution system, however resampling did not confirm this result. Based upon this, we have taken the well out of service and are trying to determine the source of contamination.The Security Project	1,800,000	1,198	3,000 08	Orange Stanislaus	V III	2009
			Critical to supplying water to the community of Diablo Grande are the raw water pump stations, which draw water out of the California Aqueduct, and pump it over a 1,000 feet vertical lift to the water treatment facility. These facilities are remote from the community. Additional physical improvements are needed to provide access control to the various pump station sites. None of the pump stations sites are remotely monitored. The water distribution system facilities such as the Zone 3 Tank and the Diablo Grande WTP have minimal security features to prevent unauthorized entry. Many of the facilities just have a chain link fence and gate to prevent casual entry. The chain link fencing to the raw water pump stations is routinely cut by intruders to gain access to the sites.									
4257 2110006	2110006-024	North Marin WD - Pt. Reyes	Alarms and redundancy could prevent future events. O SCADA controls and additional backup pumps proposed.	0	с	Water supply outage due to lack of alarms on remote system and lack of redundancy in pumping resulted in coliform contamination.	200,000	762	3,000 18	Marin	II	2001

4258 3010068	3010068-001	East Orange County WD - RZ	EOCWD Barrett-Marcy- Newport Pipeline	The area served by this pipeline is characterized by steep changes in topography. The pipeline was originally installed in easements through residential property, not in a street easement. Through the years, access to the main and its associated valves and service connections has been restricted by land movement, fences and improvements constructed by residents. Several of the valves are now inoperable and fire flow to the area has been adversely affected.Replacement of the existing pipeline, service connections and valving will allow the District to improve service, particularly fire flow, to this area as well as the adjoining areas connected to the pipeline.	0	С	The Barrett-Marcy-Newport Transmission Main Project will replace approximately 2,200 lineal feet of aging 8- inch Asbestos Cement (AC) pipe, most of which is located in areas that are very difficult to access (sloped areas, under landscaped areas). This transmission main is further burdened by a number of inoperable valves, which preclude operation of the pipeline and affect fireflow in the area served by the pipeline.	650,000	1,198	3,000 08	Orange	v	2009
4259 2110006	2110006-027	North Marin WD - Pt. Reyes	Gallager Well & Pipeline	O construction of a new well and a pipeline to supplement a periodically unreliable water source. The new well will be constructed near an existing NMWD Gallagher Ranch standby well located approximately 1.3 miles east of Point Reys-Petaluma Road at Gallagher Ranch, upstream of any flooding and tidal reaches of Lagunitas Creek. The existing standby well there has a limited flow capacity (170 gpm) and is not connected to the West Marin distribution system. The new 7,200 feet of 12" pipeline will convey water to the Point Reys Treatment Plant. This project will increase the Gallagher Wells site's capacity and integrate it to the distribution system thereby insuring reliable, high quality water supplies during high tide and flood events on Lagunitas Creek. Coast Guard Wells will continue to be the primary supply source because it has good water quality, is reliable during most months, and has ample recharge.	0	C	North Marin Water District's (NMWD) West Marin Distribution System services Point Reyes Station, Olema, Bear Valley, Paradise Ranch Estates and Inverness Park. The Town of Inverness also benefits because it has an emergency water supply connection to the NMWD West Marin Distribution System. The existing primary supply source (Coast Guard Wells) for the sole treatment plant serving this distribution system is under the influence of flows in the tidal reach of Lagunitas Creek. The water supply is thereby subject to periodic salinity intrusion during high tides and low stream flows. This problem has worsened over the last year after the Giacomini Ranch was inundated with Tomales Bay water as part of Point Reyes National Seashore's Giacomini Ranch Wetland restoration project. NMWD has adopted a policy of avoidance pumping where no water is pumped from the wells 3 hours before or after a high tide. However, the frequency of the salinity intrusion has increased and now requires more staff monitoring to forecast avoidance pumping schedules. Chlorides will generally exceed 100 mg/l during these events and have also	1,676,272	762	3,000 18	Marin	Π	2009

exceeded Secondary Maximum Containment Level (SMCL) of 250 mg/l. When elevated salinity is encountered in the Coast Guard Wells, the District has adopted a policy of customer notification.

4260 0910015	0910015-002	Tahoe Keys Water Company	Water line replacement Beach Drive	The scope of the project will include 2,449 feet of 6" C- 0 900 main waterline with approximately 23 polyethylene service lines that will be 1 1/4" in diameter. These will replace the existing 1" galvanized service lines plus additional service lines will be added to improve the ratio of service lines to homes from the current ratio of 1:4 to 1:2, meaning that no more than two homes will be tied to each new service line. Additionally, water meters will be added to 45 homes. Project costs are based on two similar projects completed in 2008 and 2010. Costs include engineering plans, permits and all construction costs including asphalt overlay as required by the City of South Lake Tahoe. The TKPOA has completed three similar projects during the past three years so should funding be available the TKPOA is prepared to start work on the Beach Drive project as soon as grading season starts on May 15, 2011.	0	c	The Tahoe Keys Property Owners' Association (TKPOA) has proactively begun to replace 45 year old galvanized service lines and AC concrete mains throughout the Tahoe Keys Water service area. Existing lines have degraded to the point where the repair costs are no longer economically feasible. The proposed project on Beach Drive will replace these failing lines as well as provide additional service lines with a larger capacity. This will result in increased water pressure to our fire hydrants. Water districts within in the Lake Tahoe Basin are required to have fire systems installed with a minimum flow of a 1000GPM. Currently, our hydrants do not meet this flow requirement but upon completion of this project the hydrants within the project area will be compliant. The current service lines in this project area with adequate water pressure. Currently we have 4 homes connected to a 1" service line. This proposed project will decrease the number of homes per service line to two and the line will be increased to 1/4". Currently the TKPOA does not meter residential water usage. Upon completion of this project, the TKPOA will have installed 45 water meters which will help us move forward in our goal to have residential meters installed at all homes by 2025.	748,200	1,578	3,004 09	El Dorado	I	2011
4261 0910015	0910015-001	Tahoe Keys Water Company	Water line replacement Balboa Drive	The scope of the project will include 1,239 feet of 6" C- 900 main waterline with approximately 17 polyethylene service lines that will be 1 1/4" in diameter. These will replace the existing 1" galvanized service lines plus additional service lines will be added to improve the ratio of service lines to homes from the current ratio of 1:4 to 1:2, meaning that no more than two homes will be tied to each new service line. Additionally, water meters will be added to 33 homes. Project costs are based on two similar projects completed in 2008 and 2010. Costs include engineering plans, permits and all construction costs including asphalt overlay as required by the City of South Lake Tahoe. The TKPOA has completed three similar projects during the past three years so should funding be available the TKPOA is prepared to start work on the Balboa Drive project as soon as grading season starts on May 15, 2011.	0	C	The Tahoe Keys Property Owners' Association (TKPOA) has proactivaly begun to replace 45 year old galvanized service lines and AC concrete mains throughout the Tahoe Keys Water service area. Existing lines have degraded to the point where the repair costs are no longer economically feasable. The proposed project on Balboa Drive will replace these failing lines as well as provide additional service lines with a larger capacity. This will result in increased water pressure to our fire hydrants. Currently the TKPOA does not meter residential water usage. Upon completion of this project, the TKPOA will have installed 33 water meters which will help us move forward in our goal to have residential meters installed at all homes by 2025.	381,600	1,578	3,004 09	El Dorado	I	2011
4262 1910006	1910006-001	SO. CAL EDISON COSANTA CATALINA	SCE "Island Wide" Water Conservation Program	The program has two "full service" elements that encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 1,900 residential homes / 4,000 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 118 acre feet per year. Element B. A team of specialist will retrofit 200 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 30 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 – 24 months and employ 75 to 100 people.	0	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 150 acre feet per year or 50.0 / 75.0 gallons per day, per person.	3,000,000	1,972	3,127 16	Los Angeles	IV	2009

4263 3110150	3110150-001	CalAm - West Placer	Walerga Road Tank, Booster Pump Station, and Pipeline Project	The project installs approximately 2,900 LF of 16 inch DI O I Transmission Main, a 2.5 million gallion Storage Tank & a 3,500 gpm Pump Station. It is the only reservoir in the system of about 1,000 homes with the potential for about 3,500 more in the future.	0	с	The project provides emergency storage, enhances fire protection & meets peak hour demands. This project will address California Regulation Section 64554 (a). Due to the size of the system, approximately 1,000 connections, and single permanent source of supply, this system will greatly benefit from this project. In addition, the system suffers from low pressures during the peak use months and this tank will help boost the system pressure.	6,500,000	925	3,148 09	Placer	I	2009	
4264 0910019	0910019-002	Lakeside Park Association	Main replacements	Replace old inadequately sized steel pipe with O adequately size C 900 pipe and loop all sections to eliminate dead-end mains.	0	С	Large sections of the Water distribution system are too small (11/2" and 2") which can not supply demand capacity, old steel pipe which is failing due to corrosion and has many dead-end sections.	1,500,000	128	3,200 09	El Dorado	I	2004	
4265 2810008	2810008-003	Veterans Home of California	Clearwell Piping Modifications	Project would consist of modifying the inlet piping to 0 the existing clearwell by extending the piping approximately 40 feet to the head of the first chamber in the clearwell. Piping would be suspended from the roof of the clearwell. Project will require engineering, plant shutdown and purchase of water from an alternate supplier while the work is completed.	0	с	The Rector Water Treatment Plant has a sub-floor serpentine clearwell for chlorine contact prior to transfer to storage. The inlet piping currently enters the clearwell approximately mid-span of the first chamber. This leaves an area approximately 40 feet long, 8 feet wide and 9 feet deep that receives minimal circulation (stagnant zone). This stagnant zone has a detrimental effect on finished water quality and chlorine residual. Project proposes to eliminate this stagnant zone to provide additional contact time and eliminate the water quality issues associated with the current design.	125,000	10	3,290 03	Napa	Π	2007	
4266 2810008	2810008-005	Veterans Home of California	Rector WTP Backwash Recovery System	Engineering and construction of underdrain system, O collection sump, pumps, controls, metering, monitoring instruments and piping to return backwash water from backwash ponds to the plant headworks.	0	с	Project is aimed at water conservation efforts by recovering water currently being wasted to percolation or evaporation from process operation.Will also improve operation through enabling improved maintenance of backwash storage ponds.	250,000	10	3,290 03	Napa	II	2008	
4267 2810008	2810008-004	Veterans Home of California	Replacement Media for Roughing Filters	The project would consist of evaluation of media to 0 determine the best material for the application followed by replacement of the existing media with the selected alternative media.	0	c	The water treatment plant for the Veterans Home of California, Yountville is equipped with five pressure vessel filters, intended as roughing filters, ahead of two upflow clarifier / mixed media package filter units to aid in handling high turbidity of the source water following storm events. The media which was installed in the roughing filters does not meet the sieve size requirements to retain solids effectively. As a result, solids become dislodged during pressure fluctuations associated with backwash events which detrimentally affect the water quality being applied to the package treatment units which then adversely affects finished water quality.	50,000	10	3,290 03	Napa	Ι	2007	
4268 2810008	2810008-001	Veterans Home of California	Rector Reservoir Solar Circulators	Purchase and installation of solar powered circulation O equipment in the source water reservoir to provide environmentally acceptable alternative to chemical treatment for algae, iron and manganese.	0	с	Algal blooms, iron, manganese, dissolved oxygen levels. This system is currently treating with copper sulfate for algae control. A neighboring system has recently been sued regarding use of copper sulfate under similar application. Iron and manganese problems arise when drafting from certain depths within the source water reservoir. Project proposes use of solar powered circulators in the source water impoundment to increase dissolved oxygen for prevention of algal blooms and natural precipitation of iron and manganese to eliminate or minimize use of chemical treatment for these constituents.	125,000	10	3,290 03	Napa	Ι	2008	
4269 2810008	2810008-002	Veterans Home of California	Telemetry for Storage Tank	Purchase and installation of a tank level transducer, chlorine residual analyzer and telemetry equipment to transmit the data from the storage tank to the water treatment plant where the data will be monitored and trended with associated alarms.	0	0	C	A project has just gone out to bid for rehabilitation of an existing 1 million gallon storage tank at the Veterans Home of California. This application is for funding to provide tank level and chlorine residual monitoring equipment and telemetry from the rehabilitated tank to the water treatment plant for monitoring purposes.	25,000	10	3,290 03	Napa	II	2007
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4270 0510003	0510003-004	Angels, City of	City of Angels Backup Well	Construction of one well and connection to City distribution system.	0	0	С	No backup emergency water supply for City	325,000	1,773	3,441 10	Calaveras	ш	2003
4271 5510012	5510012-010	TUD - Upper Basin Water System	Particle counters for crypto monitoring	INSTALL PARTICLE COUNTERS.	0	0	С	LACK OF PLANT MONITORING EQUIPMENT FOR CRYPTO OPTIMIZATION.	18,000	1,455	3,446 11	Tuolumne	Ш	1998
4272 3110009	3110009-001	Meadow Vista County Water Dist	Meadow Vista County Water District	Replace 16,000 feet with 8 inch pipe.	0	0	С	Distribution piping leaks excessively. DHS has directed that it be replaced.	560,000	1,370	3,640 02	Placer	I	1998
4273 3110010	3110010-004	Tahoe City PUD - Main	TAHOE TAVERN HEIGHTS WATER DISTRIBUTION SYSTEM IMPROVEMENTS	The Tahoe City Public Utility District (District) plans to reconstruct and install new water mains and facilities for specific portions of the Tahoe Tavern Heights Water Distribution System. The existing infrastructure has been identified as containing undersized "bottle neck" water mains, non-looped systems, has presented pressure delivery deficiencies during certain conditions. The project will include:1. 2,000 linear feet (LF) of new 12-inch transmission line replacement for the Four Seasons Tank transmission line. 2. 500 LF of new 6-inch water main connecting Woodhill Court and Woodview Court.3. 600 LF of 6-inch transmission line replacement along the Edelweiss transmission line extension. The reconstruction and addition of these new water mains and transmission lines effectively address the deficiencies identified within this water system. They will redistribute and deliver the necessary capacity required to maintain minimum system pressures per current California Waterworks Standards.	0	0	c	The Tahoe Tavern Heights Water Distribution System consists of the consolidation of two previously privately owned and operated water systems. The consolidation occured in the 1970's. Several improvements that were istalled to perform the consolidation appear to have been done in haste and were not thouroughly evaluated and engineered. The result is a distribution system that experiences significant pressure and delivery deficiencies during certain conditions. The distribution system in question provides backup source capacity to the lower pressure zone of the Tahoe City Main system in the southern portion of the system. During previous mechanical failures of the Tahoe Tavern Well source, the Tahoe Tavern Heights distibution system was used to provide backup source water during the repairs of the well source. The added hydraulic load to the distribution system reulted in delivery pressures less than the required 20 psi to areas of the systemIn addition to this issue, during the recent Washoe Fire (August 2007) usage of the fire hydrants in the distribution system caused similar issues.The proposed improvements will be designed to maintain minimum pressure requirements in the distribution system and delivery points as per current California Waterworks Standards Section 64602.	716,580	2,663	3,997 02	Placer	I	2009
4274 5610005	5610005-003	MEINERS OAKS CWD	Storage Tank Replacement	Replacement of two of the 500,000 gallon storage tanks, and the 80,000 gallon tank. Build new concrete pads adjacent to the current tanks, replace the three tanks including interconnection valving, and demolish the three old tanks.	o	0	c	The system storage consists of 3-500,000, 1-250,000, and 1-80,000 gallon ground storage tanks. All are inter- connected with the distribution system. The tanks are located on gravel base. All are in dilapidated condition. Two of the 500,000 gallon tanks are next to each other. They are both dilapidated and leaking. Both have significant structural defects indicated by leaning, sides bowing, and leaking bolts. One of the 500,000 tanks is in critical condition exhibiting leaning of more than 3%. The 80,000 gallon tank is extremely dilapidated, constantly leaks, and has several large holes in it's sides. All five tanks are in use on a daily basis. Loss of service from any of the tanks will result in critical water outages to the community.	750,000	1,283	4,000 06	Ventura	IV	2007

4275 1310003	1310003-002	GSWC, Calipatria	Date Road from Sorenson Rd to Ironwood Rd 2010	Replace 6-inch Transite pipeline with 12-inch PVC between Church Street and Date Street from Ironwood Road to Lake Avenue, and install new 12-inch from Lake Avenue to Sorenson Road.	0	0	С	The existing 6-inch pipeline requires replacement for hydraulic and fireflow deficiencies. The installation of a 12-inch line will provide better fire flows to the west side of the Calipatria system and result in higher residual presure during a fire flow event.	292,249	873	4,040 14	Imperial	V	2008
4276 1310011	1310011-011	Coachella VWD: I.D. NO. 11	Highway 86 Transmission Main Ph III	The Highway 86 Transmission Main Ph III will provide safe, reliable drinking water and fire protection to area along the west shores of the Salton Sea. This project involves the design and construction of approximately 10 miles of 24/30-inch ductile iron pipe, including environmental documentation and permitting and easement acquisition.	O S	0	С	The Coachella VWD - I.D. No. 11 water system No. 1310011 provides drinking water and fire protection to the communities of Desert Shores, Salton Sea Beach, and Salton City along the west shores of the Salton Sea. The water system infrastructure consists of three groundwater wells, approximately 10 miles of 16/18- inch diameter transmission main, several miles of distribution piping, and one 1.0 million gallon storage reservoir. The aging 10-mile 16/18-inch diameter asbestos concrete transmission main was constructed in the early 1960s and has surpassed its useful life. Water demands for this service area have increased significantly over the past 50 years and the amount of water supplied through this transmission main exceeds the Coachella Valley Water District's design and operating criteria. The District completed a needs assessment and water supply feasibility study to identify a reliable, long-term solution for water service to the west shores communities. Replacing the aging transmission main with a 24/30-inch diameter ductlie iron pipe is one element of the long-term water supply plan.	10,000,000	2,624	4,198 20	Imperial	v	2011
4277 1910248	1910248-002	LOS ANGELES CO WW DIST 37-ACTON		CONSTRUCT A 300,000 GALLON INTERMEDIATE TANK TO PROVIDE STORAGE.	0	0	С	3220 TANK. SEVERAL HUNDRED HOMES WITHIN THE DISTRICT OBTAIN THEIR DOMESTIC AND FIRE FLOWS FROM A REGULATED ZONE. WATER IS PUMPING FROM DISTRICT WELLS INTO A 3,483 FT. ZONE ELEVATION AND IS THEN REGULATED DOWN TO 3,220 FT. ZONE.	3,040,000	1,377	4,282 16	Los Angeles	IV	1998
4278 1910248	1910248-008	LOS ANGELES CO WW DIST 37-ACTON		Modify existing facilities to meet the new MCLs	0	0	С	Well will not comply with the future standards for radon and arsenic.	2,000,000	1,377	4,282 16	Los Angeles	IV	2001
4279 5010009	5010009-002	Keyes Community Services Dist.		INSTALL GENERATOR. OTHER = DESIGN AND CONSTRUCTION	0	0	С	LACK OF BACKUP POWER TO PUMP WATER DURING ELECTRICAL POWER OUTAGES.	150,000	1,472	4,575 10	Stanislaus	Ш	1998
4280 3710004	3710004-003	Del Mar - City of	City of Del Mar - Zuni Reservoir Roof Replacement	The work includes the complete removal and disposal of the existing gravel covered bituminous roof and plywood deck, removal of the wood framed structural support members, repair or replacement of up to twenty (20) 6-inch square wood columns and one (1) 8- inch square center column. The contractor will be responsible for the design, fabrication, and erection of the new roof system which will include new 316 stainless steel columns, column supported aluminum alloy joist and purlin structural framing system, fiberglass roof deck, and cold-applied modified bituminous membrane roof system with gravel surface finish. The roof shall have one aluminum access hatch and 360 degree fascia ventilation screened to protect the potable water storage system. The Zuni Reservoir is a one million gallon concrete reservoir with an inside diameter of 100 feet and a height of 20 feet.	of O	0	с	The Zuni Reservoir is an existing one million gallon, concrete reservoir built in the 1930s. The existing roof is composed of a bituminous mastic applied over roofing felt base sheets and covered with a gravel finish. The roof deck is plywood sheathing supported by a wooden joist and purlin framing system. The framing system is supported by the circular concrete reservoir and interior wooden columns. The reservoir was seismically retrofit in 1994 however, the project did not include replacement of the existing roof structure. The existing roof system is subjected to constant moisture from the underside of the roof (inside the reservoir) which contributes to premature failure and requires regular maintenance to protect the public water supply and the safety of the City's workers.	600,000	1,846	4,580 14	San Diego	v	2009
4281 1910185	1910185-006	LOS ANGELES CO WW DIST 36-VAL VERDE		INSTALLATION OF EMERGENCY GENERATORS AT TWO CRITICAL PUMP STATIONS.	0	0	с	VAL VERDE GENERATORS. THE DISTRICT'S TWO EXISTING PUMP STATIONS ARE ELECTRICALLY POWERED. IN THE EVENT OF A POWER OUTAGE, ALL OF THE AFFECTED CUSTOMERS COULD REMAIN WITHOUT WATER SERVICE.	200,000	1,320	4,660 16	Los Angeles	IV	1998

4282 1910185	1910185-003	LOS ANGELES CO WW DIST 36-VAL VERDE		CONSTRUCT ABOUT 3,000 FT. OF PIPELINE ALONG ROMERO CANVON ROAD TO PROVIDE A LOOP SYSTEM INTO THE TANK AND ALLEVIATE THE DEAD END PROBLEM.	0	0	С	SLOAN CANYON ROAD. THE PIPELINE TO HASLEY WATER TANK IS A SINGLE FEEDLINE. IF IT RUPTURED, A LARGE PORTION OF CUSTOMERS WOULD SUFFER OUTAGES. ALSO, A DEAD END SYSTEM EXISTS THAT CREATES STAGNATION WHICH COULD RESULT IN WATER QUALITY PROBLEMS.	300,000	1,320	4,660 16	Los Angeles	IV	1998
4283 1310800	1310800-001	Calipatria State Prison	Calipatria State Prison VFD Booster Pump Retrofit	Currently the Institution uses five centrifugal Peerless pumps one 100 GPM, one 400 GPM and three to 500 GPM, one of the 500 GPM pumps is a standby pump for use if one of the other pumps fails. The pumps are power by constant speed non high efficiency electric motors of 15 hp, 40 hp and 75 hp respectively. The system is non-expandable and struggles to keep up with demand during peak summer flows. The proposed retrofit VFD system would eliminate both the high energy use and pressure/flow demand problems. By retrofitting a VFD drive system to the existing drive motors the 100 GPM 15 hp pump could be eliminated and the standby pump placed in the auto system to activate as demand required thereby increasing the system's total pumping capacity and operating at a lower cost to the taxpayers.	0	0	С	Calipatria State Prison is experiencing water delivery/pressure problems at peak summer flow and uses excessive energy to produce said flow/pressure both due to the design of the Institution's Booster Pumping equipment.	125,000	4,000	4,800 14	Imperial	v	2009
4284 1710006	1710006-003	Konocti County Water District		Replace with 12 inch PVC pipe.	0	0	С	Undersized and aged raw water pipeline to water treatment plant.	600,000	1,744	4,986 03	Lake	Ш	1998
4285 3110001	3110001-016	North Tahoe PUD - Main	Kingswood West Booster Station Relocation	This project will relocate the booster station adjacent to and at the same level as the paved arterial road. The structure will use fire resistive construction including walls, doors, and roof. The new structure will retain the duplex pump layout to provide a reliable source for the system. Standby power in the form of a self contained engine/generator set will be housed within the structure to provide continuous pumping capability in the event of commercial power loss due to fire or other natural or manmade conditions. Remote control valving operated over the District radio based Supervisory Control and Data Acquisition system will be provided in order to allow operator intervention during a disaster without placing operating personnel at risk.	0	0	C	The Kingswood West (KWW) booster and the storage tank serve 220 existing connections (320 at buildout). The KWW booster pump station is comprised of a 1970 wood framed building housing the pumps, automatic valves and SCADA hardware. The station is physically located 85 feet downhill from the nearest public access road. This booster station is the only supply source for water to the upper zone (3) of the NTPUD Main system. The station is in a location vulnerable to wildland fire. The Kingswood West storage tank provides back up water supply for domestic and fire suppression water to the lower pressure zones through automatic valves. The service area of this booster station. The service area of this booster station. The service area of this conster station. The service area distelf is forested and surrounded by general forest. Access to the subdivision is limited to one paved road which is the access to booster station. This access issue places additional reliance on the water system to not only provide fire protection but also to provide sufficient fire suppression water to allow for orderly evacuation in the event of a catastrophic wildfire.	733,500	3,294	5,000 02	Placer	I	2008

4286 3110001	3110001-017	North Tahoe PUD - Main	Kings Beach Water Storage Project	The water storage project will increase the gross storage volume to achieve continuous water treatment plant operation while maintaining recommended and regulated operational, emergency and fire suppression reserves. The project will accomplish these goals by constructing two storage tanks. The Zone 1 storage will be an estimated 1.3 million gallon tank located centrally within the Main System's piping network. The tank site will require extension of existing water transmission mains by about 2,600 lineal feet. The site is in close proximity to a zone 2 water transmission main and will allow the NTPUD to relocate the zone 2 booster pumping station to the new tank site. The siting of this tank will provide operational benefits in allowing the National Avenue Water Treatment Plant to be operated without process shut downs, provide more consistent pressure throughout the system, provide reservoir storage for upper zone supply while maintaining recommended reserves for operations, emergency and fire storage, provide storage during maintenance of the existing tanks, provide for process contact time in the event of contamination or additional disinfection treatment requirements. A zone 2 storage tank of 0.5 million gallon capacity is also a part of this project. The tank will be constructed adjacent to an existing 0.12 million gallon tank which will be removed upon completion of the new tank. The purpose of this tank is	0	0	C	The NTPUD Main System source of water consists of a municipal well and a water treatment plant using Lake Tahoe as the raw water source. The District operates the National Avenue Water Treatment Plant under Filtration Avoidance criteria using chlorination and ultraviolet disinfection. The plant is designed for continuous operation but insufficient treated water storage volume results in plant shut downs during low water demand periods. The insufficient storage combined with peak demands typical of a resort community require the water treatment plant to operate at full capacity together with the backup well source during low demand periods. The plant shuts down during low demand periods when the zone 1 tanks are full. The peak demand periods when the zone 1 tanks are full. The peak demand periods are amplified by insufficient water storage components. The water storage tank in zone 2 does not meet current design standards and therefore the peak demand periods coincide exacerbating the zone 1 storage conditions and the plant shutdown and startup cycles. Threatment plant shutdown and startup cycles downten UV lamp life expectancy, promote premature lamp failures, and may upset the chlorine dose and contact time disinfection process. Any plant operational upsets can threaten the finished raw water quality and may result in	2,685,000	3,294	5,000 02	Placer	I	2008
4287 3110001	3110001-019	North Tahoe PUD - Main	National Avenue Water Treatment Plant Redundancy and Standby Pumping	The project consists of the addition of a third (standby) pump at the National Avenue Water Treatment Plant to provide system redundancy and improved reliability. Title 22 Section 64554 and HSC Section 116555(c) require that all systems have the source capacity to assure that an adequate quantity of water under sufficient pressure is available to serve consumers at all times. The two existing pumps at the National Avenue Water Treatment Plant currently provide addequate pumping capacity to supply the community. The addition of a third (standby) pump at the National Avenue Water Treatment Plant will assure redundancy and improve system reliability should one of the existing pumps fail.	0	0	С	The project consists of the addition of a third (standby) pump at the National Avenue Water Treatment Plant to provide system redundancy and improved reliability. Title 22 Section 64554 and HSC Section 116555(c) require that all systems have the source capacity to assure that an adequate quantity of water under sufficient pressure is available to serve consumers at all times. The two existing pumps at the National Avenue Water Treatment Plant currently provide addequate pumping capacity to supply the community. The addition of a third (standby) pump at the National Avenue Water Treatment Plant will assure redundancy and improve system reliability should one of the existing pumps fail.	500,000	3,294	5,000 02	Placer	I	2011
4288 5610008	5610008-007	PLEASANT VALLEY MUTUAL WATER CO		Pulled Well No. 9 and determined the best way to fix the problem is to replace liner.	0	0	с	Well No. 9 needs to be upgraded.	60,000	1,456	5,000 06	Ventura	IV	1998
4289 5610008 4290 5610008	5610008-004 5610008-005	PLEASANT VALLEY MUTUAL WATER CO PLEASANT VALLEY MUTUAL WATER CO		Replace all steel lines with PVC. Drain and inspect tanks and determine the best way to fix the problem	0	0 0	C C	Replace old distribution pipes. Needs to upgrade the storage tanks	197,000 200,000	1,456 1,456	5,000 06 5,000 06	Ventura Ventura	IV IV	1998 1998

4291 3110001	3110001-018	North Tahoe PUD - Main	Main System Zone 2 Storage Tank Project	This pre-application is for a new zone 2 storage tank of construction project. The new tank will have a capacity of 0.5 million gallons. (Note: Zone 1 storage will be addressed by the applicant in a future project.) The zone 2 tank will be constructed adjacent to an existing 0.12 million gallon tank which will be removed upon completion of the new tank. The new tank will be constructed at a higher base elevation to improve the system pressure at the highest service connections in this zone. The new tank will relieve the peak demand on zone 1 and to provide operational, emergency and fire suppression water to protect local, state and federal lands in and surrounding zone 2. The new tank will be constructed to current seismic codes to improve critical infrastructure reliability and provide vital health and safety services during and following earthquakes.	0	c	The water storage tank in NTPUD's Main System zone 2 does not meet current standards for volume or seismic design. The lack of storage in this zone causes supply problems with the systems sources, a water treatment plant and backup well source. The storage volume limitation exacerbates a storage deficiency in zone 1. Zone 2 is surrounded on three sides by Federal lands. The fire flow in the urban/wildland interface, which constitues a large portion of zone 2, is limited. Any limitation to firefighting capability can have devasting effects. The present zone 2 tank elevation is not sufficient to meet waterworks pressure standards to the highest service connections. The NTPUD Main System's source of water consists of a municipal well and a water treatment plant using Lake Tahoe as the raw water source. The District operates the National Avenue Water Treatment Plant under Filtration Avoidance criteria using chlorination and ultraviolet disinfection. The plant is designed for continuous operation but insufficient tsorage combined with peak demands typical of a seasonal community require both the water treatment plant and the backup well source to operate at full capacity during peak daily demand periods. The low genacity the plant shuts down. The peak	1,293,500	3,294	5,000 02	Placer	1	2009
4292 5610008 4293 1910108	5610008-008 1910108-007	PLEASANT VALLEY MUTUAL WATER CO BELL GARDENS-CITY, WATER DEPT.	Reequipping of Water Wel No 3F Including Well Head Treatment	Replace all steel lines with PVC.       O         I The installation of well head treatment at Well No. 3F       O         with new pumping equipment to meet the State water       o         quality MCL for manganese. Funding therefor is       requested for the well head treatment and new         pumping equipment for reactivation of Water Well No. 3F.Project :Reequipping of Water Well No 3F Including       Well Head Treatment. The installation of well head         treatment at Well No. 3F with new pumping equipment and to comply with the State water quality       requirements. Benefits: The benefits to the City of Bell         Gardens owned water system is by reactivating Well       No. 3F with needed well head treatment and pumping       equipment, so as to utilize more of its groundwater         pumping rights in the Central Basin, be less dependent       on the MWD state water supply, and to meet the State       water quality MCL for manganese and to assure a         continuous water system. The estimated overall cost       of this project is as follows:Provide water well head       treatment at Well No. 3F with new pumping         equipment \$757,575       Subtotal =       \$757,575Construction Contingencies (10%) = \$       \$         \$757,575Construction Total = \$83,333Engineering &       Construction Services (20%) = \$166,667Project Total       =         groupment \$1,000,000Estimated Project Total = \$1,000,000       \$       \$	0 0	c c	Upgrade the distribution system Existing Condition:For a number of years before 1992, the water system that served the northeastern part of the City of Bell Gardens relied upon Water Well No. 3F, which is located at Gage Avenue and Chalet Street for one of its main source's of water supply. When the City purchased this water system in 1992, the well was out of service, because of water quality issues from manganese in excess of the State MCL. Since that time (1992) the City has relied considerably upon the imported water supply from the Central Basin Municipal Water District/Metropolitan Water District of Southern California (MWD) to meet the needs of this part of the community. The City of Bell Gardens has reviewed the possibility of reactivating Well No. 3F with need de well head treatment, so as to utilize more of its groundwater pumping rights in the Central Basin. The installation of well head treatment at Well No. 3F with new pumping equipment should allow the City to keep as low as possible the cost of water to be served to its residents and businesses and meet the State water quality MCL. This project replaces the previously submitted request of 003 of rehabilitation and new electric motor.	399,000 1,000,000	1,456 1,589	5,000 06 5,247 15	Ventura Los Angeles	IV IV	1998 2011
4294 5510010	5510010-004	TUD - Crystal Falls Water System	Particle counters at WTP	INSTALL PARTICLE COUNTERS. O	0	с	LACK OF PLANT MONITORING EQUIPMENT FOR CRYPTO	18,000	2,232	5,301 11	Tuolumne	ш	1998

OPTIMIZATION.

4295 2810002	2810002-007	Calistoga, City of		Drain and clean tank, recoat with epoxy, clean outside of tank and paint.	0	0	с	There are concerns about the seismic/structural integrity and condition of the welded steel, 1MG Feige Canyon Water Storage Tank. A 2013 evaluation by Kennedy/Jenks Consultants determined that the existing tank has significant structural/seismic deficiencies. In addition to the seismic concerns, the tank needs major maintenance including being taken off line, so that it can be cleaned and recoated inside and painted outside. The report suggests that replacement is the best long term solution.	100,000	1,491	5,302 03	Napa	ΙΙ	1998
4296 5810006	5810006-002	North Yuba Water District	North Yuba Water District Pipeline Replacement and Hydro Project	The Project consists of the replacement of approximately 52,300 linear feet (9.91 miles) an existing unlined open ditch with approximately 51,600 linear feet (9.77 miles) of 36- and 42-inch diameter pipe. The pipe will convey water from the SFWPA penstock adjacent to the Woodleaf Surge Tank to the proposed hydroelectric generation plant and associated facilities at the existing District water treatment plant in Forbestown. Approximately 49,900 linear feet (9.45 miles) of the pipe will be constructed within existing roads, 1,065 feet (0.2 miles) within the existing Ditch, and 660 (0.13 miles) feet within the existing Siphon.PROJECT EXECUTION & STAGINGFour Basic Elements1. Environmental and Preliminary Engineering - The District is currently in this stage, which includes environmental evaluation and otherstudies necessary to comply with state and federal environmental processes, i.e. California Environmental Quality Act (CEQA) and National Environmental Appert (EIR) and, more than likely, a NEPA Environmental Assessment (EA) will be prepared. Preliminary engineering studies, design, and surveying are a component of this element.2. Engineering Design and the preparation of construction improvement plans. Appraisals, easement acquisitions, and permitting are components of this	0	0	c	Presently, the District's 811 domestic customers (i.e., households) and 110 raw-water customers (irrigation) receive their water after it has been transported from the water source via the Forbestown Ditch. The Ditch is an open, unlined canal that loses an estimated 35% to 40% of its water to evaporation, percolation and leakage as it travels from the Woodleaf penstock to the Forbestown Water Treatment Plant. In addition to the loss of water, the Ditch presents health issues with evidence of septic tank and/or animal waste infiltration at several places along its length. Recent testing has revealed high levels of coliform bacteria that exceed state water quality standard thresholds.Accordingly, District management believes that continued use of the Ditch constitutes a latent security threat to the District's customers. It is the only supply of potable drinking and agricultural water for the communities of Brownsville, Challenge, Dobbins, Forbestown, Oregon House and Rackerby.	28,645,000	695	5,303 21	Yuba	I	2011
4297 2910014	2910014-005P	Nevada ID - Lake of Pines	NID Ranchero Way	Construct pipeline and pressure reducing station to provide treated water service	0	0	С	Residences using untreated water for drinking and cooking	500,000	2,097	5,326 21	Nevada	I	1998
4298 4110010 4299 4110010	4110010-027 4110010-059	Montara Water and Sanitary District Montara Water and Sanitary District	Existing Alta Vista Water Storage Tank Improvements	Construct intertie with adjacent system This project will repaint the existing Alta Vista water storage steel tank with special coating encapsulating lead paint on the tank interior and exterior. In addition, the tank roof access hatch will be replaced as part of this project. To accomplish this temporary storage will be needed during the tank outage.	0	0 0	c c	Water outage during emergency situations The existing 462,000-gallon Alta Vista treated water storage tank is a coated steel tank exhibiting interior and exterior corrosion and coating deterioration. Existing coating is known to contain lead paint in it. In addition, the access hatch has deteriorated and corroded and is in need of replacement. This project is necessary to maintain water quality, protect public health and safety and the environment. This project will also extend the remaining service life of the steel storage tank.	150,000 250,000	1,640 <u>1</u> ,640	5,412 17 5,412 17	San Mateo San Mateo	11	2004 2009
4300 4110010	4110010-048	Montara Water and Sanitary District	Water Sampling Station Installation	This project will install up to twelve water quality sampling stations to throughout the system to enable the District's staff to take the samples directly out of the main instead of from a individual house bib as it is the current practice.	0	0	С	This project will install water quality sampling stations to throughout the system to enable the District's staff to take the samples directly out of the main instead of from a individual house bib as it is the current practice. The purpose of this project is to ensure accurate sampling and to protect water quality in the distribution system thus protecting health and safety of the public.	22,000	1,640	5,412 17	San Mateo	II	2009

4301 4110010	4110010-038	Montara Water and Sanitary District	Photovoltaic Cells Installation	This project will install solar panels on the the existing Alta Vista Tank roof and provide for a similar installation at the new Schoolhouse Tank. A new pG&E connection will also be established to ensure ability to provide power back into the grid during the hours of excess generation.	O	0	c	This project will install solar panels on the existing Alta Vista Tank and the new Schoolhouse Tank. Installation and operation of solar panels on the tank roofs will contribute to a significant reduction of the electric loads in the community and cost and energy savings for the District. This project is Phase II of the solar panel installation that started with the District installing solar panels on the roof of the existing raw water reservoir at the Alta Vista Water Treatment Plant in 2007. This project provides clean renewable power, reduces carbon foot print, and contributes to energy conservation goals.	220,000	1,640	5,412 17	San Mateo	II	2009
4302 4110010	4110010-042	Montara Water and Sanitary District	Park Well Rehabilitation	This project will re-drill an existing groundwater production well to a greater depth and construct a new well pad to protect water quality in the well.	0	0	с	The District owns a groundwater source, Park Well, that has been taken out of service due to severe water quality problems and flooding in its location. However, hydrogeologist's observations indicate that there is a high probability of reaching high quality and sufficient supply in another, deeper, aquifer in the same location. In addition, to protect water quality, the well pad will need to be raised to avoid flooding with nearby creek waters during rainy seasons.	150,000	1,640	5,412 17	San Mateo	Ι	2009
4303 4110010 4304 4110010	4110010-029 4110010-046	Montara Water and Sanitary District Montara Water and Sanitary District	Raw Water Turbidity Meter Installation	Construct additional storage tanks This project will purchase and install a turbidity monitoring device to be installed in an location already	0 0	0 0	C C	Increase storage capacity Raw water line turbidity monitoring is needed to comply the Federal and State Drinking Water Regulations.	1,000,000 21,000	1,640 1,640	5,412 17 5,412 17	San Mateo San Mateo	 	2004 2009
4305 4110010	4110010-050	Montara Water and Sanitary District	Alta Vista Water Treatment Plant SCADA & Controls Improvements	This project will replace the Alta Vista Water Treatment Plant (AVWTP) antiquated control and instrumentation system with new equipment and establish a connection of the treatment plant with the District's SCADA system	t O n n.	0	c	Montara Water and Sanitary District (MWSD) owns and operates Alta Vista Water Treatment Plant (AVWTP) providing surface water treatment for the Montara Creek source. The AVWTP instrumentation and controls are antiquated and no connection to the District's Supervisory Control and Data Acquisition System (SCADA) currently exist. AVWTP has no remote control capabilities requiring frequent visits by the District's operators and increasing the number of trips made daily to the plant. This project will enable remote control of AVWTP thus improving operational efficiency and protecting water quality coming out of the treatment plant into the distribution system.	185,000	1,640	5,412 17	San Mateo	Ι	2009
4306 4110010	4110010-051	Montara Water and Sanitary District	SCADA System Upgrade	This project will include replacement of outdated and faulty SCADA communication brains at each of the nine sites and the Main Office and purchase up to four new computers and two printers for operations of the SCADA system.	0	0	с	The District's Supervisory Control and Data Acquisition System (SCADA) currently included nine sites, including the Main Office where the server and the control screens are located. The SCADA system is proprietary and antiquated and gives too many error messages and false alarms. This project is needed to ensure that all facilities are properly and timely controlled and operated and that the operators are alerted to problems in a timely manner. This upgrade will serve the District in ensuring public health and safety protection.	540,000	1,640	5,412 17	San Mateo	Ι	2009
4307 4110010	4110010-052	Montara Water and Sanitary District	Portola 4 Well Emergency Back-up Generator	This project will install an emergency backup generator for Portola No. 4 groundwater production well. The generator hookup and switch have already been installed.	0	0	С	This project includes an installation of an emergency backup generator for the existing Portola No. 4 groundwater supply well. This project is required to ensure supply during a power outage event in the District's system.	40,000	1,640	5,412 17	San Mateo	II	2009

4308 4110010	4110010-053	Montara Water and Sanitary District	Portola Tank Water Quality Improvement Project	This project will install a "Solar Bee" style mixer for the O existing Portola Water Storage Tank to improve water quality in the tank and the distribution system. Temporary storage might be required during the installation to allow draining the tank for the project.	0	с	This project will install a "Solar Bee" style mixer for the existing Portola Water Storage Tank to improve water quality in the tank and the distribution system. The mixer will contribute to a reduction in disinfection byproducts formation in the water system and will assist in maintaining compliance with the Drinking Water Standards. In addition, this project will utilize solar power generation and will not increase energy consumption for the District.	115,000	1,640	5,412 17	San Mateo	Ι	2009
4309 4110010 4310 4910027	4110010-030 4910027-003	Montara Water and Sanitary District Sonoma State University	Rehabilitation of Wells No 3 and 4	O The life cycle of Wells No. 3 and No. 4 are approaching the end of their useful life. These are the only two operating wells that the University has and due to the age and detioration of well casing, and they are approaching the end of their useful life. The casings in wells no. 3 and no. 4 is compromised due to sand encroachment and well casing dertioration. They are over 20 years old and the only reliable water source for the campus. If one of the wells should fail due to age, the campus would have only one well to supply all water for the campus. The wells intertie with the campus system, but not to any outside (external)) system that could provide backup.Since the campus has requested funding for a UV System to treat water from well no. 2 which is currently not in use due to the need of a UV system, the campus is proposing that after that after the UV System is up and running, wells no. 3 and no. 4 be taken off line separately so that the casings could be replaced to extend the life cycle of each well. The monitoring systems that would be included in rehabilitation of wells no. 3 and no. 4 would include PLC communication and automated alarm to Police and Plant Operations to allow for fast response for repair or inplimenting alternate measures.	0	c c	Increase source capacity The life cycle of Wells No. 3 and No. 4 are approaching the end of their useful life. These are the only two operating wells that the University has and due to the age and detioration of well casing, and they are approaching the end of their useful life. The casings in wells no. 3 and no. 4 is compromised due to sand encroachment and well casing dertioration. They are over 20 years old and the only reliable water source for the campus. If one of the wells should fail due to age, the campus would have only one well to supply all water for the campus. The wells intertie with the campus system, but not to any outside (external) system that could provide backup.	1,500,000	1,640 1,100	5,412 17 6,000 18	San Mateo Sonoma	11 11	2004 2008
4311 4910027	4910027-006	Sonoma State University	Drill New Well No. 1	The University is proposing to drill a well in close proximity to the proposed project of constructing a new 350,000 welded steel tank #3. This well would be the sole source for tank #3. The project would include using a water locating service to determine the location of water source which would ideally be located near Tank #3 to reduce the amount of additional infrastructure needed. The project would go out to bid with the following requirements for contractors to meet.Installation of electrical service for well system, pouring of concrete slab around well casing, install and connect water piping from the well location to the pump house on campus. The well specifications would be as follows: Drill and case an 8' x420' domestic water well, provide fluid tank for storage of drilling fluid and development water throughout drilling process and vacuum truck to remove fluids off site, install a 2305250-88 25hp Grundfos submersible pump (or equivalent) set in 350' deep, install wellhead and plumbing items, install Siemens (or equivalent) pumping plant panel with motor protection, install check valve, chlorinate well and begin monitoring of water quality through lab testing.	0	c	As stated in the Water Systems Analysis and Report dated August 2007, prepared by Winzler and Kelly, Consulting Engineers, the entire potable water supply is provided by 3 existing campus wells (No's. 2,3 and 4) with two of the wells producing 200 gpm each and one well producing 220 gpm. The wells were originally installed in the mid-1960's. Since then, well No. 2 has recently been replaced with well No. 2A cannot be used at this time due to detection of coliforms which require a disinfection system project that the University is asking for funding for under a separate application for CDPH Drinking Water Funding Program grant. Due to the presence of coliforms, the University is unable use the water from Well No. 2A. This places the University as risk as student population is growing and the campus is bringing an additional 699 student resident beds online in Fall 2009. With the growth of the student population, the wells are not able to provide adequate water supply. Both Wells No. 3 and No. 4 are approaching the end of their life cycle due to sand encroachment and if one should fail, the University would be forced to close until such time a new well could be drilled, and tested as only one well would be operational but not able to provide sufficient water supply.Due to the lack of sufficient ground water, the University is in violation of CDPH Drinking Water	275,000	1,100	6,000 18	Sonoma	Π	2009

Regulations §116555. Operational requirements.(a)Any

4312 4910027	4910027-002	Sonoma State University	Domestic Water Tank #3	This project includes construction of a new 350,000 gallon welded steel tank for water storage, including tank foundation, subgrade preparation, anchorage, and tank accessories including internal and external pipe and pipe connections, inlet, outlet, overflow, drain, access manways, vents, ladders, guardrails, and miscellaneous equipment, together with associated site preparation, removal of trees, site grading, construction of new access roads to and around the tank, fencing, water systems piping, electrical work, instrumentation, protective coatings, disinfection, testing and demolition. Project earthwork is unbalanced and requires disposal of unsuitable material and importation of suitable material for engineered fill. The Univeristy is proposing to construct a new 350,000 gallon welded steel tank to facilitate the domolition and reconstruction of two new 300,000 gallon tanks. Since the University is operational 24/7, 365 days a year, the ideal solution is to bring Tank #3 online first to ensure that the campus would have ample water supply during the reconstruction of tanks #1&2 which would have to be done separately so that sufficient water storage remained.	D	0	C	The University intends to construct a new 350,000 gallon welded steel tank for potable water storage northeast of the existing two 200,000 gallon concrete tanks in the Facilities Services Area on the northeast side of the Sonoma State University Campus. The purpose of this project is to increase the reliability and the capacity of the University's potable water storage by constructing a new welded steel tank for water storage capacity of 400,000 gallons in two concrete tanks originally constructed in the mid 1960's. Both reservoirs have damage, which has led to continuous leakage of water from the reservoirs. In addition, the age of the reservoirs and their proximity to the active Rodgers Creek Fault, less than 3.5 km from the site, which is capable of producing strong ground shaking means that the reservoirs are susceptible to failure in an earthquake. Continued operation of the reservoirs places the University water supply at an unacceptable risk. Recommendations for potable water storage for the University and Report prepared for Sonoma State University by Winzler and Kelly, Engineers in October 2007. This project includes the construction of a new 350,000 gallon tanks. This would provide the University with approximately 750,000 gallons in water	1,200,000	1,100	6,000 18	Sonoma	Π	2008
4313 2810004	2810004-003	St. Helena, City of	Engineering to Research Replacement of Source Water Intake Structure	We would like to hire a civil engineering firm who has of experience in replacing intake structures and to research who and how this could be accomplished.	o	0	С	Source Problem, Malfunctioning Intake Tower. The mid intake valve of our Bell Canyon Reservoir failed around Year 2008. 2 attempts were made to repair it. During the spring, summer, and fall it is necessary to be able to draw off the top and mid valve to obtain good water quality. Due to the failure of the midvalve we had taste and odor complaints for a month in July and August 2010. An inspection in 2003 recommended that all gates need to be replaced by 2006. The intake tower has been in service for over 50 years and it has gone beyond its useful life expectancy. It would not make sense to put new valves on a corroded intake tower. The City needs the source and doesn't have enough of other sources to meet the Cities demand. Bell Canyon Reservoir can't be taken out of service to replace the tower.	20,000	2,448	6,006 03	Napa	Ι	2011
4314 3410005	3410005-003	Rancho Murieta Community Servi	Lookout Hill Water Tank Rehabilitation	The 0.5 MG steel tank was constructed in the early 00 1970's and has been out of service since the late 1980's althouth it is still in good shape. The project entails painting the tank interior and exterior. The tank will be siesmic retrofitted to comply with current AWWA siesmic requirements. Miscellaneous valve and level equipment as well as alarm and telemetry controls will be replaced and or rehabilated.	0	0	с	In a 1976-77 year drought event, the District has a 1500 af water storage deficit. As part of the overall drought water supply project, conversoin of the commercial area to an alternative water supply requires rehabilitation of an exisitng out of service water storage tank. The tank will be necessary to provide operational storage for the commercial area.	600,000	2,525	6,060 09	Sacramento	I	2009
4315 3410005	3410005-002	Rancho Murieta Community Servi	Drought Water Augmentation Supply	The project entails on off site well(s), transmission of mains, and rights-of way acquisition to convey water to the existing distribution system. In adition, the project includes conversion of the commercial area to alternative irrigation supplies, consisting of pump stations and piping.	D	0	С	In a 1976-77 year drought event, the District's sole source of water, the Cosumnes River is essentially dry. With no other source available, the District is unable to refill raw water storage reservoirs until the following year, causing a 1500 af storage deficit.	11,700,000	2,525	6,060 09	Sacramento	I	2009
4316 4010025	4010025-004	SLO CWD NO. 10 - CAYUCOS	Reservoir	design and construct a second storage tank to increase of storage and fire protection caqpacity	D	0	С	Existing storage is inadequate for fire protection & emergency needs	750,000	736	6,076 06	San Luis Obispo	IV	2006

4317 1310005	1310005-001	Holtville, City of	cast iron replacement	Replace existing deteriorated and restricted cast iron water pipelines. See attached description and water system improvement map (attachments 2 and 3).	0	0	с	Watermain breaks have resulted in numerous water outages.	4,134,542	1,508	6,299 14	Imperial	v	1998
4318 3310036	3310036-001	Western MWD - Murrieta Division	Replace three old wells	Replace aging wells and develop three new ones according to general site location in Master Plan. (No shortages or water outages reported as of 11/01.)	0	0	С	Aging wells (District's only source of water) and insufficient production capacity for future needs. Existing wells are in need of replacement and upsizing. (District does have an unused connection with Eastern MWD)	1,500,000	2,446	6,305 20	Riverside	v	2001
4319 3310036	3310036-002	Western MWD - Murrieta Division	Construct New Storage Tanks	Construct a series of storage tanks to meet curretn and rapidly growing needs. (No shortages or outages reported as of 11/01.)	0	0	С	Insufficient storage facilities resulting in potential shortages and higher costs to citizens to pay for imported water. (District does have an unused connection with Eastern MWD)	4,200,000	2,446	6,305 20	Riverside	V	2001
4320 3110026	3110026-011	Nevada ID - North Auburn	North Auburn Highway 49 Transmission Main	The "North Auburn Highway 49 Transmission Main Project" is to construct approximately 4100 feet of new 16" I.D. transmission main line. The intention of the project is to provide for a reliable system to both future and current water customers in the North Auburn Area for potable and fire protection demand. The project wil connect service loops in the project area. Construction will be from Locksley Ln to Quartz Dr and Education St to Cottage Dr along the Highway 49 corridor. A combination of open cut construction and trenchless construction will be used.	0	0	С	The intention of the project is to provide for a reliable system to both future and current water customers in the North Auburn Area for potable and fire protection demand. The project will connect service loops in the project area. The CEQA work is complete on this project and this is a category O project.	2,200,000	2,724	6,320 21	Placer	I	2009
4321 2310001	2310001-005	Fort Bragg, City of	Newman Gulch Reservoir	Construct a 45 acre foot water storage reservoir and associated piping near Newman Gulch, on property at the end of Summers Lane that is owned by the City of Fort Bragg. The Summers Lane reservoir will be constructed of sandy dune deposits and, therefore, must be reinforced with geotextile fabric and lined with a synthetic liner to prevent leakage. Water is currently piped form Waterfall Creek via a 6" asbestos concrete pipe to the existing Newman Reservoir. The existing 6" pipe will be intercepted at Brush Creek Road. A new pipe will be intercepted at Brush Creek Road. A new pipe will be installed and routed East on Brush Creek to Summers Lane and again intercepting the existing 6" pipe on City property. The order of work is as follows: Harvest trees and remove stumps, Clear vegetative materials off work area, grade reservoir and install geosynthetic fabric, construct outlet structures and pipe boots, install synthetic (HDPE) liner in the reservoir, trench and install new water pipe, temporarily shut off water flowing in existing water pipe & connect new line at both ends, reestablish flow of water, disinfect new pipeline, seed and mulch disturbed areas, repair any damaged road sections, install permanent fencing and gate.	O e	0	C	The City of Fort Bragg has expended water enterprise funds to complete the design of a 45 Acre Foot Reservoir that when constructed will help meet the water needs during drought conditions. The City is under a modified pumping program for the Noyo water source and during late summer and fall months cannot meet the necessary storage limits for domestic use and fire flows. Based upon work completed by the former Water Projects Manager, there is a several month window that water reserves are not available and fire flows may be limited.Construction of the newly proposed reservoir will go a long way to fill that gap and help meet the by-pass requirements associated with the Noyo Water Source.	1,735,042	2,791	6,963 03	Mendocino	Π	2011

4322 2310001	2310001-003	Fort Bragg, City of	Waterfall Gulch Transmission Main	Final project design has identified replacement of the existing 8" raw water pipeline with 10" PVC C900 pipe from Hwy 20 north about 1850 feet utilizing the existing water line easement. From that point the water line would follow an alternate alignment along public right of way on Thomas Lane to Brush Creek Road and then east on Brush Creek Road for a total additional distance of 3500 feet, bringing the length of the pipeline project to just over 1 mile in length. This project is expected to tie into the pipeline replacement as part of the Newman 45 Acre Foot Reservoir project.	0 : 1	0	С	The City of Fort Bragg receives water from three sources, one of which is Waterfall Gulch, and the water gravity flows through a transmission system of PVC, old asbestos cement, ductile iron and steel pipe. Much of this raw water transmission line has been in place for decades and has reached a point that failures are becoming more and more common. During the past year Public Works personnel were called on to repair several leaks in the pipe running from Hwy 20 to Newman Reservoir, and based upon visual inspection of the pipe, additional leaks are expected. Since this source is one of the purest water sources owned by the City, it is essential that the transmission line remain operational.	800,000	2,791	6,963 03	Mendocino	II	2011
4323 1710015	1710015-004	Hidden Valley Lake CSD	HVLCSD Well #5	This project would construct an emergency well (Well #5), or redundant well to provide potable water for the District in the event that the existing main well is not usable. Currently the District serves approximately 2,433 customers requiring a flow rate of approximately 1,400 gpm. The District currently has three wells. The main well produces 1,400 gpm and the other two produce 300 gpm and 500 gpm, not enough to supply the District during peak usage periods. The proposed Well #5 will provide capacity to meet the needs of the District in the event of the main well failing.	0	0	C	Currently there is no redundancy with the District's main well.	1,200,000	2,433	6,971 03	Lake	Ι	2009
4324 2910023	2910023-005	Nevada ID - Lake Wildwood		Add a second pump. Involves design and construction.	0	0	с	Inadequate reliability of treated water supply due to lack of redundancy in mechanical and electrical equipment.	95,000	3,137	7,090 21	Nevada	I	1998
4325 2910023	2910023-002	Nevada ID - Lake Wildwood		Replace section of canal with pipeline. Involves design and construction.	0	0	С	Inadequate reliability of raw water supply due to dilapidated section of Newton Canal.	550,000	3,137	7,090 21	Nevada	I	1998
4326 2910023	2910023-001	Nevada ID - Lake Wildwood		Encase and armor canal headworks. Project involves design and construction.	0	0	С	Inadequate reliability of raw water supply due to vulnerability of canal headworks to periodic severe damage from high water.	280,000	3,137	7,090 21	Nevada	I	1998
4327 2910023	2910023-008	Nevada ID - Lake Wildwood		Replace redwood tank with welded steel tank. Involves design and construction.	0	0	С	Degradation of treated water in storage due to dilapidated redwood tank.	180,000	3,137	7,090 21	Nevada	I	1998
4328 2910023	2910023-003	Nevada ID - Lake Wildwood		Relocate siphon around washout. Involves design and construction.	0	0	с	Imminent failure of raw water supply due to flood damage to Newton Canal.	170,000	3,137	7,090 21	Nevada	I	1998
4329 2710850	2710850-001	Correctional Training Facility - Soledad	CDCR California Training Facility Well # 7 Refurbish Project	The scope of work includes mobilization and demobilization of contractor, remove existing well pump equipment, video logging of well, wire line brushing of well, installation of new equipment, installation of new pump bowl unit, Installation of a 75 hp VHS turbine motor, 8" water lobe column with 1 1/4" carbon steel line shaft assembly, 8" X 10' suction pipe with galvanized cone strainer and a motor splice kit.	0	0	C	Currently at the Correctional Training Facility (CTF) a correctional facility within the California Department of Corrections and Rehabilitation Well #7 is in need of being refurbished / rebuilt. CTF has 3 well providing water to the distribution system for the facility.Well #7 is over 25 years old. Once this well is rebuilt it will give CTF another reliable water source for the institution and adds another layer of redundancy to the water distribution system. Failure to rebuild this well could place the institution into an emergency water ration situtation for an extended period of time if one or both of the other recently rebuilt wells out of service due to a catstrophic failure.	77,000	2,752	7,175 05	Monterey	Ι	2012
4330 3410033	3410033-002	Florin County Water District		Transmission mains to convey treated water from centralized treatment plant.	0	0	С	Insufficient water source capacity.	100,000	2,235	7,260 09	Sacramento	I	1998
4331 3410033	3410033-003	Florin County Water District		Transmission mains for conjunctive use distribution.	0	0	С	Overdraft of groundwater.	100,000	2,235	7,260 09	Sacramento	I	1998
4332 3410033	3410033-001	Florin County Water District		Rehabilitation and replacement of aged and antiquated system.	0	0	С	Insufficient distribution system plagued with ruptures and low volume.	100,000	2,235	7,260 09	Sacramento	I	1998

4333 1010044	1010044-007	Huron, City of	Water Metering System	AB 514 (2003) requires all users of Federal Central O Valley Project (CVP) water to install water meters and bill a metered rate by 2013. The City of Huron contacts for water annually from the Westlands Water District which represents 100% of Huron's water supply. Meters allow for a water system to account for water produced versus where it was used. With a water meter a customer may track their use and reduce their use which will reduce their bill. The City currently has an outdated and inaccurate meter system. This project will consist of replacing all old mechanical water meters in approximately 900 residential and commercial units with a grid network system. This will reduce and/or eliminate water loss due to the old meters. The new system will allow real-time monitoring of the water distribution system and improve water conservation efforts which helping to locate problems within the system if any exist.	0	С	The City of Huron has an average of 200,000 gallons per day of unaccounted for water – with the lowest being 158,000 and a high of 500,000 gallons per day! Unaccounted for water is the difference between the amount of water produced – or purchased – and the amount of water sold to customers. Unaccounted for water can include underground leakage, unauthorized use, unavoidable leakage, inaccurate meters and unusual causes. The unaccounted for water in Huron is extremely high which means the system is producing water which it does not know where it went or how it was used and there are those out there who are not paying their fair share for the water they are using. This costs the City and its rate-payers considerable monies annually in a city with one of the lowest median household incomes of \$24,609, highest unemployment rates of 28.9% and highest percentage of persons living below poverty at 39.4%.	1,200,000	860	7,306 23	Fresno	11	2011
4334 4810004	4810004-003	City of Rio Vista	well 10 arsenic	need to meet reguirements for the state we have a well O at 13 and wont meet 10mcl asking for treatment funds for well. Have sewer hookup for treatment	0	С	over MCL for the state reguires 10 we are at 13 treat at well head have connections to sewer for treatment discharge	500,000	3,274	7,376 04	Solano	II	2007
4335 4810004	4810004-005	City of Rio Vista	Rio Vista Well Water Arsenic Abatement	The City's domestic water supply is provided by 8 wells, O 3 which are inoperative due either to low flow or arsenic levels above the EPA MCL of 10 ppb. Well 10, the best water producer has been tested and has arsenic concentrations at all depths above 10 ppb. Thus, water from a specific depth will not solve the problem. The water from wells 11, 13 and 14 is blended in a 2 million gallon tank to obtain an effluent below 10 ppb. The concern is that as the arsenic concentration in each of these three wells varies due to pumping rates and changes in the aquifer, it will not always be possible to obtain a blend of the effluent below 10 ppb. Tests to determine the most economical method for the arsenic abatement of these wells will be completed within two- three weeks. To guarantee an adequate quantity as well as a safe water supply for the City, it is essential that the concentration of arsenic not exceed the MCL of 10 ppb at all times, especially during the dry season. Arsenic abatement of the water from these wells is the only method to guarantee safe drinking water for the City.	0	С	The City's domestic water supply is provided by 8 wells, 3 which are inoperative due either to low flow or arsenic levels above the EPA MCL of 10ppb. Well 10, the best water producer has been tested and has arsenic concentrations at all depths above 10ppb. Thus, water from a specific depth will not solve the problem. The water from wells 11, 13 and 14 is blended in a 2 million gallon tank to obtain an effluent below 10ppb. The concern is that as the arsenic concentration in each of these three wells varies due to pumping rates and changes in the aquifer, it will not be possible to obtain a blend of the effluent below 10ppb.Tests to determine the most economical method for the arsenic abatement of these wells will be completed within the next two- three weeks. To guarantee an adequate quantity as well as a safe water supply for the City, it is essential that the concentration of arsenic not exceed the MCl of 10ppb at all times, especially during the dry season. Arsenic abatement of the water from these wells is the only method to guarantee safe drinking water for the City.	3,000,000	3,274	7,376 04	Solano	Ι	2011

4336 3610015 36:	10015-003	CRESTLINE VILLAGE CWD - DIVISION 10	Additional Storage Tanks for Local Source Supply	The project will include the furnishing and erecting of two new 250,000 gallon welded steel tanks with reinforced concrete caissons, drainage facilities, and site piping. The tanks will be seismically anchored, and will include erosion control, paving, and fencing. A pump/control station will be constructed at the tank location. If funding is secured, this new distribution infrastructure will supply the community with 500,000 additional gallons of storage capacity to assist in the District's emergency preparedness plan, disaster response, and drought mitigation supply, as well as day-to-day residential water supply.	0	c	54% of our drinking water is supplied from local groundwater sources. The ability to provide local source water to our customers is restricted due to limited available storage capacity. Construction of additional storage tanks will allow us to maintain a higher percentage of local water to our customers and permanently decrease our dependency on State Water Project water. There is currently one tank in the proposed construction cone and it is the only distribution method available to customers in the area. The tank is very old and should the system malfunction, there will be no water supply available to those customers. We will add two new storage tanks to this site alongside the existing tank. Additionally, Crestline Village Water District is located in a high fire danger area of the San Bernardino mountains and it is essential that we increase our community's drought water supply as a buffer to the uncertain future of the State Water Project and Colorado River water supplies.	300,000	4,900	7,400 13	San Bernardino	v	2008
4337 0210002 02:	10002-005	Kirkwood Meadows Pubilc Utilit	Kirkwood Water Supply Feasibility Project	The proposed Kirkwood Water Supply Feasibility Project O (Project) will address water supply piped from nearby Caples Lake through an existing pipeline used to convey water to snow-making facilities at Kirkwood Mountain Resort (KMR). Water would be diverted from the KMR line and treated at a new package plant treatment facility before release into the public water system. Additionally, Project studies will create a comprehensive water master plan, water supply assessment, and consistency with adopted land use plans, bringing the system into compliance with state water policy. The Project consists of the following components: 1. Information/Data Gathering and Review 2. Water Supply Assesment/Water Demand Projections 3. Water Quality Test Program 4. Identification of Alternative Treatment Plant Site Areas 5. Identification of Infrastructure Requirements and List of Alternatives 6. Development of Preliminary Conceptual Layouts1. Information/Data Gathering and ReviewReports, plans, and studies relative to the project will be gathered and reviewed. This will include information on the physical condition of the Caples Lake and Kirkwood areas, existing and projected populations, flow and tank level data, and historic water use records.2. Water Supply Assesment/Water Demand ProjectionsDevelopment of a 20-year and ultimate maximum day water demand projections for the	0	c	The Kirkwood Meadows Public Utility District (KMPUD) currently draws water from four of its five groundwater wells to satisfy the demand from the 633 equivalent dwelling units (EDUs) connected to the water system. Existing storage capacity for emergency, operational, and fire protection purposes totals 950,000 gallons. However, the KMPUD water system requires urgent attention to serve the needs of the community. Three key issues bar this public water system from fulfilling the demands of the Kirkwood community, of the hundreds of thousands of visitors annually, and of state code: 1. Capacity 2. Safety/Reliability 3. Regulatory Compliance1. Capacity The Kirkwood Specific Plan (Adopted jointly in 2003 by Alpine, Amador, and El Dorado counties) estimates the number of EDUs in KMPUD service area will increase to 1757 at build-out. This represents a 177% increase in the water demand on the KMPUD system. In order to accommodate the planned expansion it will be necessary to increase infrastructure proportionally with development to support planned capacity. The aquifer and groundwater recharge rates have not been proven through scientific studies to have the capacity required to service the Kirkwood population upon planned build-out. It is, therefore, necessary that alternative sources be explored/utilized to supply water to the KMPUD service area. 2. Safety/Reliability Historically, the lack of	250,000	848	7,500 09	Alpine	1	2011

4338 4910016	4910016-002	Cotati, City of	Meter Replacement and AMR Upgrade Project	The project consists of replacing meters, and in some cases, meter boxes to fully replace all manual read meters. Meters would then be AMR enabled in a pilot area followed by City-wide implementation.Work would require purchase and installation of new water meters and associated meter boxes, meter and meter reading equipment for AMR reading, and in-home meter reading devices.	0	0	C	The City of Cotati currently has a mix of manual read and touch pad meters for service connections. To increase the efficiency and accuracy of meter reading and billing, the City needs the resources to complete the retrofit of manual read meters. Due to resource constraints, the City reads meters every 2 months. This is insufficient in the face of on-going water shortages, as the customer does not have timely information to modify water usage patterns. With continued regional growth, water supply uncertainties due to global warming and competing natural resource needs, it is imperative that we use water more efficiently. Therefore, the City is looking to implement automatic meter reading (AMR) to provide real-time usage to customers through in-home devices. In conjunction with established water budgets for each customer, this is anticipated to greatly increase the effectiveness of water conservation efforts.	200,000	2,560	7,532 18	Sonoma	Π	2009
4339 4910023 4340 4910023	4910023-001 4910023-004	California-American Larkfield (PUC) California-American Larkfield (PUC)	Larkfield "District Wide" Water Conservation Program.	Improvements to existing water treatment plant. The program has two "full service" elements that encompass a "District Wide Water" Conservation Program. Element A. A team of trained plumbers will retrofit 1,800 residential homes / 3,600 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 110 acre feet per year. Element B. A team of specialist will retrofit 600 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 36 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 – 24 months and employ 75 to 100 people.	0 0	0	c c	Water exceeds odor standards. Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 146 acre feet per year or 50.0 / 75.0 gallons per day, per person.	210,000 1,756,000	2,367 2,367	7,775 18 7,775 18	Sonoma Sonoma	II II	1998 2009
4341 5610014	5610014-005	Golden State Water Company - Ojai	Ojai - San Antonio Reservoir, piping, and booster upgrade	The existing 100,000 gallons of storage would be destroyed and a new 1.0 MG reservoir would be constructed, along with the required yard piping. Existing booster pumps would be upgraded to increase flows out of the plant.	0	0	С	This storage reservoir would be sited at the well field where the bulk of the water for the Ojai system is produced. The current 100,000 gallon forebay has reached the end of its useful life and is in a deteriorating condition; it's size is insufficient to allow for pumping in off-peak hours to take advantage of reduced energy rates. A larger reservoir, along with the associated yard piping and booster pump upgrades, would allow for increased fire flows for greater community protection, as well as allowing better use of groundwater to supply peak flows, potentially reducing dependence on purchased water.	3,200,000	2,870	8,200 06	Ventura	IV	2009
4342 5610014	5610014-006	Golden State Water Company - Ojai	Ojai - Mutual Well #6	A new well will be drilled and equipped in our Mutual Plant well field, and all necessary yard piping installed to connect it to our treatment and distribution system.	0	0	с	Aging wells and increased demand necessitate the drilling of a new well to reduce dependence on purchased water, thus ensuring our customers of a process the survey of a lower part of the survey	2,500,000	2,870	8,200 06	Ventura	IV	2009
4343 5610014	5610014-004	Golden State Water Company - Ojai	Ojai - Country Club Road Main Replacement	2400 feet of 4 inch pipe will be replaced with 8 inch ductile iron pipe.	Ο	0	с	Because of aging infrastructure, deteriorating pipeline condition, and too high pressures necessary to provide adequate flow, water loss in this 2400 foot section of Country Club Drive has risen too high, and leaks and main breaks have become too frequent. To conserve water and reduce disruption of service to our customers, this 4 inch main line needs to be replaced with an 8 inch line.	1,100,000	2,870	8,200 06	Ventura	IV	2009

4344 4210020	4210020-001	Santa Ynez River Water Cons. Dist. ID#1		Replace liner and upgrade piping and inlet/outlet.	0	0	С	Needs to upgrade the 6.5 million gallon reservoir.	1,500,000	2,327	8,298 06	Santa Barbara	IV	1998
4345 4210020	4210020-003	Santa Ynez River Water Cons. Dist. ID#1	Standby Sources	Provide fitlration and disinfection treatment which complies with the SWTR or provide additional piping to utilize the well as an agricultural only source.	0	0	C	Gallery well subject to SWTR compliance and is not filtered.	2,750,000	2,327	8,298 06	Santa Barbara	IV	1998
4346 4210020	4210020-004	Santa Ynez River Water Cons. Dist. ID#1		Implement slope stabilization measures necessary to control embankment creep below the reservoir and reservoir reconditioning	0	0	с	Improve 6.5 MG reservoir's structural stability	2,500,000	2,327	8,298 06	Santa Barbara	IV	1998
4347 4210020	4210020-006	Santa Ynez River Water Cons. Dist. ID#1	Security Safeguards for Booster Pump Stations	Problem Description Currently, Santa Ynez Water Conservation District, Improvement District No. 1 (ID#1) has two booster pump stations that are remotely located, putting these pumping stations at risk of intentional destruction due to vandalism and/or terrorism. Both of these booster pump stations are in need of security fencing, as well as remote cameras for surveillance to ensure the reliabilit of the water system. One booster pump station, Meadowlark, is located on a 2 acre site. The other booster pump station, Mesa Verde is located on a ¼ acre site. Meadowlark Booster Pump Station has an approximate flow of 3850 gallons per minute and Mesa Verde Booster Pump Station has an approximate flow of 4713 gallons per minute. Additionally, Mesa Verde Booster Pump Station provides for the entry of Cachuma Projec and State Water Project water into ID#1's system. Should these facilities be damaged or interrupted due to security breaches, there would be insufficient backup supply to meet demands or fire flows. This would amount to a critical failure of the system.	O s y t	0	C	Security Project	155,000	2,327	8,298 06	Santa Barbara	IV	2007
4248 2610112	2610112-002		т	Drill three new wells	0	0	c	Wells are old and can fail any time due to are	260,000	2 610	8 646 12	San Bernardino	V	2000
4349 3610112	3610112-002	HELENDALE COMMUNITY SERVICE DISTRIC	Т	Enhance ability to operate and monitor sites by a new telemetry system	0	0	C	Unreliable telemetry systen	100,000	2,610	8,646 13	San Bernardino	v	2000
4350 3610112	3610112-001	HELENDALE COMMUNITY SERVICE DISTRIC	т	Construct telemetry system	0	0	С	Need control system for off peak pumping	150,000	2,610	8,646 13	San Bernardino	v	1998

4351 1910250	1910250-005	NEWHALL CWD-PINETREE	RMS for Pinetree Reservoirs 1 & 1A	Newhall County Water District posesses enough land to O install the RMS system and housing for the system at Pinetree Reservoirs 1 and 1A. The project would involve construction of a block building, installation of a onsite sodium hypochlorite generator, sodium hypochlorite day tank, and aqueous ammonia storage tank. Also installed would be Total Chorine Analyzers and dosing equipment to deliver the chemicals. The RMS system will be maintained by NCWD staff and integrated into SCADA.	0	C	The Pinetree service area is located in the farthest easternmost section of the Santa Clarita Valley. Customers within the Pinetree Division receive approximately 40% alluvial groundwater and 60% purchased State Water Project (SWP) water. SWP water is treated at the Castaic Lake Water Agency treatment facilities that are 5 and 10 miles away from the Pinetree service area. The extended residence time of the water before NCWD receives it coupled with additional residence time in the Pinetree distribution system make maintaining water quality standards a constant struggle. To complicate matters further, chloramines are used in the disinfection process. Using chloramines are used in the distribution system. Most nitrification within the distribution system. Most nitrification problems appear when detention time is increased after chloramination. What happens is the chlorine dissipates leaving ammonia. The uncombined ammonia is then reduced by bacteria into nitrites. NCWD operators are skilled at monitoring and dealing with nitrites before they become an issue. During the summer months increased temperatures in reservoirs complicate the process by dissipating chlorine at a higher rate. This translates into additional flushing activities to combat long detention times in the reservoirs. Reservoirs 1 and 1A are the "heart" of the Pinetree Distribution system. All waters are pumped to	150,000	2,648	8,689 15	Los Angeles	IV	2009
4352 2710007	2710007-003	Gonzales, City of	2010 Johnson Canyon Water Main Improvemen	The general project description: This project includes O t furnishing all labor, materials, tools, and incidentals required for the construction and installation of approximately 6,600 lineal feet of 12" PVC water main, valves, fittings, trenching backfill & restoration. The SCADA system will allow the City to remotely monitor the entire system, place any or all wells into hand and run them manually, or disable any well from running, or operate any well in automatic mode based on tank level (with individual on/off setpoints, with or without time- of-day override). The proposed system will easily allow future expansion for the City to include lift stations, future storage tanks, and/or the City's wastewater plant without the need to purchase additional software. The following scope of work shall include all labor and	0	c	Our City Goal for this project is that our water system continue to besafe, reliable, and energy efficient. Our operational challenges werestorage and deliver supply lines. Recently, we increased our storagefrom one million gallons to seven million gallons of storage capacity, effectively addressing that issue.Now, our immediate focus is on the main truck line to the new tanks.The existing supply line is not large enough, and limits our pumpingcapabilities. The other issue is water system control through automation. Our present telemetry system is aging, and only provides control 2 of the 4 city wells. In fact, we have been having problems with the system the last couple of months. The telemetry system is a low voltage contact system that runs via phone lines, and the phone company has	855,000	1,916	8,803 05	Monterey	Π	2011

given us notice that it no longer recognizes this system.

The addition of additional water main capacity along with SCADA will permit the city to alter its pumping

schedule, lowering operating costs while becoming

more environmentally responsible and sustainable.

materials (installation of the panels, conduits, and

Hall);Supply one(1) Master 1 watt ISM spread spectrum RTU unit, Omni directional antenna and cableSupply five

(5) Slave 8ADI/9D0 1-watt ISM spread spectrum RTU

units with battery back-up power supplies, 20' antenna cables, and Yagii antennasFRM to install necessary current switches/transformers and control wiring at each of 4 well sites to allow monitoring/control of well pumps and chlorine pumpsSupply one (1) level transducer for Tank #1 - (provisions for 2 additional tanks included)Supply one (1) Dell dual hard drive

antennas at each well site, tank site, and City

4353 3610044	3610044-002	DWP - BIG BEAR LAKE/MOONRIDGE	Wellhead Treatment - Nitrate Concentration in Lake William Service Area	Preliminary recommendations indicate the need to 0 treat water prior to distribution to our customers. A nitrate treatment plant including monitoring equipment will be required. The results of an engineering study would provide further details on the facilities required.		0	c	The Lake William Service Area consists of 120 developed lots with buildout capacity of 234 lots. Since 1990, nitrate has been detected in increasing concentrations in ground water from all wells serving the area. Septic systems are the source of ground water nitrate.Evaluation of the available natural recharge, residential lot density, and aquifer storage capacity suggest that the area has a limited capacity to dilute existing and future septic effluent contributions to the ground water system. Without mitigation, future nitrate concentrations will continue to increase to levels that will exceed the MCL at some time in the future.The rate at which nitrate concentrations will increase is uncertain and appears to be correlated with infiltration and deep percolation of precipitation. Given the current nitrate concentration of 32 mg/L and the observed increases after an above-normal precipitation year, it is imperative that the Department of Water and Power begin planning to mitigate the nitrate as soon as possible.	100,000	10,366	8,839 13	San Bernardino	v	2008
4354 3610044	3610044-001	DWP - BIG BEAR LAKE/MOONRIDGE	Mainline Extension to Service Lake William	The purpose of the project is to provide supplemental O water to the Lake William water supply system. Water would be delivered from the existing Erwin Lake water system to the Lake William water system through a new 6-inch pipeline. The engineering was completed in November 2004 and included the installation of 8,000 LF of 6-inch Class 350 DIP pipe, 7,100 LF of 6-inch Class 200 DIP or PVC pipe and a new booster station.		0	с	The Lake William system is isolated geographically from the rest of the service area and relies on local ground water resources to meet domestic water demands. Hydrogeologic studies conducted in 2003 indicate that the average water demand of existing customers and the adjacent YMCA Camp exceed the perennial yield (safe yield) of the subarea. Only one-half of the legal lots in the system have been improved. After stringent summertime water budgets, temporary use of reclaimed water for landscape irrigation and restrictions on landscaping including no new grass, a building moratorium was put in place in 2006.	2,500,000	10,366	8,839 13	San Bernardino	v	2008
4355 0910013	0910013-007	Georgetown Divide PUD	GDPUD Meter Replacement	Purchase and install new water meters and install O additional meters at unmetered locations. The new meters will promote water conservation, provide additional assistance with leak detection, and improve operating efficiencies.	)	0	с	Replace water meters throughout distribution system	1,600,000	3,587	9,021 09	El Dorado	I	2009

4356 0410008	0410008-004	Thermalito Water & Sewer District	Contact Time Enhancement	The District has switched the plant to a fixed speed operation and when the tank reaches its maximum leve the plant is shut off and the tank is allowed to draw down as much as 20 to 25% once a day. This is not a good fix as when the tank draws down there are numerous customer complaints of low pressure and again taste and odor complaints do arise do to the fact the tank water is improperly mixed. The tank needs an independent inflow on the opposite side of the tank. This would give the tank a maximum mixing operation keeping the Chlorine levels up to treatment plant levels The other benefit would be the treatment plant could be kept in the automatic mode and water would be moving through the tank 24 hrs a day. When demand reaches its maximum the tank fluctuation would not be in the 20 to 25% range, more like 10 to 15%. A positive benefit from this would be reduced pressure swings in the distribution system and the total water supply in th 2.5-MG tank would be cycled through the tank daily. Another positive gain is added Chlorine Contact Time gained by utilizing the 2.5MG tank, another 40 to 60 minutes of added contact time could be realized.Scope of Work1. CEQA - Complete and Approved2. Project Design - Completa. Bid Documents - Complete4. Remove and replace existing system5. Flushing and Pressure Testing To replace the approximate 2,000' of	0 el 5.	0	c	In 2008 this 24" distribution main was required to be utilized to meet state required Chlorine Contact time for disinfection purposes. The line was isolated in 2008 from the distribution system and the water is pumped directly from the treatment plant to the point where the new 30" distribution line was connected. The approximate total length of pipe to be replaced or installed is 2,000'. The District gains approximately an additional 19 minutes of Contact time when the plant is operated at 3,200 gpm. The problem we have is the pipe is over 60 years old and has deteriorated to the point that its physical strength and integrity is gone. It is an old pipe that was built from sheets of steel rolled, tarred and riveted on site. The problem the District is having with this old pipe is unexpected major blow outs at times have nearly emptied our main storage tank. The major risk is the loss of the use of the 2.5 million gallon (MG) tank for a time in which the whole District is depressurized and becomes at risk for contamination. The other side effect, is this pipe has become a major component in developing the Districts Chlorine Contact Time requirements and if this pipe is removed from the contact time equation, the secondary plumbing that could be utilized in such an emergency would not allow the District to utilize its treatment plant at its fullest	325,000	2,779	9,513 21	Butte	1	2011
4357 5610039	5610039-002	CHANNEL ISLANDS BEACH CSD		Decommission three wells.	0	0	с	Connected to Port Hueneme Water Agency, reliance on CIBCSD wells as sole sources for water supply has	60,000	1,959	9,527 06	Ventura	IV	1999
4358 5610039	5610039-001	CHANNEL ISLANDS BEACH CSD		Desalination treatment plant, storage Reservoir and State Water connection	0	0	с	decreased markedly. High sulfates	4,000,000	1,959	9,527 06	Ventura	IV	1998
4359 1910020	1910020-003	EAST PASADENA WATER CO.	Nitrate Analyzer to Detect Harmful Nitrate Levels	As mentioned, the project is to install a Nitrate Analyze with peripheral monitors. The analyzer will send a signal to on-call operators notifying them if the nitrate level should climb to a potentially harmful level. We currently have interconnections with the City of Pasadena and City of Arcadia. The Analyzer will also detect Nitrate in blend water. If needed, we could give data feedback to these cities if we detect that blend water nitrate levels are climbing.	r O	0	С	As directed by the Department of Health, we must install a nitrate analyzer which will determine nitrate levels of well water, reservoir water and blend water. The analyzer will send an alarm to our SCADA system to let operators know if nitrate levels are exceeding 80% of the maximum contaminant level. The MCL is 45 parts per million. In the past, our well has exceeded 45 ppm and the Dept of Health ordered East Pasadena Water Company to shut the well off, leaving the company with only two wells to supply our over 9,000 consumers, 2,900 service connections. We have since lowered the nitrate level in that well by isolating its upper zones, but the nitrate may increase at any time. The Nitrate Analyzer will literally notify operators of potentially harmful water conditions, especially in homes which	50,000	2,945	9,745 22	Los Angeles	IV	2009

have new-born babies, and will allow our operators to react by shutting off a well or blending with water from our interconnection. This is a much-needed tool as it acts as an alarm to potentially harmful water

conditions.

4360 1910020	1910020-002	EAST PASADENA WATER CO.	Well #11	A new well called W 11 will serve to augment our source of supply by acting both as a back up well and a relief well which will extend the life of existing wells. This is the most cost-effective way to address our source of supply problem in lieu of relying on our interconnections with the cities of Arcadia and Pasadena. Interconnection water ranges in cost from \$600-\$900 per acre-foot. This is quite costly when compared to our pumping costs of about \$100 per acre- foot. This high cost is ultimately passed on to the consumer. Well 11 would be cost-effective and augment our source water challenges. East Pasadena Water Company may have to install a treatment facility for the new well depending on nitrate and other constituent levels.	0	0	с	East Pasadena Water Company is a small water company (B) serving about 9,700 people. We have been serving portions of Pasadena, Temple City and Arcadia since 1913 via our parent company. We currently have three wells; w7 is 86 years old, w8 is 72 years old and w9 is 62 years old. W7 cannot run for an extended period due to nitrate contamination. W8 is lined with a device to isolate the top zones due to nitrate contamination. As you can see, we need at least one new well which will pump at least 1,000 gallons per minute to serve the public in the event one of our wells fails. It is imperative to place another well in service immediately. However, due to our size and our concern about burdening our customers further, we have not drilled the desperately needed well as of yet.	2,458,500	2,945	9,745 22	Los Angeles	IV	2009
4361 3610125	3610125-007	SBNDO COUNTY SERVICE AREA 70J		Construct treatment plant to treat water from the	0	0	с	Over drafted basin with no natural recharge capabilities	10,500,000	2,984	9,847 13	San Bernardino	v	2001
4362 3610125	3610125-006	SBNDO COUNTY SERVICE AREA 70J		aqueduct. Install a new telemetry system to monitor the system for automatic control and alarms	0	0	С	Unreliable telemetry system	100,000	2,984	9,847 13	San Bernardino	v	1999
4363 3610125	3610125-001	SBNDO COUNTY SERVICE AREA 70J		Construct 4 new reservoirs and 3 new wells	0	0	С	Inadequate source and storage capacity	3,100,000	2,984	9,847 13	San Bernardino	v	1998
4364 3410002	3410002-009	SCWA - Arden Park Vista		Construct main replacement project. Involves design and construction.	0	0	С	General system improvement. Abandoned wells, aging distribution system and low pressure problems.	2,000,000	2,999	9,887 09	Sacramento	I	1998
4365 3410002	3410002-008	SCWA - Arden Park Vista		Acquire site for 250,000 gallon storage tank and booster station.	0	0	с	General system improvement. Abandoned wells, aging distribution system, and low pressure problems.	100,000	2,999	9,887 09	Sacramento	I	1998
4366 3410002	3410002-007	SCWA - Arden Park Vista		Design and construct a 250,000 gallon storage tank and booster station.	0	0	с	General system improvement. Abandoned wells, aging distribution system, and low pressure problems.	250,000	2,999	9,887 09	Sacramento	I	1998
4367 3410002	3410002-006	SCWA - Arden Park Vista		Perform an engineering study to define a main replacement program.	0	0	с	General system improvement. Abandoned wells, aging distribution system, and low pressure problems.	100,000	2,999	9,887 09	Sacramento	I	1998
4368 4010011	4010011-003	MORRO BAY WATER DEPARTMENT	Upper Kings Waterline Replacement	In 1997 the City of Morro Bay adopted an updated Water Master Plan. This plan included a hydraulic model designed to analyze flows through our system for both current and build out conditions. Based upon the findings of the model there are a number of lines that based upon anticipated future flows will have excessive line velocities. Excessive velocities can lead to water quality/turbidity problems with the removal of materials and films from the pipe walls, as well as reduce the life expectancy of the pipe. This pipeline will be upsized to decrease velocities and ensure adequate fire and service capacity for the build out conditions. The Upper Kings Tanks in Morro Bay is a blending tank for all of the water sources the City uses. The entire distribution network starts at the Upper Kings Tanks and flows to customers through the distribution piping. The existing 6-inch line that leaves the tanks feeds residential areas near the tank as well as provides water to the Elena tanks. Based upon our hydraulic modeling this line is undersized. The 6-inch line does not provide a sufficient flow to meet the expected fire flow demand in the areas local to the tank. Replacing this line with a 12 <sup>n</sup> line will allow the water system to maintain residential pressures to high elevation areas under high demand conditions and will improve overall distribution efficiency. This upgrade will extend from the Upper Kings Tanks to King Avenue, north along Kings Avenue		0	C	The current flow rate from the Upper Kings tanks in Morro Bay is not sufficient to meet build out fire flow required to serve the residential area near the tank.	33,000	5,425	10,270 06	San Luis Obispo	IV	2008

4369 4010011	4010011-005	MORRO BAY WATER DEPARTMENT	Nutmeg Waterline Replacement	In 1997 the City of Morro Bay adopted an updated Water Master Plan. This plan included a hydraulic model designed to analyze flows through our system for both current and build out conditions. Based upon the findings of the model there are a number of dead end lines, which need to be converted into pressure loops. The addition of this line will serve the dual purposes of eliminating a dead end line where water age problems such as nitrification can occur, as well as providing an alternate flow path allowing for future system maintenance. To meet fire flow requirements in the northern portion of Nutmeg, an 8-inch pipeline is proposed in Elena Street extending from Hemlock Avenue to Juniper Avenue about 800 feet. Additionally 10-inch pipe is needed along Avalon Street from Laurel Avenue to Ironwood Avenue and continuing on Ironwood Avenue to the previous Hayward Lumber site, totally approximately 2375 feet.	0	0	с	Existing deficiencies within the Nutmeg Zone include supplying residential fire flow requirements to the southern portion of the zone, primarily along Bayview, Rockview, and Ponderosa. Residential fire flow requirements also cannot be met in the northern portion of the zone along Hemlock and Sequoia.	115,000	5,425	10,270 06	San Luis Obispo	IV	2008
4370 4010011	4010011-007	MORRO BAY WATER DEPARTMENT	Nutmeg Water Tank	The City of Morro Bay's Water Master Plan is being used to guide upgrades to the City's water system. The Nutmeg Tank is undersized for it's service area by 1.19 million gallons. In order to meet this demand a new system of tanks will need to be designed and installed in order to provide water to residences for use and for fire flow demands. The upgraded tank and associated pressure zone modifications will increase turnover and reduce delivered water age, which will improve water quality.The current tank site and proposed tank site are on private land outside of the City limits. The new tank installation will need remote Supervisory Control and Data Acquisition (SCADA) communications creating an opportunity to enhance emergency service communications capabilities.The project will entail, design of a tank system and construction of the project. This project will provide the required water supply the City needs to meet build out fire flow demands while reducing the number of pressure zones in the City.	0	0	С	In 1997 the City of Morro Bay adopted an update of the Water Master Plan. Based upon a hydraulic model created at that time it was recommended to install storage capacity for the Nutmeg pressure zone since the existing tank at the Nutmeg site is undersized to meet future fire flow demands. The tank addition will enable the optimization of the pumping station operations and will increase system storage and reliability.	750,000	5,425	10,270 06	San Luis Obispo	IV	2008

4371 4010011	4010011-004	MORRO BAY WATER DEPARTMENT	New 8 inch line Kern to Piney on Anchor	In 1997 the City of Morro Bay adopted an updated Water Master Plan. This plan included a hydraulic model designed to analyze flows through our system for both current and build out conditions. Based upon the findings of the model, there are a number of dead end lines, which need to be converted into pressure loops. The addition of this loop line will serve the dual purposes of eliminating a dead end line where water age problems and nitrification can occur as well as providing an alternate flow path allowing for future system maintenance. The Upper Kings Tanks in Morro Bay are blending tanks for all of the water sources the City uses. The entire distribution network starts at the Upper Kings Tanks and flows to customers through the distribution piping. The existing 6-inch line that leaves the tanks feeds residential areas near the tank as well as taking water to the Elena tanks. Based upon our hydraulic modeling this line is undersized for current and future fire flowsTo help move water more efficiently and to meet the fire flow requirement a new 8" water line is needed on Kern Street from Pecho to Olive and continuing down Olive Street to Bernardo.	0	0	c	The current flow rate from the Upper Kings Tanks in Morro Bay is not sufficient to meet build out fire flow required to serve the residential area near the tank.	60,000	5,425	10,270 06	San Luis Obispo	IV	2008
4372 4010011	4010011-006	MORRO BAY WATER DEPARTMENT	Upgrade Upper Kings Tan	k The City of Morro Bay's Water Master Plan is being used to guide upgrades to the City's water system. The Upper Kings Tank is undersized for it's future service area by 0.78 million gallons. In order to meet this need a new tank will need to be designed and installed in order to provide water to residence for use and fire demands. The upgraded tank with network pipe changes and pressure zone modifications will increase turnover and reduce delivered water age, which will improve water quality. The project will include the design and construction of the new tank system. This project will provide the required water storage to meet the City's needs at build out in accordance with water supply regulations.	0	0	с	In 1997 the City adopted an update of the Water Master Plan. Based upon a hydraulic model created at that time it was recommended to install storage capacity for the Upper Kings pressure zone since the existing tanks at the Upper Kings site are undersized to meet future fire flow demands. The tank addition will enable the optimization of the pumping station operations and will increase system storage and reliability. The new tank installation will need remote Supervisory Control and Data Acquisition (SCADA) communications creating an opportunity to enhance emergency service communications capabilities.	355,000	5,425	10,270 06	San Luis Obispo	IV	2008
4373 4010011	4010011-002	MORRO BAY WATER DEPARTMENT	Upgrade Black Mountain Tank	The City of Morro Bay's Water Master Plan is being used to guide upgrades to the City's water system. The Black Mountain Tank is undersized for it's service area by 0.21 million gallons. In order to meet this need, a new system of tanks will need to be designed and installed in order to provide water to residence for use and fire demands. The project will include the design and construction of the new tank system. This project will provide the required water supply the City needs to meet water supply regulations.	0	0	с	In 1997 the City adopted an update of the Water Master Plan. Based upon a hydraulic model created at that time it was recommended to install storage capacity for the Ridgeway pressure zone since the existing tank at the Black Mountain site is undersized to meet future fire flow demands. The tank addition will enable the optimization of the pumping station operations and will increase system storage and reliability. The new tank installation will need remote Supervisory Control and Data Acquisition (SCADA) communications creating an opportunity to enhance emergency service communications capabilities.	100,000	5,425	10,270 06	San Luis Obispo	IV	2008

4374 4010011	4010011-001	MORRO BAY WATER DEPARTMENT	Lower Kings Waterline Replacement	In 1997 the City of Morro Bay adopted an updated Water Master Plan. This plan included a hydraulic model designed to analyze flows through our system fo both current and build out conditions. Based upon the findings of the model there are a number of lines that based upon anticipated future flows will have excessive line velocities. Excessive velocities can lead to water quality/turbidity problems with the removal of materials and films from the pipe walls, as well as reduce the life expectancy of the pipe. This pipeline will be upsized to decrease velocities and ensure adequate fire and service capacity for the build out conditions. The Lower Kings Zone of the Morro Bay water system is currently served solely by the Upper Kings Zone througo a single PRV located at Morro Bay Blvd. and Kern Avenue. The Lower Kings Zone includes most of Morro Bay's business districts and visitor serving facilities along the Embarcadero. This single PRV is the only source of water to the zone. The addition of a second PRV at Dunes Avenue and Napa Avenue will provide a second source of supply to the zone from the Upper Kings Zone. To meet the 3,750 gpm fire flow requirement at the El Morro Lodge, the 6-inch line on Dunes Street from Napa to Monterey Avenue will need to be upgraded to a 12-inch line. Additionally there are several other lines that require upsizing such as: the existing 6-inch line along Monterey Avenue from Dunes	o r	0	C	The current flow rate from the Upper Kings tanks in Morro Bay is not sufficient to meet build out fire flow required to serve the residential area in the Lower Kings Pressure Zone.	100,000	5,425	10,270 06	San Luis Obispo	IV	2008
4375 5510001	5510001-005	TUD - Sonora/Jamestown Water System	Particle Counters for Crypto compliance	INSTALL PARTICLE COUNTERS.	0	0	С	LACK OF PLANT MONITORING EQUIPMENT FOR CRYPTO OPTIMIZATION.	18,000	4,342	10,294 11	Tuolumne	Ш	1998
4376 1910148	1910148-003	SIERRA MADRE-CITY, WATER DEPT.	High Capacity Well	The proposed project will provide for the replacement of an existing water supply well with a new high capacity well to provide for groundwater supply reliability. The City's existing production wells are nearing their useful life and a need exists to drill and equipment a new well to allow one of the old wells to be decommissioned. The city is highly dependent upon it local groundwater supplies for the East Raymond Basin. Recent drought years have lowered the pumping levels o of the existing wells and the new well would be drilled and set at an optimum level for groundwater exaction. This project would include well design, hydrogeological services, as well as drilling and equipping construction contracts. The water supply well project is planned to provide increased system reliability, assurance of water quality and fire protection	o	0	С	The quality and reliability of drinking water supplies for the city of Sierra Madre are at risk due to the deterioration of their water infrastructure due to age and from the potential impact from a major seismic event in the region. The design and construction of the purposed projects is imperative in order to safeguard the quality and quantity of the drinking water supplies in their communities. Improvements to water storage reservoirs, pump stations, and well supply sources are needed to lower the risk of contaminating the drinking water supply and ensure sustainable water supplies due to the failure of water infrastructure systems.	2,000,000	3,867	10,800 07	Los Angeles	IV	2009

in the residential and commercial areas adjacent to the

San Gabriel Mountains.

## 4377 4410013 4410013-003 Scotts Valley Water District

4378 4110016

4110016-002

Hillsborough Water Dept.

## rehabilitation

Water storage tank

The project consists of four components: 1) Repairs at O Bethany storage tank. The 400,000 gallon tank would be stripped, repaired and recoated. The existing old sheet iron roof would be replaced with a new welded steel or aluminum roof. Tank vents would be modified to prevent contamination and unauthorized access. The tank staircase would be secured against unauthorized access.2) Repairs at MacDorsa storage tank. The 750,000 gallon tank would be stripped, repaired and recoated. The existing old sheet iron roof would be replaced with a new welded steel or aluminum roof. Tank vents would be modified to prevent contamination and unauthorized access. 3) Replacement of the existing 40,000 gallon Orchard Run Water Treatment Plant decant tank with a new steel bolt-up tank of the same capacity. 4) Replacement of the existing 20,000 gallon Orchard Run Water Treatment Plant sludge tank with a new steel bolt-up tank of the same capacity.

"smart meter technology" to remotely "read" all Town Gateway Base Stations (TGBs). The system would use a transmitted via the TGB (and several strategically placed housed in a Regional Network Interface (RNI). The RNI (MDM). The MDM is a browser-based application that and allows the utility to view the information from any PC connected to the network. The MDM also acts as a middleware between the customer billing system and the customer billing system and export meter reading provides reports for management of the meters within

storage tanks have deteriorated over time, creating potential exposure to drinking water contamination, loss of water delivery capability, and/or environmental releases. Specific problems include:1) Bethany and MacDorsa storage tanks require recoating, roof replacement, and modification of tank vents to eliminate the risk of contamination. In addition, the Bethany tank staircase, which provides access to the roof, needs security improvements. The roof, vent, and security deficiences were documented in a letter from CDPH to SVWD dated 8 September 2006. The CDPH letter followed an inspection of SVWD's system conducted in May 2006. The letter required SVWD to either make the required repairs or submit a corrective action plan for doing so. The corrective action plan was submitted; the repairs remain to be completed. There is no redundant water storage in the pressure zone served by Bethany tank. Therefore, tank contamination at this site would seriously impair SVWD's ability to meet customer demand until such time as the tank could be brought back into service. There is redundant storage for MacDorsa tank, though insufficient to fully meet customer demand during peak periods.2) Decant and sludge tanks at Orchard Run Water Treatment Plant have aged and need replacement. These tanks are vital to operation of the treatment plant, which processes The Town of Hillsborough is a residential community located in San Mateo County, California, The Town has an area of 6.23 square miles of hilly canyon-lands with a current population of just over 11,000. The Town's water system includes 8.2 million gallons of water

storage facilities, 14 pump stations and 17 tanks and

The Town provides all water delivery, meter reading

and water billing functions. The Town reads meters

manually once every two months using a Sensus RFI

disadvantages with the Town's current meters and

over fifteen years old. There are a number of

"touch read/wand" technology. The current system is

meter reading system: Meters must be physically read

by a Public Works staff person using a "wand" placed

next to the meter. Meters are spaced by considerable

distances. Meter reading requires the use of a vehicle

environmental impacts associated with its use. Meters

can currently only be reasonably read by the Town once

every two months. More frequent meter reads is cost-

seconds while driving on the freeway: a lot can happen

between looks. For example, the Town does not have

breaks, leaks and other associated over-use of water on

the data necessary to help its customers identify line

prohibitive. Reading water meters once every other

month is like opening your eyes once every thirty

and the associated greenhouse gas emissions and

100 miles of water piping to 4,233 service connections.

11,328 17 San Mateo 11

Santa Cruz

11

2009

2009

Several Scotts Valley Water District (SVWD) water 1.150.000 3.852 11,301 05 909,500 4,296

AMI Installation Project The Town requests funding to convert its current Sensus O "touch-read" meters to an Advanced Metering Infrastructure system. The AMI system would use water meters up to twenty four times per day. These individual meter reads would be transmitted in "data packets" up to four (4) times per day via two Tower single, primary-use (unshared) licensed radio band, which is less vulnerable to interference during transmission (an important consideration in Hillsborough given its topography). The data packets repeaters) would be sent to a metering database consists of 2 servers. Once in the RNI, the data is available for viewing via the Meter Data Manager shows meter reading data in a user friendly interface the RNI. The MDM has the ability to import data from data back to the customer billing system. It also the AMI system as well as graphical and table views of

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4379 4110016	4110016-006	Hillsborough Water Dept.	Darrel Tank #1 and #2 Replacement Project	The Town is at 25% design of the 2 mil gallon pre- or stressed concrete water tank and anticipates completing 100% design by June 2011. The tank will be built above ground using the pre-stressed concrete design method. The pre-stressed concrete tank will be built on the foot prints of the existing tanks #1 & 2. The tank design provides a better inlet / outlet piping design along with a mixing system to improve water quality that requires no electricity to operate. It will be designed to meet all current American Water Works Association (AWWA) standards for seismic design and will include an earth quake shut off system. The new tank design you all as liminate the need for cathodic protection which in turn will save on electricity and ongoing maintenance costs. The increased water storage capacity will give the Town more water reserve to service the residential and other areas during peak water demand in the event of an emergency water shortage, wildfire or earthquake.	0	c	The Town of Hillsborough is a residential community located in San Mateo County, California. It lies west of Highway 101 and east of Highway 280 and is very close to the San Andreas Fault line. Fully two thirds of the Town is in a CalFire State Fire Hazard Zone and nearly half is in a state designated Very High Fire Hazard Zone. The ABAG Mulit-Jurisdictional Local Hazard Mitigation Plan identifies 3,458 acres or 89% of the Town as being at risk from wild land-urban interface fires. The Town's water system includes 8.2 million gallons of water storage facilities, 14 pump statoins and 17 tanks and 106 miles of water piping to 4,200 service connections. Much of the system was originally installed in the early to mid 1900s. The Town would like to replace two of its existing older 500,000 gallon welded steel potable water tanks located at the Darrell Tank Site. These two tanks were constructed in 1952. We would like to replace them with a single larger 2 million gallon pre- stressed concrete tank with current seismic, structural and OSHA standards. The existing tanks are both in need of structural upgrades and repairs to the rafters, floor, the roof steel is deteriorated, and the interior and exterior coatings need to be replace. Tank #2 has had water quality issues in the past due to the tank being the middle of three tanks and the way the inlet / outlet piping is configured. This tank has a tendency to stagnate due to low water turnover. This new tank will	3,500,000	4,296	11,328 17	San Mateo	I	2011
4380 1510013	1510013-003	City of McFarland	Drill two new wells	Drill a new well O	0	С	Two older wells need to be replaced	1,000,000	2,792	12,138 12	Kern	ш	2007
4381 3910015	3910015-002	CITY OF LATHROP		Replace distribution lines as required and drill new well. O	0	С	Aged distribution system and one well out of service due to contamination.	3,000,000	3,675	12,427 10	San Joaquin	III	2002
4382 3610121	3610121-002	SBDNO COUNTY SERVICE AREA 64		Provide a standby power generator to operate O production well #6	0	С	Power outages resulting in unreliable system	50,000	3,782	12,481 13	San Bernardino	V	1999
4383 3610121	3610121-003	SBDNO COUNTY SERVICE AREA 64		Enhance ability to operate and monitor unattended O sites throughout water distribution system	0	С	Unreliable telemetry systen	100,000	3,782	12,481 13	San Bernardino	V	1999
4384 1910096	1910096-011	Newhall CWD-Newhall	Newhall Avenue Pipeline Replacement Project	The replacement of the pipeline on Newhall Avenue will O be completed by construction staff employed by Newhall County Water District. To complete the project new 12 inch ductile iron pipe will be installed and tied into an existing 12 inch transmission line. Approximately 3753 feet of 12 inch ductile iron pipe will be used for the new main line. Lateral mains branching off of the 12 in main will also be used and will consist of 166 feet of 8 inch pipe. Upgrading fire mains to 6 inch ductile iron will also be done at this time and 462 feet of pipe will be used for this. Traffic control and shoring during the installation of pipe will also be done in house with NCWD equipment.	0	C	Newhall is the oldest service area in all of Newhall County Water District's boundaries. Aging pipe in this area is beginning to effect reliability and water quality. Steel pipe installed 40, or more, years ago has reached the end of its usable life. Reliability is affected when pipeline failures lead to system shutdowns for repair. Shutdowns inconvenience customers and increase the risk of disaster if fire response is needed. Failures also hinder surrounding neighborhoods by putting increased demand on other pipelines. Replacing the steel pipe on Newhall Avenue also improves how NCWD can effectively convey water. When new ductile iron pipe is installed it gives NCWD an opportunity to properly align the mainline. Currently, the steel main has many crossings and bottlenecks in pipelines can contribute to stagnant water in the distribution system. Presently, the water being fed. Bottlenecks in pipelines can contribute to stagnant water in the distribution system. Presently, the water main consists of 12 inch steel pipe with various sized laterals branching off. Engineered reports suggest that 12 inch ductile iron pipe should be used to replace the current main. When replaced better flow and reliability will be reached. With better flow, water quality in the area will improve and will decrease the amount of water wasted through constant flushing procedures.	446,596	3,846	12,566 15	Los Angeles	IV	2009

4385 1910096	1910096-012	Newhall CWD-Newhall	RMS for Newhall Reservoirs 4 & 4A	Newhall County Water District posesses enough land to O install the RMS system and housing for the system at Newhall Reservoirs 4 and 4A. The project would involve construction of a block building, installation of a onsite sodium hypochlorite generator, sodium hypochlorite day tank, and aqueous ammonia storage tank. Also installed would be Total Chlorine Analyzers and dosing equipment to deliver the chemicals. The RMS system will be maintained by NCWD staff and integrated into SCADA.	0	C	The Newhall service area is located in the Santa Clarita Valley. Customers within the Newhall Division receive approximately 70% groundwater and 30% purchased State Water Project (SWP) water. SWP water is treated at the Castaic Lake Water Agency treatment facilities that are 5 and 10 miles away from the Newhall service area. The extended residence time of the water before NCWD receives it coupled with additional residence time in the Pinetree distribution system make maintaining water quality standards a constant struggle. To complicate matters further, chloramines are used in the disinfection process. Using chloramines are used in the disinfection within the distribution system. Most nitrification within the distribution system. Most nitrification problems appear when detention time is increased after chloramination. What happens is the chlorine dissipates leaving ammonia. The uncombined ammonia is then reduced by bacteria into nitrites. NCWD operators are skilled at monitoring and dealing with nitrites before they become an issue. During the summer months increased temperatures in reservoirs complicate the process by dissipating chlorine at a higher rate. This translates into additional flushing activities to combat long detention times in the reservoirs. Reservoirs before being disbursed	150,000	3,846	12,566 15	Los Angeles	IV	2009
4386 1910096	1910096-008	Newhall CWD-Newhall	Newhall Well 14	Newhall County Water District plans to drill and outfit a O deep well for potable water production. Currently the District has five wells in the Newhall Division, two of which are in production. A hydrogeologist hired by NCWD has already produced a report giving guidance to where the best production should occur for a new well. Based upon proposed locations, property shall be acquired that meets all of the parameters of functionality, ease of integration into current system, and best possible water production. The well (Newhall Well 14) will perforate the Saugus Aquifer, an underlying water bearing formation in the Santa Clarita Valley, to depths of 950 to 1000 feet below ground surface. NCWD will utilize the services of a hydrogeologist during drilling and will entertain drilling offers from several drilling outfits. Furthermore, the pump, motor, and appurtenances will all be designed by an engineering firm. All aspects of the well will abide to AWWA and Title 22 standards. Staff will also work closely with the engineers to assure NCWD's specifications are met.	0	С	With the uncertantity of State Water Project allocations, Newhall County Water District (NCWD) is planning to increase it's supply reliability by drilling a new potable water well. While a new well incereases reliability in daily operations, Newhall Well 14 will also increases the reliability of water distributed to customers in emergency situations. This is because NCWD will not have to depend on other entities avalability of water during a disaster (such as an earthquake). Another positive aspect of enhancing groundwater is very low in TOC's which are precursers to disinfection byproducts. Having these low levels of precursors translates to decreased disinfection byproduct levels throughout the distribution system. In addition to lowering disinfection by products, the use of groundwater can also help prevent against nitrification in the distribution system. Most nitrification problems appear when detention time is increased after chloramination. What happens is the chlorine dissopates leaving ammonia. The uncombined	500,000	3,846	12,566 15	Los Angeles	IV	2008

ammonia is then reduced by bacteria into nitrites. Detention time would be decreased with groundwater because the transmission time from well to customer is shorter, ultimately resulting in better chlorine residuals

and lower nitrites.

4387 4010026	4010026-005	NIPOMO COMM SERVICES DIST	NCSD Supplemental Wate Project Marysville "City Wide" Water Conservation Project	r Nipomo Community Services District is leading a project focused on the construction of treatment facilities as well as a pipeline to import between 3,000 to 6,200 acm feet of supplemental water per year from the Santa Maria Basin to resolve overdraft of groundwater in the Nipomo Mesa Groundwater Management Area. Currently, all water supplies for the Nipomo area are groundwater derived. Rapid urban growth and increased agricultural production in the area over the past 20 years has resulted in pumping depressions and decreased water quality. The entire Santa Maria Groundwater Basin is currently being adjudicated as a result of these issues. The pipeline inter-tie project will connect the City of Santa Maria water distribution system to the Nipomo Community Services District water distribution system via an 8,000ft, 16-inch pipeline which must cross the Santa Maria River. A pump station, storage reservoirs and treatment facilities will also be included in the project twill provide increased supply reliability for all users in the Nipomo Mesa Groundwater Management Area, by decreasing the demand on the basin from urban users, and adding return flow from the imported water additionally the project will result in improved water quality for users as the Santa Maria water supply The project has two elements.a. Indoor: CWSC intends to retrofit 5,700 bathrooms with water conservation products (toilets & showerheads) and the estimated maters and the estimated	e 0	0	c	The community of Nipomo is located on a coastal mesa averaging an elevation of 380 feet above sea level in the southern end of San Luis Obispo County. Approximately 12,000 customers within seven square miles receive water and wastewater services from the Nipomo Community Services District (NCSD) which has been in operation since 1965. Currently, all water supplies on the Nipomo Mesa are groundwater derived from the Nipomo Mesa Hydrologic Sub-Area of the Santa Maria Groundwater Basin. Over the past 20 years the groundwater basin has experienced pumping depressions and a decrease in groundwater quality in the form of increased salinity. On June 26, 2007 the San Luis Obispo County Board of Supervisors verified the severity of Nipomo's water supply issue by certifying a Level of Severity 3 designation. This designation indicates that water demand is exceeding available supply. In 1997, after years of increased urban and agricultural growth led to a depressed groundwater table underneath the Nipomo Mesa, a law suit to define the safe yield of the entire Santa Maria Groundwater Basin was initiated. Preliminary settlement agreements stipulate that water purveyors on the Nipomo Mesa must import supplemental water to the area. NCSD, as the purveyor of water to at least 12,000 Nipomo CWSC intends to reduce the districts total water consumption to match the long term water supply.	26,000,000	3,879	12,626 06	San Luis Obispo Yuba	IV	2007
4389 1310006	1310006-002	Imperial, City of	Surface Water Treatment Plant Improvements	estimated water savings is 29 acre feet per year. Surface Water Treatment Plant Improvements	0	0	с	Poor sludge removal from sedimentation basins; low rating of Giardia cyst and virus removal	1,500,000	4,033	12,752 14	Imperial	v	1998
4390 1510012	1510012-009	Lamont Public Utility Dist	Sunset Well Project	The Sunset Well Project will first entail a groundwater study of this site to gather the necessary information for drilling into a clean aquifer.Upon receiving results of the groundwater study, the second step will be to drill at the suggested depth and to begin producing water from a viable groundwater source.The following steps will require a new motor, pump, connection to existing system, existing on site storage tank and a booster pump to accomodate pressue for residents 1 mile north of new well site.	O f	0	С	The Lamont Public Utility District (LPUD) has 9 groundwater wells in which 4 are off line due to aging infastructure and water quality issues. The LPUD has 3,000 plus connections and a population of 14,000 plus, currently being served. Lamont is growing fast, and there is a strong push for future development. The LPUD has recognized the need for additional wells for some time, and now that development is begining to move at a faster rate, the need for additional supply to match the current demand is nothing less than critical.Once this project is completed, we will have additional pressure in the south end of Lamont and the Weedpatch area as well as additional pressure to accomodate the future growth for our community.	2,000,000	3,603	13,296 12	Kern	II	2008
4391 1510012	1510012-008	Lamont Public Utility Dist	Waterline Enhancement Project	This project would entail the construction and installation of approximately one mile of 10 inch RCP to reroute and bypass the section of the system that is currently bottlenecked.	0	0	с	Approximately 600 feet of 4 inch distribution line connects the north side and soouth side of the Lamont Public Utility Districit. The north end of the 4 inch pipe is connected to a 6 inch distribution line and the south end of the 4 inch distribution line is connected to a 10 inch distribution line. This bottlenecks the system.The goal of this project is to open up the flow between the south side and north side of the system.	2,000,000	3,603	13,296 12	Kern	111	2008
4392 4210007 4393 4210007	4210007-005 4210007-001	MONTECITO WATER DIST MONTECITO WATER DIST		Rehab tunnel. Replace pipelines and install pump station.	0 0	0 0	C C	Needs to improve Doulton Tunnel. Needs to upgrade distributions system	725,000 5,100,000	4,529 4,529	13,500 06 13,500 06	Santa Barbara Santa Barbara	IV IV	1998 1998

4394 4210007	4210007-003	MONTECITO WATER DIST		Construct pump station and additional piping.	0	0	с	Needs to upgrade distribution system for State Project water use.	770,000	4,529	13,500 06	Santa Barbara	IV	1998
4395 1910159	1910159-004	TRACT 180 MUTUAL WATER CO.	Water pipeline replacement - Elizabeth Street	The pipelines on Elizabeth Street will be consolidated into one mainline. Currently the pipelines lay inside of the parkway, so those pipes would be abandoned in place and the new pipeline would be placed out in the street.	0	0	с	Curently we have two steel pipelines running on each side of Elizabeth Street. The pipelines are frail and have very little density, there is no lining within pipe and the coating on the pipe seems to be ineffective against the soil in the area. Any variation in water pressure seems to always cause mainline leaks, which causes a problem whenever we need to operate a fire hydrant or isolate the mainline. Because of the condition of the pipelines we are faced with numerous leaks per year.	2,000,000	1,093	14,000 07	Los Angeles	IV	2011
4396 1910159	1910159-002	TRACT 180 MUTUAL WATER CO.	Water pipeline replacement - Wilcox Avenue	The pipelines on Wilcox Avenue will be consolidated into one mainline and tied into each pipeline it crosses at each intersection. Currently the pipelines lay inside of the parkway, so those pipes would be abandoned in place and the new pipeline would be placed out in the street.	O	0	С	Wilcox Avenue is one of our mainlines that crosses our entire distribution system and also has two pipelines running on each side of the street. The pipelines are frail and have very little density, there is no lining within pipe and the coating on the pipe seems to be ineffective against the soil in the area. Any variation in water pressure seems to always cause mainline leaks, which causes a problem whenever we need to operate a fire hydrant or isolate the mainline. Because of the condition of the pipelines we are faced with numerous leaks per year.	3,500,000	1,093	14,000 07	Los Angeles	IV	2011
4397 1910159	1910159-003	TRACT 180 MUTUAL WATER CO.	Water pipe line replacement - Clara St.	The two pipelines on Clara Street would be consolidate into one main pipeline. Currently the mainlines are inside the parkway, so those would be abandoned in place and the new pipeline would be placed in the street servicing both sides of Clara Street. This project would replace all the old pipeline on Clara Street.	d O	0	с	Currently we have two steel pipelines running on each sides of Clara Street. The pipelines are frail and have very little density, there is no lining within the pipe and the coating on pipe seems to be ineffective against the soil in the area. Any veriation in pressure seem to always cause main line leaks which make it a problem every time we need to utilize a fire hydrants or isolate the mainline. The condition of the pipe result in numerous leaks per year.	2,000,000	1,093	14,000 07	Los Angeles	IV	2011
4398 3910007	3910007-002	RIPON, CITY OF	City of Ripon Aquifer Storage and Recovery Feasibility Study	This project is being submitted for Proposition 84 funding under Section 75025 (Groundwater Contamination Grants ). The City is proposing a feasibility study to evaluate the viability of an Aquifer Storage and Recovery (ASR) facility to store SSID surface water in the ground for subsequent extraction, blending with existing potable and non-potable groundwater wells, and potential direct delivery to the potable water system. The SSID surface water provide an attractive alternative to the existing water quality- impaired groundwater wells used to supply the potable and non-potable water systems. SSID, a 72,000-acre district that surrounds and includes the City, has historically provided water for agricultural irrigation in the Ripon area.	0 25 25	0	C	Rising concentrations of nitrate in the City of Ripon's groundwater supply have forced the City to take critical wells out of its drinking water supply. Nitrate contamination is attributed to crop over-fertilization and industrial contamination. One of the City's potable wells, Well 12 with a design flow of 2,000 gpm, is currently offline due to nitrate concentrations exceeding the MCL, while two other wells (Wells 3 and 14) are closely monitored and controlled to maintain nitrate compliance. In addition, five of the City's seven drinking water wells contain arsenic concentrations above the new arsenic MCL of 10 µg/L or within 20% of the MCL. The City also operates two municipal wells (Well 5 and Well 11) as supply for the non-potable water system. These wells have been converted from drinking water wells to non-potable use because of high nitrate concentrations. Currently the total pumping capacity is 1,750 gpm from these non-potable wells. Nitrate, has been detected in the City's wells at concentrations as high as 67 mg/L. Arsenic, which poses a chronic health risk and has a new MCL of 10 µg/L, has also been detected in the City's wells at concentrations as high as 14 µg/L. All of the City wells with water quality monitoring dat have at sometime contained nitrate and/or arsenic within 20% of the	125,000	4,524	14,915 10	San Joaquin	Π	2007

4399 4010830	4010830-001	California Mens Colony	California Men's Colony Drinking Water Storage Facility Roof Replacement	This project involves the complete demolishion and removal of the existing roof support structure, griders, purlins, plywood sheathing and rolled composition roofing material with Asbestos containing materials. The project involves the development of construction plans and specifications per CDCR's Design Criteria Guidelines. The plans and specification will require California State Fire Marshall review. Once the construction documents are approved, the delivery of the physical construction would be performed by low bid private industry construction company or could possibly be performed by CDCR's in house construction operation know as the Inmate Ward Labor Program. Construction inspection services, project management and project closeout will be performed by CDCR Professional Architectural and Engineering Staff.	0	0	c	At California Men's Colony (CMC), a correctional institution within California Department of Corrections and Rehabilitation (CDCR) there is a 2 million gallon potable water storage reservoir. The existing reservoir wood roof support structure, sheathing, purlins and roofing material have deteriorated to the point where the institution can not perform effective repairs. The roofing system is approximately 37 years old and has Asbestos containing materials. The roof has been deemed unsafe to walk on by a private contractor roofing company. A imminent roof structure failure will allow bird fecal matter and airborne contaminants to contact the treated stored portable water resulting in potential health risks to all consumers. CMC / CDCR is the water purveyor for the Chorro Valley. Water from CMC's water plant is available for use by CMC, Cuesta Community College, National Guard Camp San Luis Obispo, the State Office of County Education, non-profit agencys, a Cal Fire Facility and the County's male, female and juvenile detention facilities. A water purveyor has the responsibility to provide safe drinking waterFire suppression capacity will be severly impacted if the reservoir is taken out of service. The State Fire Marshall could impose operational restrictions on water customer's facilities and programs. If the roof collapsed a Do Not Drink Order would need to be distributed throught the Chorro Valley to customers who use the Device of the former the tome to the severine maters.	1,200,000	5,357	15,000 06	San Luis Obispo	IV	2012
4400 2810005	2810005-003	American Canyon, City of		Construction of minimum two MGPD treatment plant.	0	0	С	Projected deficiency in water treatment capacity.	3,500,000	6,750	15,300 03	Napa	II	1998
4401 1510019	1510019-012	Shafter, City of	City of Shafter Water Meter Retrofit Program	The proposed work appears to be exempt from CEQA because the installation and updating of water meters is a permitted use of the City's water enterprise. There would be no right-of-way or easements to acquire since all work would take place at existing service connections and within existing right-of-way. The City's unmetered water connections have already been located and quantified with the City's Geographical Information System. The City has already adopted a water meter assembly for its itron automatic meter reading (AMR) system which allows for multiple meter suppliers to be considered and used. The only primary task left in order to proceed with project implementation would be for the City's engineering staff to prepare documents as well as construction plans for bidding purposes which can be completed within two months of a grant award.	0	0	c	The passage of State of California Assembly Bill (AB) 2572 requires that the City of Shafter have all of its water services metered for billing purposes by 2025. In 2009, the City approved a multi-year water enterprise financial plan and service rate increase to fund a meter retrofit program. The recent focus of the program has been to update existing manual read meters to automatic meter reading assemblies to help the rate payers avoid the cost of funding more staff to manually read thousands of meters werey month. Existing staff can now use a handheld device to read meters equipped with radio transmitters without having to lift service box lids or enter private property. Since the current rate plan was approved, the City has successfully retrofitted several hundred meters and converted affected customers to metered billing but will soon be facing a more costly retrofit shase that involves installing meters where no existing meter or service box indig the tits economically disadvantaged customer base will be facing extreme hardships with future rate increases to cover the next phase. With grant funding, the City can complete the balance of the meter retrofits in a quick and efficient manner to minimize the financial impact to the rate payers. These rate payers include the City residents, businessea as well as several	2,000,000	3,863	15,609 12	Kern		2012
4402 2310003	2310003-003	Ukiah, City of	Ranney Collector	Design and construction of new Ranney collector	0	0	С	0.66 MG deficieny of source capacity to meet maximum day demand	3,000,000	5,486	15,955 03	Mendocino	Ш	2003
4403 2310003	2310003-002	Ukiah, City of		Expand existing surface water treatment plant to be able to treat water produced by three wells that may be under the direct influence of surface water	0	0	С	System has three wells that may be under the direct influence of surface water. In depth monitoring will be done in the winter of 2001/2002.	3,000,000	5,486	15,955 03	Mendocino	II	2002

4404 2310003	2310003-004	Ukiah, City of	Automated Leak Detection for the City of Ukiah's Distribution System	n The project objective is to improve the City of Ukiah's existing water audit and leak detection program by consolidating our resources with the use of electronic leak detection devices. This project will be implementer by replacing survey teams that walk the distribution system using hand-held listening devices to discover and locate leaks with a much faster and more successfi electronic remote leak detection system. By permanently installing an electronic leak detection system throughout the distribution system we anticipate pinpointing over sixty percent more leaks than using handheld devices in the first year alone. The will be accomplished by using an automated data collection system to locate leaks for repair. The line sensors will send data that staff can immediately use to locate and repair leaks. The project goal is to improve the 68 miles of water distribution system ping. The original system, dating back to the late 1800's, was gravity fed from a hillside spring. The initial pressurizer system it is difficult to know how many leaks will be found and how long each repair will take. However the initial goal would be to locate and repair all major leaks within the first year of the new RLDS being fully operational. As the larger leaks are repaired, smaller leaks will be found. These small leaks will be found. These small leaks will be found.	O d ul is o	0	c	The City of Ukiah's water distribution system is an aged system that is susceptible to above average leaks and/or breakages. The proposed project will install acoustic leak detection sensors throughout the entire 68 miles of the water distribution system and effectively insure that all leaks and/or breakages are immediately detected and repaired. Therefore allowing us to conserve and potentially reduce the amount of water used in our distribution system. Once this project is implemented sensors will be fixed onto pipe fittings and placed approximately 1,000 feet apart throughout the entire distribution system. The sensors will localize the general area of a leak in a water main by detecting leak noise and then transmit the leak noise data by radio to a receiver (Patroller). The sensors send data continuously and demand no maintenance for many years. Along with the sensors we will purchase two digital correlators (a survey tool and ground microphone) that will confirm the leak and precisely locate it for repair. The life of the RLDS is expected to be 15 years; after that time sensors may need to be replaced. We strongly believe water audits and leak detection are important components to the efficient management of our water distribution system. There are several benefits to the RLDS over the existing system: "Foremost, leaks are recognized very early, saving water by reduction of run time of leakages.	273,050	5,486	15,955 03	Mendocino	Π	2008
4405 1910223	1910223-002	GSWC-SOUTH SAN GABRIEL	GSWC - South San Gabriel System - Garvey Well (Prop.50 Project)	This proposed project is for the drilling, development, and equipping of a new well with a capacity of 1,000 gallons per minute (gpm); building a treatment facility to treat for VOC's and perchlorate, if needed, and all appurtenant equipment such as a disinfection facility, motor control center, and all necessary valves and piping. New chemical storage facilities are included as part of the treatment system due to the increased capacity of the production facility. Also included in the project are the proper abandonment of the three existing wells (Garvey Well No. 1, Garvey Well No. 2, the unnamed well), and the abandonment of existing facilities on site to make room for the new facilities.	0	0	c	This project has a received a commitment from the Proposition S0 Fund for full funding at S5.8M (PSO- 1910223-090).The GSWC - South San Gabriel system demand is supplied by groundwater and purchased water from the Upper San Gabriel Valley Municipal Water District (USGVMWD), which is supplied by the Metropolitan Water District of Southern California (MWD). There are eight groundwater wells within the system and one connection (USG1) for the purchased water. Of the eight wells, five are offline, primarily due to levels of VOC's and perchlorate which exceed the maximum contaminant level (MCL). A new well and accompanying treatment will significantly reduce GSWC – South San Gabriel's dependence on water supplied by MWD, in turn reducing the demand on the Colorado River water supply.	5,800,000	4,836	16,078 07	Los Angeles	IV	2009
4406 1910169	1910169-002	WALNUT PARK MUTUAL WATER CO.	New well	Drill and construct new well.	0	0	С	Company in existence since 1914. Nine of 11 wells since company was formed are now unusable or abandoned. Two working wells were drilled in 1967 and 1977. Need to ensure water source for community customers.	875,000	2,801	16,180 07	Los Angeles	IV	2004
4407 0710002	0710002-005	Golden State Water Company - Bay Point		Drill new well.	0	0	С	Drill a new well to improve system water supply and quality.	75,000	5,070	16,715 04	Contra Costa	Ш	1998

4408 1610002	1610002-007	Avenal, City of	City of Avenal Application	A study completed by the City Engineer indicates that the installation of five pressure reducing stations would eliminate the need for a new tank. The cost of a new tank would be \$3.9 million. Using the pressure reducing stations would decrease that cost to \$1 million.The City's main three million gallon tank would be utilized and a new tank would be needed since the three million gallon tank is located approximately 250 feet above the residential area of the City. The new pressure reducing valves would be located in various parts of the city.	0	C	The City of Avenal takes its water from the California Aqueduct, treats it and pumps it to the top of a hill five miles away. From there the water is distributed to the City by gravity from three tanks. The City is faced with the immenite failure of one of those tanks constructed in the 1950's. It supplies the entire residental area of the city with drinking water. A current study indicates that corrison is has eaten away the entire roof structure of the tank and the tank walls and floor are severly carroded. The tank has been deemed to be beyond repair. It is beleived a moderate earthquake would cause the failure of the tank. This project would replace the need for a water tank with five pressure reducing stations (PRS). The PRS would reduce the cost of the project by eliminating the need for a new large storage tank.	1,000,000	1,892	16,737 12	Kings	II	2008
4409 5610016	5610016-001	CALIFORNIA WATER SERVICE CO - WESTL	AKE	Design and construct a booster station on the outlet of O	0	С	Needs to upgrade the distribution system facilities.	235,000	6,285	16,765 06	Ventura	IV	1998
4410 4110011	4110011-005	Coastside County Water District	Denniston Creek Water Treatment Plant Improvements Project	this reservoir The scope of the proposed improvements is based on a O 2006 Camp Dresser & McKee study and a 2010 Kennedy/Jenks Consultants Preliminary Design Report which are attached. The project improvements include: 1. Installation of pre-treatment process consisting of contact clarifiers in pressure vessels.2. Installation of two waste washwater clarifier-thickener units.3. Installation of new sludge drying beds.4. Installation of new on-site hypochlorite generation equipment and appurtenances.5. Removal of existing sodium hypochlorite metering pumps and associated controls.6. Removal of existing and installation of a new caustic soda storage tank, pumps, and piping.7. Removal of existing and installation of a new potassium permanganate storage tank, mixer, pumps, and piping.8. Removal of existing and installation of a new polymer metering pump and piping.9. Installation of a new polymer storage tank.10. Removal of existing and installation of a new in-line flash mixer.11. Removal of existing and installation of a new ferric chloride storage tank, metering pump and piping.3. Construction of secondary containment for all new chemical storage tank. 14. Installation of use to the treatment plant control system15. Removal of one existing and installation of two new Denniston Creek	0	C	The District owns and operates the Denniston Creek Water Treatment Plant (DCWTP) which was constructed in 1972. The DCWTP was designed to treat up to 1,000 gpm and 250 MG per year of local surface water from the Denniston Creek watershed and local groundwater using a direct filtration treatment process. The District has had to limit the DCWTP treated water production to approximately 90.5 MG per year (based on a 5 year average between 2005 and 2009) due to a CDPH requirement that prohibits using the existing direct filtration treatment process to treat raw water when turbidity is greater than 20 NTU. Throughout the winter months, when the local surface water supply exceeds 20 NTU, the DCWTP is unable to produce treated water and the District must purchase water from the San Francisco Public Utilities Commission (SFPUC). This project is being implemented to increase year round treatment of the local surface water supply permitting the District to increase water system reliability and reduce long-term operating costs through the use of an existing water right. This project will add new pretreatment units that will reduce the raw water turbidity to meet the CDPH limitation as well as clarified water goals included in the California Cryptosporidium Action Plan (CAP) and CCR Section 64658 (b) (11). The added pre-treatment will also help reduce total organic carbon (TOC) precursors of regulated disinfected	5,650,000	6,893	16,900 17	San Mateo	Ι	2011
4411 3410016	3410016-001	Orange Vale Water Company		Build an above ground storage facility and install water O meters.	0	C	Water demand problems. Also federally mandated to install water meters on all service connections.	1,000,000	5,327	17,500 09	Sacramento	I	1999

4412 1210009	1210009-004	Humboldt C.S.D.	Ridgewood Storage Tank Improvements	The Ridgewood Tank Improvement Project involves construction of an additional 1.0 MG tank adjacent to ar existing 0.5 MG tank for a total storage capacity of 1.5 MG that would result in providing adequate fire protection capacity volume per State Drinking Water Act Standards Title 22. The District has already performed approximately \$18,000 worth of preliminary engineering to confirm feasibility of a second tank at the same location. This work consists of:1. Hydraulic computer analysis confirming required tank size2. Topographic survey confirming new tank will fit within the existing tank site footprint (without having to obtain additional property).3. Prepared preliminary design also provided an assessment of the environmental needs determination and constraints.4. Preliminary biological and endangered species evaluation to further refine the environmental determination and permitting requirements.5. Environmental site evaluation resulted in no identifiable environmental constraints. It is anticipated that a Negative Declaration will be adequate with the District as lead agency. The only permit required is a Building Permit issued by the County of Humboldt.	0 1 1	0	C	Title 22 of the State Drinking Water Act Standards requires 1.5 MG storage for fire protection. The District's "Cutten Zone" currently provides only 0.5 MG of storage affecting approximately 2,000 customers and their property.	1,250,000	7,266	19,000 01	Humboldt	1	2011
4413 3410034	3410034-001	CalAm - Rosemont		Keifer Blvd/City of Sacramento interconnection. Involves design and construction.	0	0	с	General system improvement. Groundwater contamination threatens source of supply.	1,050,000	5,840	19,807 09	Sacramento	I	1998
4414 3410034	3410034-003	CalAm - Rosemont		Replace Montezuma well. Involves design and construction.	0	0	С	General system improvement. Nitrate contamination exceeding MCL forced well closure.	600,000	5,840	19,807 09	Sacramento	I	1998
4415 3310016	3310016-007	Hemet, City of	City of Hemet Emergency Interties	Installation of two water system interties to the City of Hemet water distribution system: One intertie with Lake Hemet Municipal Water District and an additional intertie with Eastern Municipal Water District. These two interties would expand the city's access to emergency water supply sources from a current 1.08 MG/day to an estimated 3.25 MG/day, which is 67- percent of the average daily demand of 4.9 MG.	0	0	с	Security Project	1,000,000	8,667	20,047 20	Riverside	v	2007
4416 3310016	3310016-005	Hemet, City of	City of Hemet Water Department SCADA Telemetry System	Purchase and install radio-based Supervisory Control and Data Acquisition (SCADA) telemetry water infrastructure control system to allow water distribution system to be operated and monitored remotely. Benefits include increased system reliability and operational efficiency; increased capability for rapidly and effectively making system repairs; early warning of problems resulting in increased speed in discovering and responding to system failures; increased likelihood of preventing or minimizing disruptions in water delivery; and, ability to integrate data collection and monitoring for more streamlined data utilization and data accuracy.	0	0	C	The City of Hemet water distribution system, comprised of 12 wells, four above ground reservoirs, and 130 miles of main lines is manually operated and monitored. As a result, the system is vulnerable to a variety of adverse conditions including undetected equipment malfunctions/failures, delays in discoverning and responding to system failures, reduced operational efficiency, and greater probability of intentional equipment damage and/or water contamination due to vandalism or acts of terrorism.	350,000	8,667	20,047 20	Riverside	v	2007
4417 3010055	3010055-003	South Coast WD - Capistrano Beach	Imperatrice Water Main Replacement	Install pressure rated liner inside existing 8" ductile line pipe (1100 linear feet). Includes excavation and revised connection to the existing distribution system pipine.	0	0	с	Existing ductile iron pipe is located within easements adjacent to homes and within steep slopes. The pipe is deteriorated and has experienced several leaks. Several point-repairs have been completed. Lining the pipe will prevent potential damage to the homes and provide reliability to the distribution system.	600,000	5,575	20,500 08	Orange	v	2009
4418 3610120	3610120-007	Phelan Pinon Hills CSD	basin overdraft - construct WTP for aquaduct	Construct treatment plant to treat water from the aqueduct	0	0	С	Overdrafted basin with no natural recharge capabilities.	10,500,000	6,267	20,681 13	San Bernardino	V	2001

4419 3610120	3610120-001	Phelan Pinon Hills CSD	source and storage - wells	Construct 6 new reservoirs and 4 new wells	0	0	С	Inadequate source and storage capacity	4,400,000	6,267	20,681 13	San Bernardino	v	1998
4420 3010042	3010042-001	South Coast WD - South Coast	38 Reservoir Water Main Replacement	Install pressure rated liner inside existing 8" cast iron pipe (total length 325 feet). Liner meets NSF61 requirements. This project includes excavation and revised connection to the existing distribution system piping.	0	0	с	Existing 8" cast iron pipe is inlet/outlet line to existing 100,000 gallon reservoir. There is significant degredation and several point-repairs have been completed. Project needed to rehabilitate existing watermain to provide reliability in water service to surrounding area. A break in this line will result in a disruption of water service to customers.	400,000	6,729	21,000 08	Orange	v	2009
4421 5010017	5010017-004	PATTERSON, CITY OF	Surveillance Systems for Water Sites	A Surveillance System would alert operators to unathorized entries to the water facilities. This would also provide video images of intruders and other problems. The City wants to install a Surveillance System compatible with our current SCADA system software. This will be less costly to implement. The system would send an alert and video images in real time of an event The City currently has a remote laptop and can access SCADA from any location. An operator can make immediate adjustments or alert Police/Fire/Medical. There are currently products on the market that would suit our needs. We would begin with our largest storag facilities and Well #5. There are three steel Reservoir tanks one well site, and the Corporation Yard. The Corporation Yard is included becuase it houses the SCADA central computer. These five facilities receive the highest volume of unathorized entries.	о е	0	c	Increased security for water sites	110,000	5,680	21,229 10	Stanislaus	Π	2007
4422 4110018	4110018-004	City of Millbrae		Design and construct 2 MG water storage reservoir for low elevation service area.	0	0	С	Approximately 40% of our customers do not have water storage reservoirs for emergency water supplies if SFPUC system fails.	2,500,000	6,397	21,500 17	San Mateo	II	2001
4423 1910186	1910186-001	CAL-AM WATER COMPANY - DUARTE	L.A. District "City Wide" Water Conservation Program.	The program has two "full service" elements that encompass a "District Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 24,000 residential homes / 48,000 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 1,472 acre feet per year Element B. A team of specialist will retrofit 8,000 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 490 acre feet per yearThis program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 months or less. The program will employ 75 to 100 people for 12 months.	0	0	C	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 1,962 acre feet per year or 50.0 / 75.0 gallons per day, per person.	16,712,000	7,396	23,461 07	Los Angeles	IV	2009

4424 3710018	3710018-001	Rincon Del Diablo MWD (ID-1)	Rincon del Diablo M.W.D. Remote Site Security Survelliance	Rincon del Diablo Municipal Water District, CA, solicits approval for the submission of a grant application unde Proposition 50: Water Security, Clean Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et seq.), Chapter 3 – Water Security, Rincon del Diablo MWD services a population of 25,000 over 24 square miles. It has 10 reservoirs and 6 pump stations with 132 miles of water mains. A Vulnerability Assessment conducted in 2004 identified 11 sites as being water security liabilities for the District. Each is vital in the storage and delivery of potable water to the District's customers. The majority of these eleven sites are remote with no electrical feed, being powered by solar panels. The absence of surveillance equipment compromises the reliability of the District's water resources and infrastructure. Rincon del Diablo MWD's remote sites reported incidences of vandalism (e.g. graffiti) and trespassing. The 2004 Assessment recommended the installation of an integrated security system at the following 11 critical sites: 1) District Administrative, SCADA and Network functions; 2) Reservoir Site R1: R1A and R1B water storage tanks; 4) Reservoir Site R3: R3A and R3B water storage tanks; 5) Reservoir Site R4: (1) water storage tank; 6) Reservoir Site R5: (1) water storage tank; 7) Reservoir Site R5: (1) water storage tank; 7) Reservoir Site R5: (1) water storage tank; 7) Reservoir	O rr	0	c	Security Project	340,000	6,251	24,471 14	San Diego	v	2007
4425 3610008 4426 3710026	3610008-006 3710026-008	BIG BEAR CITY CSD Valley Center MWD	Cool Valley Reservoir Cover Replacement	Construct fluoride removal system This 55.6 MG storage basin, was constructed in 1975, provides the only storage for the Cool Valley Zone. The Cool Valley Zone, a 23,920 acre service area, is one of the District's largest zones. Replacing the existing cove includes removal and disposal of an existing 340,000 square foot cover and replacement with a new 45 mill thick floating cover including sand tubes, floats, hatches, vents, and rainwater removal pump system.	O O r	0 0	c c	Fluoride level of new well exceeds MCL The hypolan cover is experiencing tears, rips, and holes due to its deteriorating condition. Left alone, these holes may allow rainwater and other debris to enter the potable water reservoir which may impact water quality. Due to the overall condition of the liner, individual repair of holes is not warranted but instead the existing cover must be replaced	100,000 4,500,000	6,356 9,726	25,000 13 25,572 14	San Bernardino San Diego	V V	2002 2011
4427 3710026	3710026-002	Valley Center MWD		Construct pressure filtration plant.	0	0	с	Surface water reservoir which is not in service at this time does not meet drinking water standards.	6,000,000	9,726	25,572 14	San Diego	v	1998
4428 3710026	3710026-010	Valley Center MWD	Cobb Reservoir Cover Replacement	This 8.8 MG storage basin, was constructed in 1963, provides the only storage for the Cool Valley Zone. The Cool Valley Zone, a 23,920 acre service area, is one of the District's largest zones. Replacing the existing cove includes removal and disposal of an existing 89,000 square foot cover and replacement with a new 45 mill thick floating cover including sand tubes, floats, hatches, vents, and rainwater removal pump system.	0 r	0	с	The hypolan cover is experiencing tears, rips, and holes due to its deteriorating condition. Left alone, these holes may allow rainwater and other debris to enter the potable water reservoir which may impact water quality. Due to the overall condition of the liner, individual repair of holes is not warranted but instead the existing cover must be replaced	1,000,000	9,726	25,572 14	San Diego	v	2011

4429 3710026	3710026-011	Valley Center MWD	Chlorination Facility Relocation	VC-1A/B Relocation is a cooperative project with the County Water Authority (CWA). The CWA desires to relocate their existing service connection, constructed in 1956 and was designed to deliver 20 cfs. Staff has located a site and is in the planning stages of project design. The VCMWD portion of the project consists of the planning, design, and construction of a chlorination facility, temporary and permanent transmission pipelines, and the removal of the existing chlorination facility. VCMWD staff will also provide project and construction management services for the removal and relocation of the CWA facilities including site acquisition, CEQA, metered connection, piping, site improvements including pavement, fencing, landscaping, buildings, and existing facility removal.	0	0	c	The District is planning to relocate the chlorine facilities out of the Keys Creek flood plain. It is our intent to relocate this facility due to flooding in the past. The project would coincide with the CWA to move the connection to the aqueduct to the same location to the North.	1,100,000	9,726	25,572 14	San Diego	V	2011
4430 3710026	3710026-003	Valley Center MWD	Water System Security	Valley Center Municipal Water District requests an invitation to apply under Proposition 50: Water Security, Clean Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et seq.), Chapter 3 – Water Security. Valley Center MWD provides water and sewer services to 24,800 domestic, agricultural, and commercial customers over a mostly rural 100 square miles. The District imports 100% of its water from San Diego County Water Authority. It has 42 enclosed reservoirs, 26 pump stations with 289 miles of water mains. In 2004, VCMWD performed a formal Vulnerabilty Assessment through a third party. Based on a matrix of economic loss, loss of fire flow, water quality, and health impacts, the Assessment deemed eleven sites critical to the operation of VCMWD. The primary issue VCMWD by to Solve with Chapter 3 funding is to secure the following eleven sites (assets) from any terrorist organizations, vandals, disgruntled employees or contractors, and disgruntled customers: 1) Valley Center Pump Station, 2) Rainbow Pump Station, 3) Paradise Pump Station, 4) Paradise Reservoir, 5) Oar Hill Pump Station, 10) Miller Pump Station, and 11) Oat Hill Reservoir, 8) Cool Valley Reservoir, 9) Betsworth Pump Station, 10) Miller Pump Station, and 11) Oat Hill Reservoir. Valley Center MWD wishes to accomplish the requisite water infrastructure security through 24 hour video surveillance, monitoring.	0 	0	c	Water system security	1,600,000	9,726	25,572 14	San Diego	V	2007
4431 3710026	3710026-009	Valley Center MWD	Lilac Reservoir Replacement Cover	The storage basin was constructed in 1966 and the cover was installed in 1989 with a life expectancy of 20 years. The new hypolan cover is expected to last 30 years. The project consists of the removal and replacement of an existing hypolan floating cover on a 4.7 million gallon potable water reservoir. This storage basin provides the only storage for the Lilac Zone, a 920 acre service area, and relies on surplus storage from hydraulically higher zones. Work includes removal and replacement with a new 45 mill thick floating cover including sand tubes, floats, hatches, vents, and rainwater removal pump system. The cover and appurtenant facilities will prevent rainwater, silt, and other foreign debris to enter into the potable water reservoir.	0	0	c	The Lilac Reservoir is a 4.7 million gallon covered reservoir designed to store potable water for domestic and agricultural use. The current hypalon floating cover is approximately 20 years old and has reached the end of its life expectancy. The cover is experiencing tears, rips, and holes due to its deteriorating condition. Left alone, these holes may allow rainwater and other debris to enter the potable water reservoir which may impact water quality. Due to the overall condition of the liner, individual repair of holes is not warranted but instead the existing cover must be replaced	500,000	9,726	25,572 14	San Diego	v	2011

4432 3710026	3710026-004	Valley Center MWD	Gordon Hill Pipeline Replacement	O approximately 5,000 linear feet of existing 10-inch buried cement mortar lined and tar wrapped steel transmission pipeline located within and adjacent to Gordon Hill Road. The existing 10-inch diameter pipeline will be replaced with a 12-inch diameter buried ductile iron pipeline and anciliary appurtenances. The new pipeline will be located within existing improved private roadways and all existing meters and other appurtenances will be relocated to the new line, thus providing improved access to the pipeline by Distict crews. The new pipeline, as designed, will provide improved flows and pressures within the general area as well as provide a more reliable transmission feed to a high water use area thus improving fire protection and service reliability to this area of the District.	0	C	Valley Center Municipal Water District owns and operates an existing 10-inch diameter buried concrete mortar lined and tar wrapped transmission pipeline within and adjacent to Gordon Hill Road, in Valley Center, California. Installed in the early 1960's, this pipeline is a vital transmission facility that provides water for domestic and fire use to a high density residential, retail, and commercial use area including senior mobile home development, golf course, hotel, retail, and commercial developments. Due to various factors including pipeline age, deteriorating exterior pipeline coating, high groundwater, and corrosive soil, the pipeline is showing evidence of severe deterioration. As a result, this portion of the pipeline has experienced numerous leaks resulting in water service and transmission outages to the general area, significant property loss, and water loss. Because a portion of the pipeline is located within private property, maintenance and repair acivity is hindered thus extending the time necessary to complete repairs. The current status of the pipeline has diminished the District's ability to meet current water demands of the area. During emergency outages, the remaining water distribution facilities in the general area are neither designed to, nor capable of, providing adequate domestic and fire flows to the area. Thus, the replacement of this portion of the transmission line is	2,300,000	9,726	25,572 14	San Diego	v	2009
4433 3710026	3710026-005	Valley Center MWD	Rodriguez Road Pipeline Replacement	The Rodriguez Road Pipeline Replacement project O consists of the construction of approximately 5,000 linear feet of buried 18- and 20-inch diameter ductile iron transmission piping including ancillary appurtenances within Rodriguez Road. The proposed pipeline will be relocated from within existing agricultural developments to within existing District easements. Minor grading is included to widen an existing graded dirt access road to accommodate the pipeline. Additional valving will be installed providing District staff the ability to maintain fire protection in the area and minimize future service interruptions associated with performing scheduled or emergency repairs.	0	C	Valley Center Municipal Water District owns and operates 5,000 linear feet of 16- and 20-inch diameter buried cement mortar lined and tar wrapped steel water transmission piping located within Rodriguez Road in Valley Center, California. Installed in the 1950's, the transmission pipeline provides a vital link in the District's distribution system in that it transports water from a San Diego Courty Water Authority metered aqueduct connection to the northwestern portion of the District. Due to various factors inlcuding pipeline age and external pipeline coating deterioration, this section of pipeline has shown extensive evidence of deterioration resulting in several leaks along the pipeline and at several mainline connections. These leaks have resulted in extended water outages, terminated water transfers within the District's distribution zones, significant water loss as well as property damage to the surrounding agricultural developments. The current status of the pipeline has greatly diminished the District's ability to meet current	2,600,000	9,726	25,572 14	San Diego	v	2009

water demands within the northwesterly portion of the District. During emergency outages, water must be forced around this area causing loss of pressure and flows. This loss of pressure and flow greatly impacts the District's ability to meet minimal fire flow and pressure requirements within this area. Thus, the replacement of this portion of the transmission line is necessary at

4434 1310001	1310001-005	Brawley, City of	Brawley Water Treatment Plant Raw Water Storage Reservoir	A new third reservoir 500 feet x 150 x 30 feet would alleviate the issues we face. The three reservoirs would be configured in series which would minimize turbidities and allow less chemical dosing. It would allow maintenance of each reservoir without impacting operations by allowing the isolation of each reservoir. It would have the storage capacity to operate at a less strained level when source water outages occur. The new reservoir will be constructed similarly to existing reservoirs. Concrete walls with asphalt floors and a protective liner to prevent leakage. A sloping floor with a partition wall along the center to allow sediment to settle in one half of the reservoir. Two 36 inch intake pipes with isolation gates connected to the existing for reservoir isolation connected to the existing glant intake. An access ramp for maintenance. An 440 volt electrical access point for a sludge pump.	)	0	c	Our water plant has only one raw water source feeding two raw water reservoirs. These reservoirs will supply three days of water should an extended outage of source water occur during peak usage particularly during summer months. In addition our current raw water impoundment configuration does not allow to properly drain and clean the reservoirs. This puts a strain on our system during high peak demands as turbidity levels increase causing elevated chemical dosing to keep turbidities at their required level.Source water system repairs lasting three or more days have initiated water conservation efforts from citizens, schools and industries. Water plant operators cannot isolate a reservoir for maintenance because the demand thru one reservoir is too high and it's difficult to maintain a safe raw water level. The raw water turbidity increases into the 100's during the summer due to us sharing the main canal source with farmers such when they have high water orders this causes scouring of the canal banks and end up in our ponds where we need to use more chemicals to treat it.	2,500,000	5,530	26,513 14	Imperial	v	2008
4435 2410005	2410005-006	LOS BANOS-CITY	Los Banos Well head treatment of Hex Chromium for twelve wells	Install filtration system to remove Hexavalent O Chromium. Install piping, sediment tanks, filtration s units, monitoring equipment, electrical services, (489 V 3 phase) pumps, concrete pads, media, disposal and engineering	)	0	с	Our Chromium levels range from 22 to 38 ppb. It is anticipated to exceed the McI for drinking water.	13,600,000	12,277	27,635 11	Merced	Ш	2012
4436 4810005	4810005-003	SUISUN-SOLANO WATER AUTHORITY	New Cement Hill Potable Water Storage Tank	The project is to build a 2 million gallon welded steel O water storage tank adjacent to and at the same elevation as the existing tank of the same size. Internal baffling, NSF-compliant coatings and a THM reduction system will be included. Piping and telemetry to connect the new tank to the system will be included. Due to the tank's location in the hills above the Cement Hill Water Treatment Plant significant earthwork and retaining walls to create the tank pad and maintenance access will be included. The tank will be set on a concrete grade ring. Associated work for right-of-way acquisition, surveying, engineering, inspection and project administration is also included.	,	0	c	This project will address the following problems:Water Quality: the Suisun-Solano Water Authority (SSWA) system uses the Cement Hill Water Treatment Plant to treat its sole water supply from the Federal Solano Project's Putah South Canal. The Canal can be out of service for cleaning for a day, or the water can be highly turbid due to uncontrolled overland and bank runoff into the Canal during high-intensity storm events. These make it necessary to take the Water Treatment Plant off-line until the Canal water quality improves, thus forcing SSWA to rely on storage and/or purchase water from the City of Fairfield (which also has water treatment plants facing the same issue) whose system is intertied with that of SSWA.Maintenance: an existing tank adjacent to the proposed new tank cannot be taken out of service for maintenance, most urgently to recoat its interior surface, because the existing tank is needed for operation of the Cement Hill Water Treatment Plant. System capacity: the SSWA water system has limited storage to meet peak demand on successive hot days and provide one full day of storage as a needed per SSWA policyThis project addresses problems that do not involve any violations of drinking water standards, regulations, or CDPH directives. SSWA has been directed by CDPH to recoat the interior of the existing tank.	2,000,000	8,100	27,748 04	Solano	IJ	2009
4437 4810005	4810005-002	SUISUN-SOLANO WATER AUTHORITY	System Metering nd Monitoring System Expansion	One new metering station will be added to monitor flows into Old Town Suisun City from the Gregory Hill Storage Tank. Five existing meter stations will be upgraded for more accurate measurements and SCADA compatibility. Five pressure reducing stations and the metering stations will be equipped with telemetry equipment capable of transmitting instantaneous flow information and system pressures to the system contro center at the Cement Hill Water Treatment Plant. This will provide operations staff with an increased ability to efficiently monitor and maintain the SSWA water system.	O	0	с	The Suisun-Solano Water Authority (SSWA) monitors the flow from its treatment and transmissions system into the service area's distribution system. The existing equipment is aged and needs to be upgraded and augmented to more accurately measure flows into the system and efficiently provide this information to the SSWA SCADA system for monitoring by the system operators.	275,000	8,100	27,748 04	Solano	ΙΙ	2009
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4438 1910204	1910204-006	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Serra Booster Station	UPGRADE EXISTING BOOSTER STATION TO ELIMINATE FREQUENT MAINTENANCE.	0	0	С	SERRA BOOSTER STATION. THE EXISTING BOOSTER STATION IS AGED AND OF INSUFFICIENT CAPACITY TO PROMPTLY FILL THE SWEETWATER MESA TANK.	200,000	7,733	27,807 16	Los Angeles	IV	1998
4439 1910204	1910204-021	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Tank site modification	Modification with water diverting systemssuch as retaining walls, flood gates, drainage courses, weep holes etc.	0	0	С	11 tank sites have been determine to be a safety threat due to lack of proper drainaga courses and storm drains to convey the water flow in the event of a tank rupture	750,000	7,733	27,807 16	Los Angeles	IV	2004
4440 1910204	1910204-022	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Replacement of old appurtenances	Rehabilitation, replacementor removal air and vaccum release valves, posts, cross connections, fire hydrants, underground vaults, vault ventilation covers and water valves	0	0	С	Deterioration and damage of old appurtenances	476,000	7,733	27,807 16	Los Angeles	IV	2004
4441 1910204	1910204-019	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Phase II of II; mesa tank farm storage	CONSTRUCT A 1.6 MG RESERVOIR AT THE EXISTING SUNSET MESA TANK FARM SITE	0	0	С	PHASE 2 OF 2: 3.6 MG WATER STORAGE DEFICIENCY	1,680,000	7,733	27,807 16	Los Angeles	IV	1998
4442 1910204	1910204-009	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Malibu Knolls Pipeline	REPLACEMENT OF WATER MAIN AND CONSTRUCTION OF A BOOSTER PUMP STATION TO REDUCE MAINTENANCE.	0	0	С	MALIBU KNOLLS PIPELINE. THE EXISTING WATER SYSTEM IN THIS COMMUNITY IS AGED, UNDERSIZED, AND IN NEED OF REPLACEMENT. THE DETERIORATING SYSTEM CAUSES MAINTENANCE PROBLEMS.	1,250,000	7,733	27,807 16	Los Angeles	IV	1998
4443 1910204	1910204-012	LOS ANGELES CO WW DISTRICT 29 & 80-N	MA Encinal Road Pipeline	INSTALL WATER MAINS TO IMPROVE FIRE PROTECTION AND IMPROVE OUR ABILITY TO FILL THE EXISTING WATER TANK.	0	0	с	ENCINAL CANYON ROAD PIPELINE. THE EXISTING WATER SYSTEM IS AGED AND UNDERSIZED.	350,000	7,733	27,807 16	Los Angeles	IV	1998
4444 4810001	4810001-023	City of Benicia	Benicia MIEX Installation Project	Install a magnetic ion exchange process as part of a pretreatment solution for removing disinfection byproduct precursors. The trial-proven technology is the MIEX (trademarked) resin developed by Orica. Since the total organic carbon (TOC) levels increase during the winter, a 6 million gallon per day MIEX (trademarked) removal process would be installed upstream of the coagulation process. Designed as a by pass configuration, the MIEX (trademarked) system can remove up to 70% of TOC in the raw water, reducing alum dosage, alum sludge, and chlorine demand.	о	0	С	The total organic carbon content (specifically the dissolved phase) in the North Bay Aqueduct (State Water Project) contributes to high disinfection byproducts during the winter months when winter rains wash natural organic matter into Barker Slough. Benicia's water treatment plant must treat total organic carbon (TOC) ranging up to 18 mg/L, with high levels of color. The current precursor removal can only remove up to 45% of the TOC in the raw water. The remaining TOC passing through the water plant can create trihalomethane (THM) levels that approach the current Stage 1 disinfection byproduct level, and will exceed certain locational running annual averages for THMs.	2,000,000	9,548	28,000 04	Solano	11	2009
4445 3310006	3310006-003	Banning, City of		Pipeline and storage tank replacement	0	0	с	Potential for water outages due to aged transmission	10,000,000	10,381	28,500 20	Riverside	v	2001
4446 4110003	4110003-003	City of Burlingame	Water Storage Tank Lead Based Paint Removal and Re-coating	The tank recoating project involves the sand blasting of the tank's exterior to remove old, lead-based paint. Because of the likely presence of significant lead inhalation risks during sand blasting, significant health and safety precautions must be taken to avoid exposing workers and adjacent residents.	0	0	с	Current storage tanks have old, loose lead-based paint on the exterior of the tanks. The California Department of Public Health has required that Burlingame re-coat the tanks' exterior. In order to perform this re-coating, the lead-based paint must be removed prior to painting. Additionally, the City is concerned that the deteriorated condition of the tank exterior may contribute to local lead contamination and potential stormwater quality impacts.	500,000	8,966	29,867 17	San Mateo	II	2009
4447 0110011	0110011-001	City of Livermore		Add two elevated storage reservoirs, associated piping and pump station to system.	0	0	с	Unable to provide service to specific areas at acceptable pressures for both domestic and fire purposes.	10,000	9,364	29,995 04	Alameda	Ш	1998

4448 0110011	0110011-002	City of Livermore	Emergency Water Interconnections	This project invovles constructing two emergency water interconnections. On the west side of the City of Livermore a water interconnection will be constructed with Dublin San Ramon Service District. The interconnection will be constructed northeast of the EI Charro/I-S80 Interchange. Approximately 100 feet of 1 inch pipe will be installed to connect the two water systems at this location. A vault will be constructed with a dual direction meter. Valving and fire hydrants will be constructed so that the ends of these pipelines can be flushed prior to flowing water from one system to another. There is currently an interconnection with Cal Water at the other end of this pressure zone, however, the existing interconnection is almost two miles from the proposed new interconnect and it is not able to supply required residual pressures and fire flow in an emergency. If the pressure zone is isolated from the supply reservoir. This new interconnection togethe with the existing interconnection will be able to provide required residual pressures and fire flows in the event of an emergency. This project also involves the construction of a second water interconnection with Ca Water at the east side of the City of Livermore. The design of the second interconnect is identical to the design of the second interconnect is consently there is no interconnect in this pressure zone so this interconnect will provide a critical alternative water	r O 2. s r	0	C	Water supply during an emergency is critical, however, water supply can be threatened during an emergency due to a pipeline or reservoir rupture. The City of Livermore's water system has three pressure zones with a reservoir in each zone. A tank or supply pipeline rupture in one of the City's pressure zones would leave the pressure zone without operational, emergency, or fire storage during the repair period. Interconnections, allow the City to temporarily use the storage in a neighboring water system to fulfill these needs during an emergency.Two of the City's pressure zones currently have water interconnections with Cal Water, which is a neighboring water company. One of the zones does not have a designated water interconnection. The maximum flows through the two existing interconnections are not adequate to sustain minimum residual pressures and fire flows during an emergency.	160,000	9,364	29,995 04	Alameda	Π	2009
4449 3610005	3610005-002	LAKE ARROWHEAD CSD	Bernina Water Treatment Plant Improvements	The scope of work generally includes the replacement of the existing water treatment plant filter piping, valves, instrumentation and controls. The project will improve the reliability of the water treatment system and avoid any unplanned disruption to water service.	0	0	с	The District's five million gallons per day Bernina Water Treatment Plant Filter piping is more than 35 years old and in need of replacement. A recent pipe failure prompted investigation of the filter piping, valves, instrumentation and controls and many deficiencies were identified. A catastrophic failure of this piping would result in the plant being shut down and potential interruption of service.	1,200,000	8,269	30,000 13	San Bernardino	v	2009
4450 1510017	1510017-001	INDIAN WELLS VALLEY W.D.		SPREAD WELLFIELD OUT. OTHER - DESIGN AND CONSTRUCTION	0	0	С	DOCUMENTED THREAT OF HIGH TDS WATER (91,200 PPM) MAY CONTAMINATE THE GROUNDWATER	3,925,000	11,688	30,000 19	Kern	ш	1998
4451 4310028	4310028-001	San Jose State University	Water Distribution System Improvements Phase 3	The project installs sampling points on the distribution system in accordance with municipal standards.	Ο	0	с	The San Jose State University (SJSU) Public Water System (PWS) serves a population of between 10,001 and 100,000 and is intertied to the San Jose Water Company's PWS that serves more than 100,000. There are inadequate sampling facilities necessitating sampling within buildings resulting in unreliable sampling results.	200,000	1,000	30,000 17	Santa Clara	Ι	2009
4452 3610043	3610043-002	GOLDEN STATE WATER CO - BARSTOW	Buena Vista Street from Avenue A to West Street 2010	Replace 12-inch Steel pipeline with 12-inch PVC along Buena Vists Street from Avenue A to West Street, and replace 4-inch Cast Iron and 8-inch Steel pipelines with 8-inch PVC along west Street from Buena Vista to Fredericks	0	0	С	The 61-year old Cast Iron and Steel pipelines require replacement due to pipe material and age of infrastructure. Additionaly, the portion of 4-inch main on West Street needs to be replaced due to hydraulic deficiencies.	171,171	9,233	30,469 13	San Bernardino	V	2008
4453 3410010	3410010-003	CalAm - Suburban		Booster station, tank and connecting mains. Involves design and construction.	0	0	С	General system improvement. Inadequate source of supply due to ground water contamination from Mather.	2,500,000	9,874	33,314 09	Sacramento	I	1998
4454 3410010	3410010-002	CalAm - Suburban		US 50 overcrossing. Involves design and construction.	0	0	С	General system improvement. Lack of system pressure due to loss of source of supply.	250,000	9,874	33,314 09	Sacramento	I	1998
4455 3410010	3410010-004	CalAm - Suburban		Drill and equip well. Involves design and construction.	0	0	с	General system improvement. Loss of source production due to VOC ground water contamination.	530,000	9,874	33,314 09	Sacramento	I	1998
4456 3410021	3410021-005	San Juan Water District		Reconstruction to replace or renovate the pipeline.	0	0	С	General system improvement. The water main pipeline has failed many times and is vulnerable to collapse by being suspended over a canyon by dilapidated wooden trestle.	940,000	10,240	33,792 09	Sacramento	I	1998

4457 3410021	3410021-001	San Juan Water District		Improve suction sides and replace pumps.	0	0	с	General system improvement. Existing pumps will not provide the water needed by the six agencies in case of floods or drought. Possible water outage.	2,800,000	10,240	33,792 09	Sacramento	I	1998
4458 3410021	3410021-006	San Juan Water District		Determine improvements/replacements to existing SCADA system and implement.	0	0	с	General system improvement. Scada system has unacceptable transmission capacity, with up to 15 minute data update time intervals, which is well below the exoected response.	900,000	10,240	33,792 09	Sacramento	I	1998
4459 1910062	1910062-002	LA VERNE, CITY WD	Plateau Forebay Discharge Line	This proposed project would replace the aging 16" pipeline from the City's Palteau Booster Station to Summit Avenue, which is near the top of this small canyon or drainage area. Approximately 2,500 feet of new ductile iron pipe would replace the existing pipe.	0	0	C	The City of La verne purchased the assets of the La Verne Plateaus Mutual Water Company circa 1970, including the Plateau Forebay, pump station, and transmission pipeline. This existing 16" pipeline was originally constructed by the Plateau Mutual Water Company. Although the actual age of the pipeline is unknown, is it beleived to be at least 50 plus years old. The pipe alignment is through a small canyon into the Live Oak Canyon area and provides the major source of supply to the city's upper reaches. The pipe is susceptiple to damage from exposure due to eroding soil conditions within the canyon. The pipe is also under high pressure tue the pumping operations it supports and the elevation of the terminal reservoir. Any significant rupture of this line also poses a threat to the Leroys Home for Boys, whic is located at the mouth of the small canyon.	1,000,000	8,516	34,046 15	Los Angeles	IV	2009
4460 1910062	1910062-014	LA VERNE, CITY WD	Air Stripper Replacement	The project will demolish the existing air stripper and replace it with a similar unit capable of treating 2,000 gpm. Since this will occur on existing City owned property the project will not require additional rights o way or land acquisition.	0 f	0	с	Two wells in the City's system (Lincoln and Mills Tract) have exceeded the maximum allowable limit for Trichloroethylene (TCE) since the late 1980's. To continue extracting the water the City needed to treat it; thus, an air stripping system was installed at the 5th and White plant. This system has been in operation since this time and is nearing the end of its useful life. Replacing the air stripper is necessary for the City to continue production of groundwater from these two wells.	500,000	8,516	34,046 15	Los Angeles	IV	2012
4461 1910062	1910062-015	LA VERNE, CITY WD	New Groundwater Well	The project includes drilling for a new well and testing to determine amount of water that is available. Also, water quality testing to determine concentrations of any contaminants. The project includes equipping the well with an appropriate sized pump and electrical equipment required to extract the water. The project includes development of treatment equipment for treating nitrate contamination and any additional contaminants found during the water quality analysis. Lastly, all piping required for treatment and transmission to the City's existing water system.	0	0	C	The City is seeking to improve the reliability of it's system through the development of a new groundwater extraction well in the Main San Gabriel Basin. Currently, the City relies on imported water to supplement high demand periods. The development of a new will will lower the need to import water and improve the redundancy of the overall system.Similar to other wells in the are the proposed will is likely to encounter water quality issues with Nitrates. Therefore, the water extracted from this well will require treatment prior to distribution.	3,000,000	8,516	34,046 15	Los Angeles	IV	2012
4462 1910062	1910062-004	LA VERNE, CITY WD	Critical Facility Intrusion Alarms	This proposed project would install various electronic equipment to provide 24 hour monitoring and surveilance of critical water facilities inclduing reservoirs, pumping stations, and treatment plants.	0	0	с	The civt of La Verne is located in the Foothills of eastern Los Angeles County. many of its water facilities are located within the foothills and other remote locations and subject to vandalism. This includes unauthorized entry into reservoir hatches, unauthorized entry into pumping facilities, and treatment plants. Potential damages might include water quality threats from body contact or intentional dumping of contaminants into reservoirs, theft of communications and other electronic equipment monitoring water operations.	300,000	8,516	34,046 15	Los Angeles	IV	2009

4463 1910062	1910062-001	LA VERNE, CITY WD	E Street 16" Water Main Replacement	This proposed project will replace approximately 3,600 O feet of existing 14" riveted steel pipeline with roughly 2,500 feet of new 16" ductile iron pipe and 1,100 feet of 8" ductile iron pipe. The new 16" line will also be connected to a new transmission line from the city's main pumping facility. The new 8" line will function as distribution only, thus the reduced sized.	0	c	The existing 14" pipeline in E Street is a riveted steel pipe with thin wall. The pipe is at least 80 years old and experiencing numerous leaks and failures. The pipe is also vulnerable to damage as it crosses two sets of rail lines. This pipeline is the major source of supply (domestic and fire) to the city's southern section, which is primarily industrial land uses with some residential. Any long term failure of this pipe will inhibit supply to this region subjecting users to limited water suply and inadequate fire flows. Installation of a new 16" water line will improve system hydraulics and ensure continued delivery of high quality water supplies and fire protection flows.	1,000,000	8,516	34,046 15	Los Angeles	IV	2009
4464 1910062	1910062-016	LA VERNE, CITY WD	White Ave - Treatment Facility	The project will include the construction of treatment vessels for the removal of nitrate and perchlorate contamination, all necessary piping to convey the water from the wells to the treatment facility and through the respective processes, a booster pump station to provide for the additional head requirements and equipment for chloramination disinfection prior to distribution to the City's system. The proposed location of the treatment facility is at the City'S White Avenue Forebay; the project will not require land acquisition. The required piping includes a 12" ductile iron pipeline in 5th and "B" streets from the Walnut Well to the White Avenue Forebay.	0	c	The City has exclusive rights to produce unlimited quantities of groundwater from the Ganesha Basin. It also has rights to extract 7.72% of the safe yield from the Pomona basin. Historically these basins have been contaminated with nitrate and perchlorate in excess of the MCL. The City has stopped using it's wells ithat contain perchlorate until a treatment facility is constructed. The wells with nitrate concentrations slightly above the MCL are blended with treated surface water to lower the concentrations below the MCL. This project will help to develop new groundwater sources and reduce the City's demand for imported surface water. The project will provide for the development of a new groundwater Treatment Plant. The treatment plant will treate for nitrate and perchlorate at a discharge preliminary design rate of 2,000 gpm. The project proposes to utilized the lon Exchange treatment processes for contaminate removal; however, the City is interested in pilot or demonstration projert will allow the City to produce more groundwater and reduce it's dependance on imported surface water.	5,500,000	8,516	34,046 15	Los Angeles	IV	2012
4465 2710017	2710017-008	Marina Coast Water District	Marina Undersized Mains and Hydrant Repair and Replacement	O Replacement Project would include planning, design and construction for replacing 26 locations of undersized drinking water transmission mains and Warfhead Hydrants to improve pressure flow in those public drinking water transmission main locations pre-design/planning for the transmission pipelines-design(including environmental documentation) and bid document preparation- construction to remove and replace 26 transmission main sections and associated water hydrants- disinfection of new drinking water transmission lines- drinking water sample collection to ensure safe connection to existing drinking water system- pilot operation to monitor pressure effectiveness and line integrity to protect drinking water yality	0	с	There are 26 locations in the Marina Coast Water District's Marina drinking water delivery system where the water transmission mains feeding oul-de-sacs are undersized and require replacement. These undersized transmission main sections pose pressure issues with our customers and flow issues with hydrants. Additionally, 14 of the hydrants are Warfhead Hydrants which get very low flow results also being unsuitable for fighting fires. The integrity of the system in those 26 locations is of concern for long-term drinking water delivery reliability relative to consistent and controllable pressure head throughout the public water deliver system.	1,400,000	8,133	34,600 05	Monterey	II	2008

4466 2710017	2710017-009	Marina Coast Water District	Marina Blow Off Replacement	The project would include planning, design, and removal and replacement of 65 blow-offs on dead end drinking water pipelines to enable the annual flushing required by DPH and ensure drinking water quality standards are met throughout the Marina Coast Water District's Marina drinking water distribution system. The repair/replacement of the blowoffs will provide for a more secure drinking water delivery system given the condition of the blow off valves. The project would include:- Pre-design/planning- Design (including environmental documentation and permits)- Preparation of bid documents- Construction to remove and replace the blow-offs- Preparing lines for re- connection to system Monitoring performance of initial blow-offs to ensure appropriate design construction is working or modify if needed.	0 7 2	0	C	The Marina distribution system has 65 locations where water flow is into a deadend main where a blow off is located for deadend main flushing. DHS requires we flush all of the dead end mains annually. We are not able to do so and effectively flush them due to the blowoffs are either not working or constructed so that we cannot use them. Thus, drinking water quality at these locations, if not more easily flushed, may become problematic and may possibly affect other portions of the system or affect water quality at the tap in the localized deadline area. Improving these deadends would provide a more secure system with transmission mains distributing drinking water that throughout the system consistently meets drinking water quality standards.	1,000,000	8,133	34,600 05	Monterey	Ι	2008
4467 2710017	2710017-010	Marina Coast Water District	Ord CSUMB Housing Smal Mains Replacement	I The Ord CSUMB Housing Small Mains Replacement Project would include:- pre-design/planning for removing transmisstion main sections - design(including environmental documentation) and bid document preparation- construction to remove and replace 28 transmission main sections at cul-de-sacs - disinfection of new drinking water transmission lines- drinking wate sample collection to ensure safe connection to existing drinking water system- pilot operation to monitor pressure effectiveness and line integrity	O g er	0	C	The conversion of the Fort Ord from military use to domestic use included transferring ownership to the Marina Coast Water District for the existing Fort Ord public drinking water supply, treatment, storage and distribution system. The Marina Coast Water District is now responsible for public drinking water service to the public now using and residing on the former Fort Ord land. The California State University (CSUMB) housing now present on the former Fort Ord property is served by the former Army drinking water transmission mains. These water mains have flow and pressure issues due to 2" mains feeding several sections at 28 couldesacks. Additionally, the mains are glued schedule 40 PVC which is not suitable for a public drinking water delivery system.	4,000,000	8,133	34,600 05	Monterey	Π	2008
4468 4210016	4210016-011	Golden State Water Company - Orcutt	Orcutt - Park Avenue Mai Replacement	n Replace 1200 feet of 4 inch steel main line with 8 inch ductile iron pipe in order to increase pressure and flow to better serve customers in low pressure areas, and to increase fire flow for public protection.	0	0	С	Mains that are now undersized because of growth that has taken place result in low pressure for our customers, as well as insufficient fire flows for public protection. By replacing 11200 feet of 4 inch steel main line with 8 inch ductile iron pipe, this problem will be rectified.	400,000	10,846	35,212 06	Santa Barbara	IV	2009
4469 4210016	4210016-007	Golden State Water Company - Orcutt		Install two industrial approved sample stations for TCR sampling.	0	0	c	Upgrade distribution system for bacteriological monitoring.	10,000	10,846	35,212 06	Santa Barbara	IV	1998
4470 4210016	4210016-005	Golden State Water Company - Orcutt	Orcutt - South Pacific Mai Replacement	Automate the Foxenwood zone system. n Replace 800 feet of 4 inch steel main line with 8 inch ductile iron pipe in order to increase pressure and flow to better serve customers in low pressure areas, and to increase fire flow for public protection.	0	0	c	Diggrade the distribution system for adequate pressure. Mains that are now undersized because of growth that has taken place result in low pressure for our customers, as well as insufficient fire flows for public protection. By replacing 800 feet of 4 inch steel main line with 8 inch ductile iron pipe, this problem will be rectified.	210,000	10,846	35,212 06 35,212 06	Santa Barbara	IV	2009
4472 4210016 4473 4210016	4210016-003 4210016-004	Golden State Water Company - Orcutt Golden State Water Company - Orcutt		Implement a groundwater management plan. Automate the system with auto dailer.	0 0	0 0	c c	Needs to improve sources. Needs to improve the reliability of system operation.	10,000 50,000	10,846 10,846	35,212 06 35,212 06	Santa Barbara Santa Barbara	IV IV	1998 1998
4474 4210016	4210016-008	Golden State Water Company - Orcutt		Install cathodic protection at two reservoirs, Orcutt Hill	0	0	с	Upgrade reservoirs to prevent corrosion.	25,000	10,846	35,212 06	Santa Barbara	IV	1998
4475 4210016	4210016-012	Golden State Water Company - Orcutt	Orcutt - Orcutt Road Mair Replacement	a Replace 1,423 feet of 4 inch main line with 8 inch pipe i order to increase pressure and flow to better serve customers in low pressure areas, and to increase fire flow for public protection.	in O	0	С	Mains that are now undersized because of growth that has taken place result in low pressure for our customers, as well as insufficient fire flows for public protection. By replacing 1,423 feet of 4 inch main line with 8 inch pipe, this problem will be rectified.	600,000	10,846	35,212 06	Santa Barbara	IV	2009
4476 4210016	4210016-009	Golden State Water Company - Orcutt		Automate the Evergreen Zone.	0	0	С	Distribution system needs upgrades for maintain adequate pressure.	30,000	10,846	35,212 06	Santa Barbara	IV	1998

4477 1910024	1910024-004	GSWC - CLAREMONT	Indian Hills Well 2009	This project involves the drilling and equiping of a new well at an existing facility.	0	0	С	The Indian Hill areaWells have reached the end of their economic usefull life. Drilling a new well on an existing site will provide ground water inlieu of using Colorado	750,000	11,061	36,435 07	Los Angeles	IV	2008
4478 1910024	1910024-005	GSWC - CLAREMONT	Montana Lane Well 2009	This project will involve the complete developement of a new well facility. The project is currentlyin design and will involve the drilling and equiping of the well and building as well as chlorination failities.	0	0	с	The Montana Lane area Wells have reached the end of their economic usefull life. This is a new site to provide ground water inlieu of using Colorado River Water.	850,000	11,061	36,435 07	Los Angeles	IV	2008
4479 5610018	5610018-005	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Reservoir Safety Upgrade	This project is to install Safe-T-Climb Devices, extend - existing ladders, provide enclosues for security and s safety, and install/repair liquid level indicators.Once completed, this project will comply with all OSHA requirements and provide for a safer environment for employees,	0	0	С	Ventura County Waterworks District No. 1 (District) has various reservoirs that are inadequately equipped and not in compliance with OSHA regulations such as ladders with no fall arresting device, or lanyards to prevent injury from a slip or fall while climbing the reservoirs (many of them are over 30 feet tall).Also, there are District reservoirs that do not have functioning liquid level indicators.	101,750	10,180	36,786 06	Ventura	IV	2009
4480 5610018	5610018-002	VENTURA CWWD NO. 1 - MOORPARK	Ventura County Waterworks District No. 1 Well Treatment/Conversion to Chloramines	The District's intention is to treat District Wells 55,95, - 96, and 98 with chloramines to be compatible with imported water treatment. The conversion to chloramines would include chemical analyzers and chlorine and ammonia pumps and othe related appurtenances. Completion of this project will ensure proper disinfection within the District's water system, and protect the health and safety of the customers.	0	0	с	Ventura County Waterworks District No.1 (District) provides water service to over 35,000 people in the City of Moorpark and contiguous areas. The District's water supply comes from imported and local sources. The imported chloraminated water is combined with chlorinated well water resulting in no chlorine residual which violates State of California Health and Safety regulations.	300,000	10,180	36,786 06	Ventura	IV	2009
4481 1910028	1910028-006	CRESCENTA VALLEY CWD	Emergency Water Supply Interconnection Between LADWP, CVWD and FMW	CVWD is proposing a three (3) phase project includingPhase A - Plan, design and construct a new D 1000 gpm emergency water supply interconnection with Los Angeles Department of Water and Power that will be activated in the event of a MWD system shutdown. This include installation of a new 6-inch water main in Honolulu Avenue from the existing LADWP termination point, west of the intersection of Honolulu Avenue and Lowell Avenue, to CVWD's Ordunio Reservoir site, a new 4-inch metering station within the public right-of-way, on-site piping from the meter to CVWD's Ordunio Reservoir inlet/outlet line, a chlorine analyzer, onsite sodium hypochlorite generation equipment, a hypochlorination building and SCADA and electrical equipmentPhase B - Plan, design and construct an interconnection between CVWD and FMWD at CVWD's Williams Reservoir site which will include new piping, a valved by-pass system and a metering system to allow water flow from CVWD to FMWD , a chlorination station with onsite sodium hypochlorite generation and anhydrous ammonia for disinfection conversion from free chlorine to chloramines, and SCADA and electrical equipment. Phase C - Plan, design and construct the upgrade to the exsting flow control valve at FMWD's Berkshire Booster Station to allow water to flow from the CVWD water system to allow water to flow from the CVWD water	o	0	C	The problem is that FMWD has one connection to the MWD system and is reliant upon this one connection for all import water delivered to its eight member agencies. When the MWD system is shutdown for repairs and maintenance. Most of these shutdown for repairs and maintenance. Most of these shutdown are seasonally planned to occur in low demand times and the proposed project will go into service when the MWD system is planning a shutdown or without warning due to acts of terrorism or 'acts of god'. The regions 80,000 customers needed protection from disruption of import drinking water deliveries from MWD's Weymouth plant due to natural disasters, intentional contamination caused by terrorist attack or deliberate acts of destruction or degradation. Further investigation confirmed that the number of people facing these threats has been increased to approximately 102,000 customers. This project will provide an emergency water supply interconnection between LADWP, CVWD and FMWD, so CVWD will have the ability to transfer water to FMWD in an emergency situation. The existing CVWD connections to the FMWD by to CVWD and do not have the ability to distribute the water supply between CVWD and the other member agencies that are supplied by FMWD. This project will provide a new water source from LADWP at CVWD's Ordunio Reservoir site, a new by-pass system from the CVWD's	1,133,250	8,133	38,000 15	Los Angeles	IV	2009
4482 1910028	1910028-003	CRESCENTA VALLEY CWD		Funding requested for a water distribution system pipeline replacement program that has been in place since 1994/95 for a portion from 1997/98 beyond. Project involves: Design, and Construction	0	0	С	Aging distribution system pipelines with significant leak/rupture history; resulting potential for contamination and pressure losses within distribution system and inability to meet required fire protection flows.	8,173,060	8,133	38,000 15	Los Angeles	IV	1998
4483 4110025	4110025-006	North Coast County Water Dist		Phase 1 system modifications will allow leaking main to be taken out of service	0	0	С	Corroding and leaking transmission mains.	75,000	11,743	38,390 17	San Mateo	II	1998
4484 4110025	4110025-007	North Coast County Water Dist		Phase 2 of project will place a liner inside main after phase 1 work is completed.	0	0	с	Corroding and leaking transmission mains.	350,000	11,743	38,390 17	San Mateo	Ш	1998

4485 3310007	3310007-001	Coachella, City of	Water Facilties Security System	Security for the municipal water wells, reservoirs, and O booster stations in the city of Coachella.		D	С	Security Project	175,000	7,460	38,406 20	Riverside	V	2007
4486 3710021	3710021-001	San Dieguito WD		Back wash water secondary treatment (reclamation) O and removal of accumulated solids in lake for taste and odor imrovements.	(	D	С	Possible contamination of San Dieguito Reservoir with collection of sludge solids and filter backwash water.	5,900,000	11,135	38,500 14	San Diego	V	1998
4487 3710021	3710021-005	San Dieguito WD	SDWD Motorized Actuators for Transmission Lines and Valve Replacement Project	Installation of 16 motorized actuators and replacement O of existing 24" and 30" valves in the 520 zone transmission mains. Construction will involve traffic control in major arterials of the City of Encinitas, shut down of transmission mains, removal and installation of new valves, installation of new motorized actuators include extending power sources to each site. The existing valves are old and do not fully seat or shut off the flow; therefore the valves will be replaced at the same time. This project would allow operations personnel to control the on/off positions of the valves without entering the valuts. Supply of potable drinking water is a fundamental responsibility of the District, and is supported in the City's General Plan by RM-1 to, "conserve, protect, and enhance the water resources in the Planning Area," and PS-2 which states, "The City of Encinitas will make an effort to minimize potential hazards to public health safety, and welfare."A Programmed Environmental Impact Report was certified by the District Board as part of list of Water Master Plan projects on May 22, 2002. This project was determined to have no significant impact. NEPA will require a Categorical Exclusion.		D	c	SDWD Motorized Actuators for Transmission Lines and Valve ReplacementProject No. CWW01AInstallation of 16 motorized actuators and replacement of existing 24" and 30" valves in the 520 zone transmission mains. This project installs motorized actuators and valve replacements in the districts transmission main. The motorized actuators will be installed in existing valuts power will need to be extended to every site. The existing valves are old and do not fully seat or shut off the flow; therefore the valves will be replaced at the same time. This project would allow operations personnel to control the on/off positions of the valves without entering the valuts. It would also eliminate the need for complex traffic control and confined space requirements and allow quick control of the valves, which is critical during emergency situations.	400,000	11,135	38,500 14	San Diego	v	2009
4488 3710021	3710021-003	San Dieguito WD	SDWD Corrosion Protection for Underground Facilities and Vaults	This project will provide protective corrosion protection O for 10 underground facilities. The project is to strip blast paint and other containments from piping, flex coupler, clay valves, gate valves and supporting legs. A thermal spray will be used to coat all piping, valve components and appurtenances to a thickness of 0.008 to 0.010 inches. Project requires OSHA confined space requirements, including pre-entry testing, monitoring air quality, and continuous forced air ventilation. Project requires traffic control for all vault located in traveled ways.Location No. 1: 345 Santa Fe Drive PRV Location No. 2: San Dieguito Dam No. 9Location No. 3: San Dieguito Dam Top VaultLocation No. 4: San Dieguito Dam No. 30Location No. 5: San Dieguito Dam Small VaultLocation No. 7: 895 Leucadia PRV Vault Location No. 8: Arroyo Drive PRV StationLocation No. 9: El Camino Del Norte Venture Vault Location No. 10: 601 Santa Fe Drive PRV VaultNEPA will require a Categorical Exclusion.	. (	0	c	This project will provide protective corrosion protection for 10 underground facilities. The project is to strip blast paint and other containments from piping, flex coupler, clay valves, gate valves and supporting legs. A thermal spray will be used to coat all piping, valve components and appurtenances to a thickness of 0.008 to 0.010 inches. Project requires OSHA confined space requirements, including pre-entry testing, monitoring air quality, and continuous forced air ventilation. Project requires traffic control for all vault located in traveled ways.	100,000	11,135	38,500 14	San Diego	v	2009

4489 1910090	1910090-006	MONROVIA-CITY, WATER DEPT.	Solar power installation a 600 S. Mountain Avenue	t The City would have a contractor construct a 650 kW DC O solar system at this site. The solar power generating panels would be installed on the roof area and parking facilities. The associated equipment would be installed in the mechanical area at the site. This project would be of the highest benefit due to the amout of power consumed here which would allow a larger supply of power generated to be returned to the Edison system and a larger cost savings to the City Water System. The purchase of the system would show that it is a positive investment for all parties involved.	0	C	This is an application for the green-environmental projects. The City of Monrovia is a leader in green- environmental projects in Los Angeles County. To continue with our progressive approach the City of Monrovia has a plan to install a 650 kW DC solar powered system at our City Water System headquarters at 600 South Mountain Avenue. The City would reduce the demand on the power supplied by Southern California Edison and at the same time provide additional power to Southern California Edison for their use. This site is the headquarters facility for the City Water System and houses its offices, warehouse, SCADA system, and fleet. Southern California has experienced power outages and "brown outs" in the past and this system would supply an additional source of reliable power. The power costs for the City Water System average about \$80,000.00 per month. The City Water System currently qualifies for "time of use" electrical rates by pumping in "off peak hours" when ever possible. Even with all these positive factors it is not economically feasible to construct these facilities without a grant. The City is unable to receive tax incentives that are available to the private sector that offset the installation and operating costs. Long term projections show no cost savings to investor operated or systems installed by loan funding.	4,350,000	9,169	39,147 22	Los Angeles	IV	2009
4490 1910090	1910090-002	MONROVIA-CITY, WATER DEPT.	Rehabilitation of Monrovi Wells #5 and #6	a The City of Monrovia will hire a contractor to remove O and rebuild the well pump and motors. The wells themselves will be inspected and cleaned and items repaired if needed. The wells will then be sanitized and tested and put back into active service. This will help insure the water quality and increase the water produced.	0	С	The City of Monrovia has identified two of the City Water System wells as needing rehabilitation. The number of hours that the wells run and the volume of water they produce has caused "wear and tear" on the pumps and motors. The volume of water pumped has decreased and the well casing, perforations and gravel pack need inspection. these factors could lead to a degradation in water quality, and amount of water supplied.	125,000	9,169	39,147 22	Los Angeles	IV	2009
4491 1910090	1910090-009	MONROVIA-CITY, WATER DEPT.	Solar power installation 510 Mountain Reservoir	The City would have a contractor construct a 105.6 kW O DC system at this site. The solar power generating panels would be installed on the roof area and the associated equipment installed in the existing pump area. The projected power output would supply power back to our power supplier, Southern California Edison, for use in the area power grid. The purchase of the system would show that it is a positive investment for all parties involved.	0	с	This is an application for the green-environmental projects. the City of Monrovia is a leader in green- Environmental projects in Los Angeles County. To continue with our progressive approach the City of Monrovia has a plan to install a 105.6kW DC solar powered system at our Mountain Avenue Reservoir. The City would reduce the demand on the power supplied by Southern California Edison and at the same time provide addition power to Southern California Edison for their use. This site has a storage capacity of five million gallons of potable water and pumps water to four pressure zones in the City of Monrovia. Southern California has experienced power outages and "brown outs" in the past and this system would supply an additional reliable source of power. The power costs for the City Water System average about \$80,000.00 per month. The City Water System currently qualifies for "time of use" electrical rates by pumping in "off peak hours" when ever possible. Even with all these positive factors it is not economically feasible to construct these facilities without a grant. The City is unable to receive tax incentives that are available to the private sector that offset installation and operating costs. Long term projections show no cost savings to investor operated or systems installed by loan funding.	900,000	9,169	39,147 22	Los Angeles	IV	2009

4492 1910090	1910090-001	MONROVIA-CITY, WATER DEPT.	Solar Power installation a City Well Field 2655 Myrtl Avenue	t The City would have a contractor construct a 334 kW DC O e solar system at this site. The solar power generating panels would be installed on the roof area and parking facilities. The associated equipment would be installed in the mechanical area of the site. This project would reduce the power supply required to provide the City with it's water supply. The purchase of the system would show that it is a positive investment for all parties involved.	0	C	This is an application for the green-environmental projects. The City of Monrovia is a leader in green- environmental projects in Los Angeles County. To continue with our progressive approach the City of Monrovia has a plan to install a 334 kW DC solar powered system at our City well field site at 2655 South Myrtle Avenue, Monrovia, California. The City would reduce the demand on the power supplied by Southern Cafifornia Edison and at the same time provide additional power to Southern california edison for their use. This site is the well field for the City Water Supply and provides the majority of the water consumed in the City of Monrovia. The site also contains our chlorination and VOC treatment systems. Southern California has experienced power outages and "brown outs" in the past and this system would supply an additional source of reliable power. The power costs for the City Water System currently avalifies for the "time of use" electrical rates by pumping in "off peak hours" when ever possible. Even with all these positive factors it is not economically feasible to construct these facilities without a grant. The City is unable to receive tax incentives that are available to the private sector that offset the installation and operating costs. Long term projections show no cost savings to investor operated or systems	1,680,000	9,169	39,147 22	Los Angeles	IV	2009
4493 1910090	1910090-003	MONROVIA-CITY, WATER DEPT.	Install Security Cameras a City Reservoir Sites	t The City will hire a contractor to install all materials and O equipment to create a security system of motion sensors and cameras at 10 of the reservior locations. The system would be able to raise an alarm to get immediate response to prevent a water quality problem and vandalisum to the site.	0	с	Due to the remote locations or several of the City reservoir sites security on the roof structures of the facilities is an issue. The water quality of the system could be compromised and vandalisum could occur. Cameras and motion sensors would be installed on 10 reservoirs.	60,000	9,169	39,147 22	Los Angeles	IV	2009
4494 3710019	3710019-008	Ramona Municipal WD	San Vicente Water Pipelin	e The tasks for which this application is made are pipeline O construction, construction inspection, and other construction phase activities. The proposed pipeline will have a diameter of 16 inches. Connecting pipelines have diameters of 8 and 12 inches. The pipelines will be installed concurrent with road construction. The significant changes in the pipeline alignment require the new pipeline be installed as the proposed road surface and horizontal locations change. The County will not permit pipeline work within a newly paved road for a minimum of 3 years. Several planning phase project activities are complete. The preliminary engineering, environmental documentation (EIR), land surveying, right of way acquisition, and road design documents are complete. The design of the water pipeline will be concurrent with road construction. The County of San Diego and Ramona MWD have developed a preliminarily cost estimate for the construction phase of the pipeline work to be \$4.4M.Neither a consolidation nor an intertie will not address the road and pipeline realignment challenge.	0	c	The County of San Diego is improving an approximately three-mile segment of San Vicente Road. The road improvements will include horizontal and vertical alignment modifications. The Ramona Municipal Water District owns and operates a critical water distribution pipeline along the existing alignment of San Vicente Road. Due to the significant modifications proposed to the vertical and horizontal alignments of San Vicente Road, combined with the age of the existing water pipeline, a new pipeline should be installed along the entire realignment of San Vicente Road. Funds requested are not for road improvements; requested funds are related solely to water pipeline related activities. If a new pipeline is not installed, portions of the existing pipeline will be located approximately 18' below the road surface, pipeline segments will be located in new habitat areas, and the repair/replacement of the existing pipeline will be forbidden by the County for at least three years.	4,400,000	9,330	40,000 14	San Diego	v	2012

4495 3710019	3710019-002	Ramona Municipal WD	24 inch Pipeline to Olive St. PS	Construct 5,200 If of 24-in pipeline between Olive St. Pump Station and Julian Tank. This pipeline will increase the reliability of the water supply provided to Downtown Ramona, Bargar Pressure Zone, and the San Diego County Estates which total approximately 9,000 meters. By directing flow through the Westend reservoir and through the Olive St Pump Station the District is able to reduce the total energy use to deliver water to Downtown Ramona and the San Diego Country Estates. Also creates a second supply to the majority of the District and increases the water system reliability.	0	C	This pipeline creates a second supply to the majority of the District increases the water system reliability, and reduces energy consumption. It will provide additional fire fighting capabilites to avoid the evacuation and destruction of the town of Ramona caused by the 2003 and 2007 wildfires.Currrently the water supply to entire the Ramona Area is restricted because nearly all the imported water comes to Mt Woodson Reservoir. This also results in higher energy demands and larger carbon foot print than a system that split the flow between the 1700 elevation reservoir (Westend) and the 1800 elevation reservoir (Mt Woodson). This pipeline will allow more demand to be placed on the Westend Reservoir which will improve the flows to downtown Ramona, the San Diego Country Estates and the Bargar pressure zone, representing nearly 9,000 meters. The District has constructed a new pump station and pipelines to help unload the demand on the Mt Woodson system and improve the reliability of water to the Ramona Area but this pipeline is needed for the overall system to fuction effectively. This project also reduces the demand on the single 12-in water line serving the San Diego County Estates (4000 meters) that is over stressed and has failed on a number of occasions.	1,310,000	9,330	40,000 14	San Diego	v	2009
4496 3710019	3710019-007	Ramona Municipal WD	Highland Valley Rd. Joint Replacement	Contract of the replacement of approximately 100 joints O on approximately 4000 If of 12 and 16-in pipeline and associated road repair.	0	C	The potable untreated water line in highland valley has suffered deterioration of the pipe joints requiring replacement of all joints. This work has been scheduled over a period of 10 years and results in repeated outages and road detours. The joints frequently leak resulting in damage to the roadways and potential contamination of the water supply.	500,000	9,330	40,000 14	San Diego	V	2009
4497 3710019	3710019-005	Ramona Municipal WD	18 inch Downtown Pipeline	Design and construct 9,000 lf of 18-in pipeline between O Olive St. Pump Station and Julian Tank and upgrade pump station. This pipeline will increase the reliability of the water supply provided to Downtown Ramona and the San Diego County estates which total approximately 8,000 meters. By directing flow through the Westend reservoir and through the Olive St Pump Station the District is able to reduce the total energy and the carbon footprint associated with usethe to delivery of water to Downtown Ramona and the San Diego Country Estates.	0	C	The District's objective is to provide a reliable water supply to the existing San Diego Country Estates, Downtown Ramona and the Bargar Pressure Zone. Ramona suffered significant damage and forced evacuations during the 2003 and 2007 wild fires. Currrently the water supply to the San Diego Country Estates (4000 meters) is dependent on a single 12-in water line that is overstressed and has failed on a number of occasions. It is also limited to delivering high TDS water from the San Diego County Water Authority (CWA) supply which results in increased degredation of the ground water in the San Diego County Estates and additional energy use and costs for the operation of the San Vicente Wasterwater Treatment Plant to RO the effluent. The addition of the pipeline will allow delivery of more low TDS water from Bargar WTP which will lower the TDS and improve the groundwater in the San Diego Country Estates. Surrently the water supply to the Downtown Ramona area (4000 meters) is dependent on a number of small distribution lines to serve the area which result in low pressure areas. This pipeline will almore the ground area. It will also reduce the energy and carbon footprint associated with the delivery of water to the Downtown Ramona Area by lowering the lift by 100 feet.	2,673,000	9,330	40,000 14	San Diego	v	2009

4498 3710019	3710019-003	Ramona Municipal WD	Poway Pump Station Standby Generator	Purchase and installation of standby generators to sited O at the Poway Pump Station. Project may use standard diesel standby generators or natural gas or solar as an alternative.	0	с	In the event of a power outage, the Ramona area of the County will be without a water supply and in the Witch Fire event the water system was nearly dry. This resulted in No Use of Water Order, a No Drinking Water Order, and a Boil Order. In addition the Cal Fire "Fire Attack Base" was nearly out of water. The water supply to Ramona is pumped up 1000 feet in elevation to the Ramona area by the Poway Pump Station and a 30-in and 18-in pipeline. The pump station has no standby electrical generation, so there is no water to the Ramona Area during an event that takes the pump station out of service, such as a fire or earthquake. In addition San Diego Gas and Electric is proposing a rolling black out whenever there are high winds and this would mean more frequent loss of power to the pumps. The site is only accessible through a sensitive habitat and the installation of the generators would reduce the need to haul in generators each time there is an incident of power loss.	2,191,000	9,330	40,000 14	San Diego	v	2009
4499 4110023	4110023-007	City of San Bruno		Purchase five trailer mounted portable diesel powered O electrical generators that would be stationed at each well head.	0	С	Need emergency power supply at booster pump stations and wells.	300,000	11,502	40,165 17	San Mateo	II	1998
4500 4110023	4110023-008	City of San Bruno		Construct storage facilities to expand storage capacity. O	0	С	Need to increase emergency water supply. (combined with another project)	10,200,000	11,502	40,165 17	San Mateo	II	1998
4501 4110023	4110023-015	City of San Bruno	Seismic Retrofit and Rehabilitation of Water Tanks 1 and 3	As these tanks are the most critical to the safe and efficient operation of the City's water distribution system, this project has been placed on the fast track for reconstruction. The City recently conducted a feasibility study and determined that a rehabilitation of Tank No. 3 would be more cost effective than replacement. In depth physical analysis of the tank's condition has occurred. Work will include enlargement and strengthening of the tank foundation, rewinding the tank with pre-stressed strands that effectively rewraps the exterior wall, and anchoring the tank walls to the foundation through additional diagonal strand seismic cables to comply with AWWA D110 standards. The City also plans to install flexible pipe connections at both Tank 1 and Tank 3 to further increase the ability of these tanks to withstand seismic ground movement.	0	С	Existing Tank No. 1 is a welded steel tank that is structurally sound to resist seismic forces, but has rigid pipe connections to the distribution system that are susceptible to damage as a result of seismic ground movement.Existing Tank No. 3 performs a critical function by providing storage capacity to meet peak flow and fire flow demands. It is the City's only spiral wound reinforced concrete tank. The tank capacity is 2,000,000 gallons, the second largest holding capacity tank in the City's water distribution system. As a result of its very poor structural condition the City is able to fill safely only to half of its 32 feet in height and therefore only store one half the water the tank is designed to hold. The City of San Bruno water system thus faces an above ground water storage deficit of approximately 1- million gallons. This shortfall threatens the ability of San Bruno to supply enough potable water should a significant event impair the use of our water wells, and our ability to deliver fire suppression flows to all existing and future developments.	1,250,000	11,502	40,165 17	San Mateo	IJ	2009

4502 4110023	4110023-012	City of San Bruno	Advanced Water Meter System	This project will allow for real-time meter reads from a O central location. It includes the installation of a new transmitting register at each of the approximately 11,500 service connections, the installation of two antennas on top of two 100-foot poles and associated equipment placed in key locations to receive transmissions from the registers to the antennas to a fix base unit at City hall. The project also includes installation of repeating transmitters to relay data from the registers to the antennas to a fix base unit at City hall. The project also includes installation of repeating transmitters to relay data from the registers to the transmistor to the registers to the associated hardware and software to allow City personnel to receive hourly, accurate information from all 11,500 accounts. Once complete unaccounted water will decline dramatically, the City will be able to determine from each service account how much water was consumed and, by looking at water consumption history, be able to determine if each account is likely experiencing a leak on their service.		0	C	Currently, with limited funding and outdated technology, the City of San Bruno is only able to read the meters of its ratepayers once every two months. This length of time between reads leads to three major problems: o Customers are unable to track their water consumption in a timely fashion; o Water leaks on the service line go undetected for long periods of time, leaving ratepayers on the hook for excessively high bills and a clear waste of water; ando Due to undetected leaks, the City of San Bruno is often faced with a large amount of unaccounted for water, thereby necessitating insufficient management of the City's water resources.	2,500,000	11,502	40,165 17	San Mateo	II	2009
4503 5610059	5610059-008	Golden State Water Company - Simi	Simi Valley - Niles Booster Upgrades and Piping	To maximize groundwater use, extra pumping and O piping would need to be added to send blended water from this plant and spread it around the distribution system. This would involve replacing aging booster pumps with more efficient VFD's and adding considerable piping to distribute the blended water effectively and efficiently.	,	0	С	Groundwater from the two wells in this system is very high in TDS, necessitating blending with purchased water from Calleguas Mutual Water District. Only a small portion of the groundwater can be used because of limits to how much of the blended water can be sent into the distribution system due to piping and pumping constraints. It would be beneficial to our customers to be able to maximize groundwater use, thus providing a more stable and cost effective source of water.	3,000,000	13,385	42,717 06	Ventura	IV	2009
4504 5610059	5610059-003	Golden State Water Company - Simi		Acquisition of property for the drilling of a well near O Fitsgerald interconnection with Callegaus MWD will provide for the additioon of future emergency and alternative water supply to the system. Overall water qualityimprovement by blending.	)	0	с	Needs to improve sources for reliability.	150,000	13,385	42,717 06	Ventura	IV	1998
4505 5610059	5610059-001	Golden State Water Company - Simi		Drill and equip a well at the Rebecca Plant to provide O for future emergency and laternative water supply.	)	0	С	Needs to improve sources for reliability.	450,000	13,385	42,717 06	Ventura	IV	1998
4506 5610059	5610059-002	Golden State Water Company - Simi		Provide an additional 2 MG of storage steel tank for O emergency and peak supply.	)	0	С	Needs to improve storage capacity for meeting peak water demand.	1,000,000	13,385	42,717 06	Ventura	IV	1998
4507 5610059	5610059-004	Golden State Water Company - Simi		Study groundwater quality and quantity available in the O area of the highest elevation. Results will be used to select a well site to provide emergency and alternative water supply of good water quality to this area.	)	0	с	Needs to improve sources for reliability.	30,000	13,385	42,717 06	Ventura	IV	1998
4508 3010036	3010036-004	City of San Clemente	Reservoir No. 1 Expansion	The project was recommended in the City's 2006 Water O Master Plan. Reservoir replacement from 0.5 MG to 1.0 MG. Proposed reservoir will provide a higher overflow elevation increasing hydraulic grade of service zone which will improve fire flows and low pressure problems in the southernmost part of the City.	)	0	с	Require additional operational and emergency storage for reservoir service zone.	3,000,000	17,350	43,900 08	Orange	v	2009
4509 3010036	3010036-001	City of San Clemente	Calle Real Pump Station Rehabilitation	Calle Real Pump Station will improve redundancy within O the City's Reservoir 10 and 6 service zones. The existing pump station has reached the end of its useful life and will be refitted with larger pumps, motors and an electrical system to provide service directly to Reservoir 10 which only has one source of supply. Reservoir 6 zone will be served from Reservoir 10 through a new pressure reducing station included as part of this project.		0	С	Pump station installed in 1960's and has reached end of useful life. No redundancy for pump station service zones.	1,150,000	17,350	43,900 08	Orange	V	2009

4510 1910156	1910156-001	BEVERLY HILLS-CITY, WATER DEPT.	Shallow groundwater well thills to manage the Hollywood Basin as two separate Hills aquifers a deep with the existing wells and a shallow aquifer with a minimum of two new wells. To investigate the groundwater within the aquifers of th Hollywood Basin for potential drilling of the shallow water wells near the treatment plant to supplement 1 City water supply. The project requires drilling two shallow wells 200 feet deep with a 50 foot seal at the surface so the water. Upon testing of the water and getti approval from the Department of Public Health the water would be piped to the nearby treatment plant treatment. This project is estimated to supplement to City's water supply by no more than 300 acre feet annually. The proposed land for this project is alread owned by the City.	ly O the ce ng for he	0	c	California is experiencing a natural and regulatory drought. These conditions are limiting the amount of water conveyed from the State Water Project and Colorado River to Southern California. As a result more water is needed through local ground water sources. The City of Beverly Hills developed four wells and built a reverse osmosis water treatment plant capable of treating 3 million gallons of water per day. However, the four wells can only provide 1.5 million gallons of water per day. Therefore to optimize the capacity of the water treatment plant and help alleviate the water shortages to Southern California new sources of water are necessary. There is currently shallow ground water being pumped to the storm drain from properties located near the City's water treatment plant. The City hired a consultant to evaluate the possibility of using this water. One possible means of capturing this water and putting it to beneficial use is by drilling shallow groundwater wells and piping the water to the existing water treatment. The proximity of where these shallow groundwater wells to the treatment plant make this option a promising alternative.	1,500,000	9,898	44,290 22	Los Angeles	IV	2009
4511 1910156	1910156-014	BEVERLY HILLS-CITY, WATER DEPT.	Water efficient equipment       As a member agency of the Metropolitan Water         replacement       District, an water audit was performed in the Fall of         2008 that identified water devices throughout city       facilities that could be replaced and/or upgraded to         conserve more water.       With the current water supply         concerns, by making upgrades and/or replacement to       tollets, urinals and irrigation spray noozles, the city ca         expect to save over 9,000,000 gallons in water per year	O / o an ear.	0	с	Replace and/upgrade water devices with more efficient models to conserve more water.	80,000	9,898	44,290 22	Los Angeles	IV	2011
4512 1910156	1910156-003	BEVERLY HILLS-CITY, WATER DEPT.	Deep well development at Developing a functional deep well on existing City robertson yard property is the highest ranked projects in the City's Groundwater Management Plan Technical Committee requiring exploration of increase local water supply. Currently, the City has released a contract to do the borehole testing required to determine if building a permanent well at this City property in West Hollywo is viable. The results are expected this summer. The the City would require the funding to build the well a conveyance back to the City's existing treatment plan which is the project being submitted to the State for funding. The City has experienced in the past deep wells in the Hollywood Basin producing 350 acre feet annually.	O e pod n nd nt,	0	с	California is experiencing natural and regulatory droughts. These conditions are limiting the amount of water conveyed from the State Water Project and Colorado River to Southern California. As a result more water is needed through local ground water sources. The City of Beverly Hills developed four wells and built a reverse osmosis water treatment plant capable of treating 3 million gallons of water per day. However, the four wells can only provide 1.5 million gallons of water pre day. Therefore to optimize the capacity of the water treatment plant and help alleviate the water shortages to Southern California new sources of water are necessary. The City owns some land located in West Hollywood known as the Robertson Yard where this project will be located.	1,288,283	9,898	44,290 22	Los Angeles	IV	2009

4513 1910156	1910156-009	BEVERLY HILLS-CITY, WATER DEPT.	Replacement of half century old steel tank reservoirs	The City of Beverly Hills is planning to replace the existing five welded steel water storage tanks and on- site piping at sites 3A, 4B, 5, 6 & 7 with new water storage tanks and on-site piping. Also, a seismic retrofit for the associated pump stations to comply with AWWA standards and the DPH drinking water requirements. The project will include automatic analyzers and chemical feed system to help improve water quality. The water storage tanks are essential for potable water uses and fire suppression.	0	0	c	Within the City of Beverly Hills potable water distribution system inventory are five flat bottom, ground supported circular steel water reservoirs tanks, all located at five separate sites within the city. These tanks were constructed in the mid-fifties to the mid- sixties and do not meet the current American Water Works Association (AWWA) standards for "Welded Steel tanks for Water Storage."The existing tanks and their on-site piping, which are an integral part of the City's water distribution system, need to be replaced to meet current Department of Public Health Services (DPH) drinking water standards, seismic design standards, and Cal OSHA safety standards. In addition, the associated five pump stations have to be seismically retrofitted. Presently the City's Water Utilityexperiences water quality problems with these tanks, mainly involving nitrification due to the water age in the reservoirs. Other problems with the reservoir include rusting to side walls, piping, and structural roof rafters. The interior coating/paint surfaces have also been tested and shown to have varying levels of lead.	8,800,000	9,898	44,290 22	Los Angeles	IV	2009
4514 1910156	1910156-002	BEVERLY HILLS-CITY, WATER DEPT.	Old obsolete water mete replacement	To change out the 61 remaining old obsolete turbine water meters and replace them with state of the art compound water meters that use the smart e-coder technology, it is necessary to enlarge the vaults because of the length of the new meters. This involves removing the old vault, digging out a larger area, and make modifications to the existing piping. The contractor hired for this job does not have the ability to do the work so in order to complete this project, the City either has to use internal forces that take away from other important functions or seek out the funds to hire a contractor who can complete this work in a timely manner without compromising other necessary water utility tasks.	0	0	c	With the state of the economy and the shortage of water it is important that we as professionals and administrators look for new and inventive ways to both save money as well as find ways to help the public conserve water. With that in mind the staff at the City of Beverly Hills with the support of the City Council embarked on an aggressive water meter change-out project. Staff spent months researching the available technology existing in the market. Staff was looking for a proven product that would help the City re-direct its labor force, vehicle usage, and overall equipment costs to enable the City to concentrate these assets in a direction that could be better utilized. In addition to this the City wanted to obtain more accurate water measurements, reduce the amount of unaccounted water, and offer benefits to the City's customers. As staff progressed through their research a technology began to stand-out above all others to achieve all of the goals and objectives the City had set to accomplish. Upon further research staff determined that the City should pursue a fixed network AMR (Automatic Meter Read) with smart meter technology. This system would allow daily meter reading of all of the meters throughout the City transmitting to data collections units which in turn contacted the utilities Network Control Center. By using a smart meter in conjunction with the fixed network system the City and the City's	518,500	9,898	44,290 22	Los Angeles	IV	2009
4515 1910156	1910156-008	BEVERLY HILLS-CITY, WATER DEPT.	Water efficient equipmer replacement	It As a member agency of the Metropolitan Water District, an water audit was performed in the Fall of 2008 that identified water devices throughout city facilities that could be replaced and/or upgraded to conserve more water. With the current water supply concerns, by making upgrades and/or replacements to toilets, urinals and irrigation spray noozles, the city can expect to save over 9,000,000 gallons in water per year.	0	0	С	Replace and/upgrade water devices to with more efficient models to conserve more water.	80,000	9,898	44,290 22	Los Angeles	IV	2009
4516 3410013	3410013-003	CalAm - Lincoln Oaks		Treelark wellhead treatment. Involves design and construction.	0	0	с	General system improvement. VOC contamination in well.	450,000	13,548	44,784 09	Sacramento	I	1998
4517 3410013	3410013-007	CalAm - Lincoln Oaks		Lincoln Oaks tank and booster station. Involves design and construction.	0	0	С	General system improvement. Inadequate soruce of supply due to attrition if well sources and VOC groundwater contamination.	1,800,000	13,548	44,784 09	Sacramento	I	1998

4518 3410013	3410013-004	CalAm - Lincoln Oaks		Sandlewood wellhead treatment. Involves design and construction.	0	0	с	General system improvement. VOC contamination in well.	450,000	13,548	44,784 09	Sacramento	I	1998
4519 3410013	3410013-006	CalAm - Lincoln Oaks		Villaview wellhead treatment. Involves design and construction.	0	0	С	General system improvement. Diesel contamination in well.	450,000	13,548	44,784 09	Sacramento	I	1998
4520 3410013	3410013-002	CalAm - Lincoln Oaks		Connect to Daly Ave main. Involves design and construction.	0	0	с	General system improvement. Inadequate distribution main for new well location.	160,000	13,548	44,784 09	Sacramento	I	1998
4521 3410013	3410013-005	CalAm - Lincoln Oaks		Glass Slipper wellhead treatment. Involves design and construction.	0	0	С	General system improvement. VOC contamination in well.	450,000	13,548	44,784 09	Sacramento	I	1998
4522 1910003	1910003-003	City of Arcadia	Sustainable Energy - Solar System Project	Arcadia Water Master Plan identified the need for installation of Sustainable Energy Projects and solar systems at water pumping facilities to offset high demand cost of power. The project will provide for installation of photovoltaic solar panel energy generating systems at various facilities, where the Citty has available space as well as high demand for electrica power. There are identified three facilities to be equipped with the solar panel energy generating systems: St. Joseph water facility. It is proposed to locate solar panels on the roofs of reservoirs and provide power to booster pumps located nearby within facilities. Project will be designed and constructed in phases by location and the Citty will work in cooperation with the Southern California Edison and providers of solar panel energy generating systems.	O al	0	c	Growing electricity prices are most pronounced in the high energy demanding water pumping areas of Southern California. This high energy demand occurs during midday hot weather periods when utilities have the most difficult time to provide power and the power supply is most susceptible to blackouts. Green energy projects will decrease demand and the use of non- renewable or limited resources by implementing technologies that provide equivalent or superior output utilizing recycled, renewable, or unlimited resources. This process is referred to as "Sustainable Design" and is becoming more and more necessary as the demand for water and energy increases and the supply from initial sources becomes less certain. Sustainable projects include the implementation of photovoltaic power at reservoirs and pumping stations. The installation of photovoltaic power supply systems provides the highest power output during the highest demand periods to dramatically lower the utility power cost as well as decreased grid susceptibility to blackouts.	3,000,000	14,719	44,814 22	Los Angeles	IV	2009
4523 5610019	5610019-001	CAMARILLO WATER DEPT		Construct additional wells to provide provide	0	0	С	Needs to improve the reliability of sources.	740,000	12,522	44,831 06	Ventura	IV	1998
4524 1910167	1910167-006	VERNON-CITY, WATER DEPT.	Vernon Production Well 21	K. Project DescriptionThe City will be drilling a production well (Well 21) at 3200 Fruitland Avenue. Thi Well will be drilled to a depth of approximately 1400 feet and capable of producing 1500 gal/min. The casing will be approxiamtely 18-inches in diameter and the pump boles will set at 450 feet. At the conclusion of the drilling process, the following tasks must be facilitated: Pump & motor installation, piping design and installation, flush basin construction, SCADA design, backup power installation and treatment design.	O is 2 e	0	c	J. Problem DescriptionThe City of Vernon is in need of a new potable water production facility in order to meet existing water demand conditions and to reduce our reliance on MWD surface water supplies. In the past year alone, the City has been forced to have one of its production wells destroyed due to excessive VOC's and another is currently off-line due to sanding and related water quality problems and may also have to be destroyed. This has forced the City to purchase expensive surface water supplies. The City is in the process of having specifications developed in order to have a production well drilled (Well 21) to makeup, in part, for the loss of the above-mentioned wells. The location of the proposed well is Soto Street & 50th Street, in Vernon, CA.	2,500,000	1,217	45,000 15	Los Angeles	IV	2009
4525 1910144	1910144-001	SAN GABRIEL COUNTY WD	Well 3 Rehabilitation Project	The project would involve our well 3 which has been inactive for approxamately 18 years. It is situated at ou Van Nuys reservoir site. It is an ideal spot for a rehabilitation because of the location next to our reservoir which it would dump directly into. Recently we had General Pump Company come in and test pump and pull water samples out of the well. Test results hav come back for water quality and are mostly non detect or below the mcl. We feel very confident about this water source. The construction of this site would include a new building, new pump, new 75 hp motor, new column and shaft, new motor control center, pipe from well to existing reservoir. pump to waste line, nitrate analyzer and sodium hypochlorite injection system.	O rr pp re	0	c	Over the last four years San Gabriel County water District has lost 2500gpm of production due to heavy sand problems at three of our well sites, well 11, well 9 and well 7. We would like to rehabilitate our well 3 that has been out of service for approxamatley 18 years. This well will provide us with an extra 700 gpm which would greatly improve our pumping capacity. Our max day is currently 11.5 mg. If you were to take out our biggest producer we would only be able to pump 7.5 mg. The extra 1 mgd would help us achieve our max day demand. In this time of drought we are in need of another water source.	500,000	8,943	45,000 07	Los Angeles	IV	2008

4526 1910167	1910167-004	VERNON-CITY, WATER DEPT.	Vernon Production Wells 9 K. Project DescriptionThe Vernon Production Wells 9 & & 10 are needed by the City to meet its daily water demands. The City recently destroyed its Well No. 18 due to groundwater contaminates and its advanced age This had required the City to purchase MWD surface water to supplement its water supply. Well 18 produced approximately 1400 acre-feet-year. Wells 9 & 10 both have sabitary seals that meet potable water well construction standards and with treatment should provide the City with a safe and consistent supply that will reduce our reliance on MWD water. The cost of this project is estimated to be \$2,500.000 to complete.	O 0 a. d	)	c	Problem DescriptionThe City of Vernon purchased proprerty from the Smurfit Stone Container Corporation, located at 2001 57th Street, in Vernon, CA. Smurfit left two of its industrial wells: herein know as Wells 9 & 10, that were constructed in 2001 and 2004 respectively. The City would like to use this wells for potable water use. The City used Richard Slade & Associates to perform extensive testing of the source water supply for the above-mentioned wells. Slade's reports indicated that the groundwater supply tested positive for 1,2 DCA, TCE, Perchlorate and Boron. In addition, video log results have concluded that these wells need rehabilitation. In conclusion, treatment, rehabilitation, and construction of distribution lines will have to be facilitated in order to use the wells as a potable drinking water source.	2,500,000	1,217	45,000 15	Los Angeles	IV	2009
4527 1910167	1910167-005	VERNON-CITY, WATER DEPT.	Vernon Closed Distribution System multitude of Variable Frequency Drive motors placed a strategic locations along with a highly complex automated telemetry system to provide system pressure. The closed system or be operated independently should the Elevated Storage Reservoir be rendered inoperable. Moreover, if the Elevated Storage Reservoir was to be taken off-line for purposes mentioned above, the City would have to utilize large quantities of MWD water in order to provide sustainability until such time the Elevated Storage Reservoir is placed back into service.	0 0		c	(Vernon Closed System):The City of Vernon's (City) Water Distribution System operates on an open to atmosphere system with one pressure zone. The City uses and Elevated Storage Reservoir along with strategically placed pumps to provide sufficient pressure for firefighting and drinking water purposes. Although the existing hydraulic system is simplistic in nature and provides ample pressure to the water distribution system, it is the only means the City has to provide water pressure to the water distribution system. In the event that the City's Elevated Storage Reservoir was damaged due to a natural or manmade disaster, the City would have no means of regulating the system pressure and be hard-pressed to deliver uniform water supplies for drinking water and firefighting purposes. The City had Infrastructure Engineering Corporation, Inc. design a closed water distribution system to provide an additional degree of redundancy to the water system. The proposed closed water distribution system uses a multitude of Variable Frequency Drive motors placed a strategic locations along with a highly complex automated telemetry system to provide system pressure. The closed system could be run in concert with the existing open system or be operated independently should the Elevated Storage Reservoir be rendered inoperable. Moreover, if the Elevated Storage Reservoir was to be taken off-line for	4,000,000	1,217	45,000 15	Los Angeles	IV	2009
4528 0710004	0710004-005	City of Brentwood	Do a Nitrification Study master plan to determine the best way to treat well water for nitrate problems.	0 0	)	С	Study and apply treatment to the well water that exceeds nitrate MCL standard.	100,000	15,776	45,892 04	Contra Costa	Ш	1998

4529 1910139	1910139-003	CAL/AM WATER COOMPANY - SAN MARING	9 California Friendly Medians: City of San Marino	California American Water and the city of San Marino will partner to replace the grass medians along Huntington Drive and San Marino Boulevard with California-Friendly landscaping. The proposed project would include the use of a California-friendly plant palette; functional landscaping, energy efficient use of tree canopy, permeable ground cover, shady and sunny areas in landscape; firewise landscape, a design reducing runoff, the use of appropriate irrigation equipment for plant material and water consumption.A California Friendly landscape along Huntington Drive and San Marino Boulevard would provide the residents of San Marino and the surrounding communities the opportunity to learn first hand how to plant a beautiful and inviting landscape around their home that can resist the summer heat, conserve water, and save money on their water bills.	0	0	c	California American Water and the city of San Marino will partner to replace the grass medians along Huntington Drive and San Marino Boulevard with California-Friendly landscaping.Currently the medians along Huntington Drive and San Marino Boulevard comprise of large grass areas that require considerable amounts of water to sustain their beauty. The existing water shortages are making large suburban lawns a luxury less and less affordable. A garden where the majority of its area is taken up by grass has becoming increasingly unsustainable in terms of water consumption and the resulting costs.	50,000	14,038	46,701 07	Los Angeles	IV	2009
4530 5710003	5710003-010	City of West Sacramento	West Sacramento - First Ground Level Tank	The project involves the costruction of a 3.0 million gallons concerete tank and pump station with a rated capacity of 6000gpm to provide storage for fire flow and emergency demand.	o	0	с	The City rely on 20 Ground Waterwells for its water supply, at the moment four of these wells are down due to excessive nitrate and iron content. In this regard, the City decided to build storage tanks to store water for peak demand due due reduced number of wells available for source water.	9,000,000	13,842	47,065 09	Yolo	I	2012
4531 3610038	3610038-003	RIALTO-CITY	Water meter replacement	Water meter replacement to promote water	0	0	С	Aging meters in distribution system	1,000,000	11,923	48,418 13	San Bernardino	V	2003
4532 0110009	0110009-001	Dublin San Ramon Services District	Water Reservoir 20B (CIP 620C530)	Per our Dublin San Ramon Services District's 2005 Water Master Plan, Potable Water Reservoir 208 project ("Project") will construct a 1.52 million gallon potable water reservoir located in the City of Dublin, County of Alameda. The Project will provide potable water storage capacity and water service reliability to Pressure Zone 20, which serves water to elevations between 390 feet to 580 feet above mean sea level, to eastern Dublin.The Project consists of all materials, labor, tools, equipment, apparatus, electrical facilities, transportation and incidentals necessary to furnish, deliver and construct a new 1.52 MG Reservoir, site work, inlet/outlet piping, and all necessary appurtenances for a complete and operable water system.The Project falls under Safe Drinking Water SRF Health Based Category O - All water system deficiencies that are eligible and are not covered in any of the above categories.	o	0	С	Dublin San Ramon Services District ("DSRSD") is a retail water supplier having a Distribution System Classification of D4 that must maintain water quality, water supply reliability, and water supply emergencies in its distribution system. The Potable Water Reservoir 20B project ("Project") is to ensure that the water delivered by DSRSD's public water system meet the following Drinking Water Statutes. Section 116270 (e), "shall at all times be pure, wholesome, and potable". Section 75020, "is intended to provide the funds necessary to address the critical water needs of the state including the provision of safe drinking water to all Californians, the protection of water quality and the environment, and the improvement of water supply reliability." This Project provides the means to accomplish these objectives. The Project shall also meet the following Drinking Water Regulations. Section 64600 (4), "schedule for routine inspections of reservoirs and the procedures for cleaning reservoirs," and Section 64600 (6), "plans and procedures for responding to water supply emergencies". This Project will provide for fire flow storage so such schedules can be implemented with minimal risk of inadequate water	7,000,000	15,308	49,243 04	Alameda	Ι	2009

supply during a fire event.

4533 0110009	0110009-002	Dublin San Ramon Services District	Schaefer Ranch Water System Pump Station 4B and 12" Waterline	Per Dublin San Ramon Services District's 2005 Water Master Plan, Water Main from Schaefer Ranch to Pum Station 4B ("Project") will redesign and retrofit a temporary Pump Station 4B facility to a permanent facility and construct a 4,250LF welded steel pipeline that will connect existing Pump Station 4B and Reservo 4A in the City of Dublin, County of Alameda. The Project will provide looped potable water service and adequate fire and water supply to two subdivisions. The Project consists of all materials, labor, tools, equipment, apparatus, electrical facilities, transportation and incidentals necessary to furnish, deliver and construct a water main, site work, inlet/outlet piping, and all necessary appurtenances for a complete and operable water system. The Project falls under Safe Drinking Water SRF Health Based Category 0 - All water system deficiencies that are eligible and are not covered in any of the above categories.	O np bir t e a	0	c	Dublin San Ramon Services District (DSRSD) is a retail water supplier having a Distribution System Classification of D4 that must maintain water quality, water supply reliability, and water supply emergencies in its distribution system. The Water Main from Schaefer Ranch to Pump Station 4B project (Project) is to ensure that the water delivered by DSRSD's public water system meet the following Drinking Water Statutes. Section 116270 (e), "shall at all times be pure, wholesome, and potable". Section 75020, "is intended to provide the funds necessary to address the critical water needs of the state including the provision of safe drinking water to all Californians, the protection of water quality and the environment, and the improvement of water supply reliability." This Project provides the means to accomplish these objectives. The Project shall also meet the Drinking Water Regulations section 64600 (6), "plans and procedures for responding to water supply emergencies". This Project will provide for fire flow storage so such schedules can be implemented with minimal risk of inadequate water supply during a fire event.	3,211,001	15,308	49,243 04	Alameda	Ι	2009
4534 4410017	4410017-009	Soquel Creek Water District		Construct new production well at Top Sail Court.	0	0	с	System needs new well at Top Sail Court due to	1,900,000	15,115	50,000 05	Santa Cruz	П	1998
4535 4410017	4410017-003	Soquel Creek Water District		Upgrades to treatment plantgranular activated carbon	n O	0	С	seawater intrusion. GAC and water softening is needed for Garnet Well for	500,000	15,115	50,000 05	Santa Cruz	Ш	1998
4536 4410017	4410017-004	Soquel Creek Water District		filters, and water softening equipment. System needs a computer groundwater model to	0	0	С	taste and odor problems. System needs computer ground water modeling to help	300,000	15,115	50,000 05	Santa Cruz	Ш	1998
4537 5610020	5610020-007	THOUSAND OAKS WATER DEPT	Automated Chlorine Analyzer	simulate groundwater basin yield. The project entails installation of automated Chlorine Analyzer equipment at select reservoirs for monitoring and detection purposes through the City's SCADA (Supervisory Conrol and Data Acquisition) system.	0	0	c	with seawater intrusion. Certainly, service areas within the City's drinking water system experience the effects of low turnover, nitrification and a subsequent diminished disinfection agent residual. This is primarily a winter phenomena when irrigation use is low. As the City does not have the ability or the trained/certified staff to re- chloraminate, the recourse has been to drain tanks to minimal elevations and refill with fresh water, seeking to raise the chlorine residual. This pattern of drain- down, refill, reanalyze may continue for several weeks as these cycles are matched against peak-pumping hours, energy costs, the ability for inspectors to return to a specific location in a timely manner (weekends, evenings) and convey analytical results to appropriate staff. Additionally, these subject reservoirs being equipped with a common inlet-outlet structure minimizes the in-reservoir mixing that would enhance staffs ability to address the phenomena more expeditiously. The addition of on-line chlorine analyzers at selected reservoirs mix SCADA input would directly enhance both operations and water quality staff ability to identify potential issues more quickly, respond more effectively and more consistently.1 am not famiar with the equipment necessary for such installations. However, I believe it is imperative that long-term reliability, constancy and calibration routine and procedures be evaluated extensively during the	300,000	16,436	50,000 06	Ventura	IV	2009
4538 4410017	4410017-006	Soquei Creek Water District		install a multipe shallow well system to reduce localized groundwater demand and avoid using deeper waters.	αU	U	C	need snailow well system in La Selva Beach due to seawater intrusion.	3,000,000	15,115	50,000 05	Santa Cruz	Ш	1998
4539 4410017	4410017-008	Soquel Creek Water District		Install La Selva Beach production well will provide additional water in sub-area IV.	0	0	С	Need La Selva Beach well due to high TDS and chlorides.	758,900	15,115	50,000 05	Santa Cruz	Ш	1998

4540 5610020	5610020-003	THOUSAND OAKS WATER DEPT	Water Meter Replacemer (Automated Meter Reading)	It Citywide, there are more than 17,000 meters currently active. The material used in manufacturing the meters (brass) contains a certain level of lead. In the older meters the level of lead content is higher than the newer models (as of 2010 there will be even more strii regulations applied in that respect). The City's existing meters breaking down or registering incorrect water usage, require additional site trips by City staff, resulting an inefficient operation and loss of energy an manpower, and ultimately increasing the City's overall carbon foot print. The proposed project will replace City meters with a more environmental friendly metering system. The new metering system will use meters manufactured with very low lead content material and will also be equipped with remote and automated reading capabilities. This will enable the Cit staff to quickly, correctly, and efficiently complete the meter reading activities while driving by through the City streets without leaving their vehicle and without compromising their personal safety.	r O s ct ;	0	C	Within the City's water system, there have been long lasting problems with water meters with respect to incorrect metering, higher lead content in older meters, and excessive carbon foot print due to maintenance and meter reading activities.	900,000	16,436	50,000 06	Ventura	IV	2009
4541 4410017	4410017-002	Soquel Creek Water District		Install treatment and water softening equipment.	0	0	С	Purissima aquifer needs treatment for taste, odor, and hardness of water	1,100,000	15,115	50,000 05	Santa Cruz	II	1998
4542 4410017	4410017-007	Soquel Creek Water District		Installation of a production well in sub-area III.	0	0	с	Need new well in sub-area III due to high TDS and chlorides.	1,000,000	15,115	50,000 05	Santa Cruz	Ш	1998
4543 5610020	5610020-001	THOUSAND OAKS WATER DEPT		Construct a new larger reservoir to meet the current seismic codes and the standard for fire flow storage.	0	0	С	Rolling Oaks tank needs to be adequately sized and seismically safe.	1,000,000	16,436	50,000 06	Ventura	IV	1998
4544 3710015	3710015-003	Poway - City of	Clearwell Pipeline Replacement	The scope of this project includes the installation of a new transmission line connecting the clearwell at the City's water treatment plant to the entire City. The work involves the installation of approximately 3000 f of 24-inch to 42-inch transmission line to replace the o existing line.	O t Id	0	С	The existing transmission main conveying water from the water treatment plant clearwell to the City's entire distribution system is over 50-years old and approaching the end of it's service llife. When this line is down for repairs, most of the City is without water. A new line is necessary to ensure a continuous and safe water service to the citizens of Poway.	2,234,000	14,017	50,542 14	San Diego	V	2009
4545 3710015	3710015-002	Poway - City of	Boulder Mountain Reservoir Replacement	The Boulder Mountain water reservoir tanks serve the 1100 Pressure Zone in the City of Poway. The tanks an in need of structural repairs including seismic retrofit. The most economic solution would be to replace the two existing older tanks with on 1.0 Million Gallon Tan The proposed project will construct a new 1.0 Million storage tank and demolish the two existing older tanks This will ensure that the residents in the service area will be provided with a safe and reliable service.	0 e k.	0	С	The Boulder Mountain water reservoir tanks serve the 1100 Pressure Zone in the City of Poway. The tanks are very old and in need of structural repairs including seismic retrofit. Without significant repairs or replacement the residents in the service area will experience service outages and a significant capacity reduction if one or both of the tanks are taken out of service.	2,200,000	14,017	50,542 14	San Diego	v	2009
4546 3010079	3010079-001	El Toro Water District		Re-coating of reservoirs	0	0	с	Deteriorating reservoirs coating	1,000,000	10,032	50,800 08	Orange	v	2006
4547 3010079	3010079-002	El Toro Water District		Re-coating of reservoir	0	0	С	Deteriorating reservoir coating	400,000	10,032	50,800 08	Orange	V	2006
4548 3010079	3010079-003	ELLIORO Water District		Pipeline replacement	0	0	c	Aged & worn water wransmission pipe	203,000	10,032	50,800 08	Urange San Bernardino	V	2006
4549 3010003	2010003-001	AFFLE VALLET KAINCHUS WU		construct reservoir and pooster system adjacent to we	: U	U	L	madequate source capacity (single source of Supply)	300,000	10,844	52,879 13	Sali Bernarumo	v	1999

4550 1510005	1510005-002	Delano, City of	Deteriorated Waterline Replacement Project	The City will replace 12,450 lineal feet of deteriorated O outside diameter (OD) steel water distribution pipelines and leaking valves. The pipes were prevously installed between 1930 and 1940. The 4" OD pipes will be replace with 8" PVC pipe. The main line valves will be replace on allow isolation of areas effectively. The existing galvanized water services will be replaced with plastic tubing.By replacing the pipes and vavles, the city will be able to address the Disinfection Byproducts Rule (high levels of Trihalomethanes and Haloacetic Acids). It will also address the chance for bacterial increase. Chlorine is absorbed into the buildup of corrosion on the inside of the pipes. By fixing the pipes, the amount of chlorine that is used will be reduced. The city receives numerous customer complaints of their water quality. The water has a rust color with sand. At this time, the City of Delano is not able to meet fire flow requirements as set by Kern County. Through implementing this project, the city will be better equipped to meet the safety needs of the community. The project will reduce the amount of shut-downs to the system. The city will also be able to address the substantial water loss for the leaking pipes. During this time of drought, the city and the state need to work together to ensure that water loss is addressed and repaired immediately.	0	C	The City of Delano needs to immediately replace 12,450 lineal feet of old deteriorated OD steel water distribution pipelines and leaking valves. There are over 100 water breaks per year that require emergency excavation and repair in the proposed area. There is substantial water loss due to the leaks. The drinking water regulation that will be addressed through the replacement of the pipelines and valves is the Disinfection Byproducts Rule. Due to the leaks, there is a reaction causing Trihalomethanes and Haloacetic Acids. The leaking pipe are also causing an interruption of water service and impeding the City's ability through the system to meet fire protection capacity as determined by Kern County Fire Department to various locations within the City because of substandard water pressure. The City is bisected by State Highway 99. Higher ground within the city is the eastern portion of the community thereby creating a gravity flow from east to west. The central core of the community of Delano is serviced by OD Steel water distribution pipe. The downtown area of the city is situated in a location that affects the ability to move of water to the eastern portion of the community. It was discovered through flow tests that several highly populated east side areas of the city do not meet the fire flow requirements of 1000 gallons per minute. Turning off valves to push the	2,200,000	8,670	53,855 12	Kern	11	2008
4551 0110003	0110003-002	CALIFORNIA WATER SERVICE - LIVERMORE		Install facilities to enable Chloramine disinfection of all O system reservoirs (24) and purchase portable	0	С	water uphill to the eastern portion of the city requires Improve disinfection reliability, so that it is compatible with Chloramine.	980,000	17,801	54,496 04	Alameda	Ш	1998
4552 5710006	5710006-018	City of Woodland	Surface Water Project	Chloramination equipment. The project involves the design of surface water intake O structure at the sacramento river and pipelines and tanks to mix the water in order to obtain better water quality. The surface water would be mixed with well water from well 10,11 and 20.	0	С	This project involves the design of a surface water intake structure to dilute the City water from well 17 and 10 to bring down the nitrate concentration below the MCL of 45 ppm.	250,000	14,065	56,000 09	Yolo	I	2011
4553 5710006	5710006-020	City of Woodland	Rehabilitation of well 10,11,18 and 20	The project involves the installation of blockers in the O wells to reduce nitrate water infiltration.	0	с	This project involves the modification of the existing wells 11,18 and 20 to prevent excessive nitrate infiltration. These wells currently have high nitrate concentration. They are sometimes shut down from operation when there is a spike in nitrate levels. These project would identify zones of high nitrate and modify these wells accordingly to minimize contribution from these zones with the aim of reducing the nitrate levels.	1,000,000	14,065	56,000 09	Yolo	I	2011

4554 5710006	5710006-022	City of Woodland	City of Woodland Treated Surface Distribution and Storage Facilities	This project constructs the infrastructure to deliver of treated Sacramento River water from the Woodland Davis Clean Water Agency (WDCWA) facilities to City customers. The project allows the City to reduce reliance on deteriorating groundwater supplies and ensures a reliable and sustainable long-term water source for the future which meets regulatory requirements for safe drinking water and wastewater discharges. The project includes design and construction of transmission, storage and distribution facilities. The distribution system improvements include approximately 50,000 lineal feet of water transmission and distribution mains varying in size from 12" to 36", three new water storage tanks providing 7.0 MG additional storage capacity and three booster pumps providing 15.8 mgd additional pumping capacity to the system. The transmission and distribution piping and storage tanks will be designed and located to ensure the most efficient mixing of surface water with existing groundwater supplies to achieve maximum distribution of surface water to all customers throughout the City. The additional storage and/or offline wells and further reduce the City's reliance on groundwater wells. These improvements will transition	0	C	The City of Woodland currently relies exclusively on an aging system of 19 groundwater wells to meet consumer water demands. Declining groundwater quality and more stringent regulatory standards combined with the difficulties of maintaining water pressure and flows with the aging system make it infeasible for the City to continue to rely solely on groundwater to meet future water demands. The salinity of the City's groundwater supply and elevated levels of nitrates, magnaese, boron, and selenium make it increasingly difficult to meet drinking water and wastewater discharge requirements. Woodland has temporarily taken wells offline and/or abandoned wells in order to protect public health and comply with water quality regulations. Groundwater nitrate levels within the city's water supply system are trending higher over time. Groundwater quality currently fails regulatory environmental standards for wastewater discharge before it even enters the City system. In addition to water quality issues, the City struggles to maintain sufficient flow and pressure to meet industry standards for peak demands with the existing water supply system. An evaluation of the system indicates a pumping capacity deficit of over 6,000 gpm and storage capacity deficits of almost 3 MG. Multiple wells within the system have reduced pumping capacity or production due to age-related deterioration and water	32,000,000	14,065	56,000 09	Yolo	I	2011
4555 5710006	5710006-008	City of Woodland	Well Site Security - Video	This project involves instal;ling vedeo cameras at the existing wells to record and transmit unwanted activities. This is a requirement of the department of homeland security for public watert systems.	0	C	This project is aimed at improving the security at the wells to comply with the requirements of the department of homeland security.	300,000	14,065	56,000 09	Yolo	I	2009
4556 2110003	2110003-039	North Marin Water District	Flushing Taps at Zone Valves	This project proposes to install flushing taps at the dead O end zone valves to enable flushing as part of the annual flushing program. There are 43 locations requiring flushing taps. Mains 10" in diameter and smaller would receive a 2" flushing tap. Main 12" and larger in diameter would receive a 6" flushing tap.	0	с	Zone Valves in the system separate two different pressure zones and are permanently closed, to be opened only as an emergency connection. Water in the dead end zone adjacent to the valve becomes stagnant and needs to be flushed periodically to maintain acceptable water quality.	200,000	20,639	56,000 18	Marin	II	2009
4557 5710006	5710006-025	City of Woodland	Woodland: Farmer Centra Pipeline Project	I This project involves a master plan that identified the O need, it involves CEQA that identified the mitigation measures required for enviromental impact, it also involves design and construction management. The project will be done in conjuction with the City of Davis	0	С	This project involves the construction of approximately 10,000 feet of 36 inch pipeline .	30,000,000	14,065	56,000 09	Yolo	I	2012
4558 2110003	2110003-037	North Marin Water District	Water Quality Sample Stations	The project proposes to install Sample Stations O throughout the water system to test for water quality. There are 17 locations that have been identified as needing a permanent station installed. The Sample Station consists of a X" copper pipe tapped into the existing main with a hose bid at the end. The hose bib is surrounded by a heavy-duty steel enclosure, which is lockable, to prevent contamination and vandalism.	0	с	Sample stations are needed to monitor chlorine decay dynamics throughout the distribution system in accordance with CDPH and EPA regulations. Permanent sample stations increase the integrity of the data collected and eliminate the need to utilize customer's private taps.	100,000	20,639	56,000 18	Marin	II	2009
4559 5710006	5710006-021	City of Woodland	EMERGENCY CONNECTION OF COUNTY WELL	The project involves the connection of the well to the City's distribution system. It involves reconfiguration of the pipe network and integration of the two system together,. It also involves the installation of a SCADA control system on the jail well to maximize its utilization.	0	С	This project is aimed at balancing the loss of supply from other well due to high nitrate concentrations. The Yolo County well has excess capacity that can be used in supplementing our water supply to meet maximum day and peak hour demand. This is urgently needed to have this capacity for fire flow in the region of the City.	500,000	14,065	56,000 09	Yolo	I	2011
4560 3410014	3410014-001	Folsom, City of - Main	Security improvement project	install passive monitoring systems at 15 sites at water O treatment plant and distribution system; possible central monitoring	0	С	lack of intrusion monitoring, alert system at water treatment plant, pump stations, and reservoirs	300,000	17,111	56,980 09	Sacramento	I	2003

4561 3310020	3310020-006	Indio Water Authority	Posse Park Surface Water Treatment Plant (Cr+6)	Acquisition of properly zoned land adjacent to a surface O water source: COMPLETEConceptual design and feasibility study: COMPLETEConceptual design and feasibility study: COMPLETEMitigated Negative Declaration under CEQA: COMPLETECordination with CDPH on recycled water recharge regulations, to incorporate into the final project design: COMPLETEParticipation in regional efforts to understand imminent Cr (VI) regulations and treatment options, to ensure that a SWTP can effectively mitigate the fiscal impact of a new Chrome 6 MCL: COMPLETEComplete Supplemental Water Supply Program: COMPLETEIncorporation of SWTP plans into Urban Water Management Plan, Water Master Plan, Groundwater Management Plan; IN PROGRESSSecure funding for project, including through grant procurement, as well as separating finances from the CIty of Indio in order to reduce liability and improve bonding capacity: IN PROGRESSSEstabilsn new CFD or Assessment District to collect fees that support debt service and O&M costs for SWTP: IN PROGRESSComplete Engineer's Report for Supplemental Water Supply Program: INCOMPLETEAdvertise bids and award contract for SWTP design/build that incorporates regulatory compliance: INCOMPLETE*Form new JPA with neighboring City of Coachella's water system (CWA) so that both IWA and CWA can benefit from the plant and	0	c	The Indio Water Authority (IWA) serves approximately 21,000 service connections in the City of Indio, comprised primarily of residences, businesses, and golf courses. IWA is 100% reliant on the Whitewater Aquifer for its supply, and at pumps approximately 23,000 acrefect annually (AFV) from the basin. The Coachella Valley is served with inexpensive ag/irrigation water from the Coachella Canal ("Canal"), administered by the Coachella Canal ("Canal"), administered by the Coachella Valley Water District (CVWD), though this water is high in TDS and unfit for potable use. No facility suitable for treating Canal water currently exists. Building a surface water treatment plant (SWTP) will provide three major advantages over the long term: providing for growth without overdraft, maintaining safe and affordable water in the event of a low Cr (VI) MCL, and enhancing recycling capabilities to improve conservation and enable recharge.Growth Without Overdraft. In our 2010 Urban Water Management Plan Update (adopted Dec 2011) IWA anticipates delivering over 44,000 AFY by 2030, based on population growth projections. However, to responsibly manage the basin, IWA has set a goal to limit groundwater pumping to 20,000 AFY indefinitely. In order to provide for a growing population while maintaining sustainable conjunctive use of ground and surface water, IWA will need to import and treat Canal water for potable	42,800,000	19,453	58,823 20	Riverside	V	2012
4562 0910002	0910002-007	South Tahoe PUD - Main	Angora Tank Replacement	STPUD is planning to replace the existing Angora Tank and waterline in an effort to upgrade the District's water distribution system. The project in its entirety involves building an access road, tank replacement, waterline replacement, and associated staging. The District proposes to replace the existing 63,000 gallon Angora Tank with a new tank with an operating volume of 249,000 gallons to meet District standards for domestic supply. In conjunction with construction of the new tank, STPUD will replace the existing waterline. The existing tank will be demolished after the new tank is placed in service. To simplify construction and provide reliable access to the site into the future, STPUD proposes to install a permanent access road to the site. With reconstruction of the tank, site improvements and instruments will be installed that will require more frequent access for maintenance than was needed for the old tank. A permanent road is also necessary to meet requirements stated in CA Waterworks Standards (22 CCR S 64585). It is the District's goal to design and construct a permanent road to the tank site that is both structurally and environmentally stable. The proposed road is approximately 630 feet long, 10 feet wide, and will be secured at the bottom by a Forest Service gate. It will require some earthwork and tree removal. The road will be stabilized using permanent erosion control best management practices and will be paved with AC	0	c	The Angora Tank is a critical facility for the South Tahoe Public Utility District's water system. This tank and the associated waterline is the only source of water serving the Angora Highlands neighborhood; there are no wells in this zone and there is no other connection to the main water supply system. The Angora Tank is located atop a ridge, approximately 80ft above the nearest residences being served by the tank on the perimeter of the neighborhood. Water is provided to over 87 residences by gravity, so that at this elevation only about 35-40 psi pressure is available at the nearest homes. This pressure is on the low end of what is acceptable for domestic supply and insufficient to meet current demand in an emergency situation. The existing tank was constructed in the late 1960's and has an operating volume of approximately 63,000 gallons. This tank is aging and undersized to meet public health storage requirements for domestic demand capacity. Based on current water supply standards for domestic capacity, the tank should be approximately four times its current size. The replacement of this tank is the first step in a number of upgrades needed to provide adequate domestic supply capability to this area. The District-owned tank site is currently land-locked, as the District has no means of accessing the site other than by foot across property owned by the United States Forest Service (USFS). Being restricted to foot-only access year-	1,200,000	13,635	60,000 09	El Dorado	1	2009

4563 3010018	3010018-005	City of La Habra	Installation of Reservoir Mixers at The Puente, Byerrum and Westridge Reservoir Sites	The project consists of the installation of 4 SolarBee Reservoir Circulators, to provide complete mixing throughout the reservoirs to reduce stratification, reduce stagnant water conditions, and provide a complete circulation of a full reservoir in less than two days. Although there are only 3 reservoirs, there is a need for 4 reservoir circulators as the Byerrum Reservoir is actually two tanks with a common baffle wall and therefore is in need of 2 seperate circulators. In efforts of reducing installation costs and conserving energy at these remote reservoir sites, the Solarbee Reservoir Circulators identified are solar-powered in design.	0	0	C	In a study conducted in 2007, high nitrite concentrations and low disinfectant residuals were observed in the City's reservoirs and in areas of the distribution system served by the reservoirs. Nitrification and residual loss in the reservoirs may be caused by poor mixing and high water age. Based on the study's evaluation, Puente Hills Reservoir has poor mixing characteristics and high water ages, conditions leading to disinfectant loss and nitrification. Low water level fluctuation in the Byerrum Reservoir at certain times of the year may also result in low residual events in the reservoir and in areas of the distribution system served by the reservoir. The Westridge Reservoir is also directly affected by the water quality of the Byerrum Reservoir as pumped water from Byerrum Reservoir. To improve water quality in the reservoirs and those portions of the distribution system served by the reservoir. The installation of reservoir mixers have been recommended by the study and our local CDPH branch office.	300,000	12,548	61,454 08	Orange	v	2009
4564 3010018	3010018-004	City of La Habra	Water Main Replacement Project	The project will be in the south eastern section of the City of La Habra and will consist of the replacement of approximately 17,000 feet of 4 inch to 8 inch water mains, including the installation of new valves, fire hydrants, water services, improvements to pressure regulating stations, and other related appurtenances.	ο	0	C	The City is currently experiencing a high frequency of water main breaks (81 breaks in 2008 alone). The breaks are attributed to corrosion and the age of water mains, most of which were built in the 1950s and 1960s. The water main breaks have caused numerous interruptions of water service, compromised the ability to provide adequate fire protection, and destruction of streets and adjacent properties. Replacing problematic water mains will help to prevent unscheduled water outages and improve fire flows to the immediate area, thereby improving system reliability for public health and safety concerns.	3,300,000	12,548	61,454 08	Orange	v	2009
4565 3010018	3010018-001	City of La Habra	La Habra Well #3 and Booster Station	Drill a 1400 feet deep 2500 GPM ground water well. Install sodium hexametaphoshate iron/manganese sequestering or a filter removal system. Install an air stripper for ammonia and hydrogen sulfide removal. Install 5000 feet of 24" diameter supply pipeline to a 4000 GPM groundwater supply line from California Domestic Water Company. Construct a 200,000 gallon blending forebay to reduce TDS. Construct a 6000 GPM booster station. Due to the age and size of the existing water system piping that is adjacent the proposed project, it will be necessary to install approximately 8000 feet of 16-24" diameter transmission pipeline in order to properly distribute the new supply. Other equipment shall include a chlorine injector, chlorine analyser. For emergency reliability there would also need to be a 800 KW emergency standby generator in order to produce the proper quality of water from this project site.	0	0	C	La Habra produces 10 percent of its water from the local ground water basin. Currently there are three water quality issues associated with the local ground water basin which are all secondary standards. The first problem is Total Dissolved Solids that range from 1000 PPM to 1070 PPM. The other water quality issues are hydrogen sulfide, and iron/manganese.	4,500,000	12,548	61,454 08	Orange	v	2007

4566 3610012	3610012-006	CITY OF CHINO	Eastside Water Treatment Complex - Phase 1	The Eastside Complex would provide water supply needs to meet existing and future potable water demand in the southern portion of the City's service area. The Complex includes the construction of various facilities including wells, storage reservoirs, booster stations, pressure regulating stations, treatment facilities, and associated pipelines. The proposed initial phase of the Eastside Water Treatment Complex will remove nitrate from up to 3,250 gpm of groundwater produced by Wells 16, 17, and 18. The proposed treatment facility will use ion exchange equipment that will result in treated groundwater that meets all drinking water standards for nitrate. The project will include the installation of ion exchange equipment, associated piping, tanks, filters, electrical controls, connections to existing water mains, installation of booster pumps, and construction of a brine waste pipeline. The initial phase of the treatment facility would also include the construction of a storage reservoir and a booster pumping station. A draft initial environmental study for a phased groundwater treatment program in the City of Chino's service area has been prepared according to the California Environmental Quality Act (CEQA). The study indicates that the proposed project does not create a significant negative impact. The brine resulting from the	0	0	C	Chino Basin groundwater is a critical resource to the City of Chino. In 2010, local groundwater represented 83% of the City's potable water supply. However, past agricultural activities in overlying areas of the Chino Basin have significantly contributed to high levels of nitrate in groundwater produced from various wells throughout the Chino Basin. The southern portion of the City of Chino known as "The Preserve" was incorporated into the City in 2003. The Preserve is located within the Chino Valley Dairy Preserve and consists of approximately 5,228 acres of land. The City of Chino was responsible for the preparation of an EIR for The Preserve, which included a Water Supply Assessment in accordance with S8 221 and S8 610. The WSA indicated that The Preserve would significantly increase the City's potable water demand over a 20-30 year development period. The City also updated its Water System Master Plan to include a detailed evaluation of the future infrastructure that would be necessary to provide potable and recycled water to The Preserve. The Master Plan identified a multi-phased groundwater treatment facility that would include the construction of various wells, treatment facilities, storage reservoirs, booster pumps, and associated water distribution pipelines. The facility, referred to by City staff as the Eastside Water Treatment Complex,	18,000,000	16,677	62,000 13	San Bernardino	v	2012
4567 0710008	0710008-003	City of Pittsburg	City of Pittsburg WTP Solids Handling	regeneration of the ion exchange resin will be Pre-design has been completed. CDPH permitting, design and construction are not started. The budget for design is proposed in the FY 12-13 CIP.	0	0	C	would be generally located near the intersection of Residuals handling. Installing sedimentation basin collectors and construct facility to thicken the residuals and send it directly the upper drying lagoon instead of the backwash water lagoon, where it can get recycled	3,600,000	16,041	62,000 04	Contra Costa	II	2012
4568 3610012	3610012-002	CITY OF CHINO	Citywide Water Main Project - Francis, Adams, Harding and 10th St	"Pipelines within these streets require significant maintenance due to their age, composition, and size. The referenced pipelines are substandard and undersized having limited hydraulic carrying capacity. These pipelines (having exceeded their serviceable lifespan) are experiencing greater maintenance. The pipelines are constructed of transite (comprised of asbestos-cement) which is no longer manufactured or available."	0	0	с	"Pipelines within these streets require significant maintenance due to their age, composition, and size. The referenced pipelines are substandard and undersized having limited hydraulic carrying capacity. These pipelines (having exceeded their serviceable lifespan) are experiencing greater maintenance. The pipelines are constructed of transite (comprised of asbestos-cement) which is no longer manufactured or available."	373,000	16,677	62,000 13	San Bernardino	v	2012
4569 3610012	3610012-003	CITY OF CHINO	Water Main Upgrade - Philadelphia Avenue	"This project calls for the upgrade (replacement or rehabilitation) of a 12-inch diameter spiral welded steel pipeline having exceeded its serviceable lifespan and is experiencing greater maintenance related to age and corrosion."	0	0	С	"This project calls for the upgrade (replacement or rehabilitation) of a 12-inch diameter spiral welded steel pipeline having exceeded its serviceable lifespan and is experiencing greater maintenance related to age and corrosion."	100,000	16,677	62,000 13	San Bernardino	v	2012

4570 3610012	3610012-004	CITY OF CHINO	Phillips Boulevard Treatment Facility	The proposed Phillips Boulevard Treatment Plant will remove nitrate and perchlorate from up to 2,200 gpm of groundwater produced by Well No. 12. The proposed treatment plant will use ion exchange equipment that will result in treated groundwater that meets all drinking water standards for nitrate and perchlorate. The project will include the installation of ion exchange equipment, associated piping, tanks, filters, electrical controls, connections to existing water mains, installation of booster pumps, and construction of a brine waste pipeline. A draft initial environmental study for a phased groundwater treatment program in the City of Chino's service area has been prepared according to the California Environmental Quality Act (CEQA). The study indicates that the proposed project does not create a significant negative environmental impact. The brine resulting from the regeneration of the ion exchange resin will be discharged to the Inland Empire Utilities Agency's (IEUA) North System Center Trunk industrial sewer line for transport and disposal out of the region, helping to further preserve and protect local groundwater quality.	0	c	Chino Basin groundwater is a critical resource to the City of Chino. In 2010, local groundwater represented 83% of the City's potable water supply. However, past agricultural and industrial business operations in overlying areas of the Chino Basin have significantly impacted the quality of groundwater pumped from various City wells generally located in the northern portion of the service area. Well No. 12, located at intersection of Phillips Boulevard and Central Avenue in the City of Chino, was constructed in 1982. Groundwater produced at Well No. 12 has nitrate concentrations that exceed the Maximum Contaminant Level (MCL) of 45 mg/L (as Nitrate). The City previously operated Well No. 12 utilizing blending as a treatment technique in order to reduce nitrate concentrations to permitted levels. Well No. 12 groundwater was blended with treated surface water from the Water Facilities Authority located in Upland, CA. Monitoring performed in 2008 indicated that groundwater produced at Well No. 12 has a perchlorate concentration of 16 µg/L, which exceeded the perchlorate MCL of 6 µg/L. Subsequent to this monitoring event, the CDPH, in a letter dated April 18, 2008, directed the City to discontinue operation of this well until "approved treatment is provided to meet all California Drinking Water Standards". Well No. 12 has a design capacity of approximately 2,200 gpm	4,000,000	16,677	62,000 13	San Bernardino	V	2012
4571 4310009	4310009-003	City of Palo Alto		Construct a new well on Middlefield Rd. with treatment O	0	С	Need new well with iron and manganese treatment.	460,000	19,344	62,000 17	Santa Clara	П	1998
4572 3610012	3610012-001	CITY OF CHINO	Euclid Well Facility (Well #18)	The City is proposing to proceed with this wellhead o equipping project to mitigate the impacts to the City's water delivery capability due to the two high volume groundwater wells that have been put on standby. The proposed improvements would include construction and installation of a new vertical turbine pump with electric motor, construction of new mechanical, electrical, communications and chlorination equipment and over 1000 feet of transmission pipeline. The project would also include construction of an approximately 400 square foot pump house building to enclose the wellhead equipment.	0	c	The City is experiencing rapid growth and increasing drinking water demands such that additional groundwater supplies are needed in order to mitigate potential water supply shortages. The City has idled, and placed on standby status, two high volume groundwater wells affected by high nitrate and perchlorate contaminants. Well head treatment is unavailable to these two groundwater facilities, which would be capable of producing approximately 4,500 gpm (6.5 mgd). As such the City is moving forward with a project, and seeking grant funding, to develop a cleaner groundwater facility located adjacent to the new growth demand center. The groundwater facility is designed to produce approximately 1,200 gpm (1.7 mgd) and is located in an area of known water quality meeting CDPH standards for nitrate and perchlorate.	1,500,000	16,677	62,000 13	San Bernardino	v	2009
4573 4310009	4310009-009	City of Palo Alto	Reservoir Water Quality Enhancement	The scope of installation of SolarBee reservoir mixing systems (6 mixers in 6 reservoirs, including mixing unit, solar panel assembly, wiring and SCADA capability) to the following City reservoirs:1. Monte Bello (1.5 MG)2. Dahl (1.0 MG)3. Park (1.0 MG)4. Boronda (1.5 MG)5. Corte Madera (1.5 MG)6. Mayfield (4.0 MG)These units are needed to preserve and enhance water quality by preventing nitrification pursuant to the City's water- quality monitoring program which supports distribution system management efforts for regulatory compliance. This monitoring program works in concert with the City's nitrification action plan to prevent nitrification episodes in the chloraminated system.	0	С	This project consists of installing SolarBee(tm) reservoir mixing systems at Monte Bello, Dahl, Park, Boronda, Corte Madera, and Mayfield reservoirs to prevent nitrification pursuant to the City's water-quality monitoring program which supports distribution system management efforts for regulatory compliance. This monitoring program works in concert with the nitrification action plan to prevent nitrification peisodes in the chloraminated system. Implementation benefits include: fewer turnover of stored water, reducing the pumping (saving energy consumption and costs) and downflow cycle and minimizes risk of nitrification during sustained warm to hot weather conditions for water quality enhancement and compliance.	310,000	19,344	62,000 17	Santa Clara	Π	2009

4574 4310009	4310009-002	City of Palo Alto		Extend a SCVWD line from Mt. View to Palo Alto along the Foothill Expression	0	0	С	Alternate source of water needs to be constructed.	3,000,000	19,344	62,000 17	Santa Clara	П	1998
4575 3610012	3610012-005	CITY OF CHINO	State Street Treatment Facility	The proposed State Street Treatment Facility will remove nitrate and perchlorate from up to 2,297 gpm of groundwater produced by Well No. 14. The proposed treatment facility will use ion exchange equipment that will result in treated groundwater that meets all drinking water standards for nitrate and perchlorate. The project will include the installation of ion exchange equipment, associated piping, tanks, filters, electrical controls, connections to existing water mains, installation of booster pumps, and construction of a brine waste pipeline. A draft initial environmental study for a phased groundwater treatment program in the City of Chino's service area has been prepared according to the California Environmental Quality Act (CEQA). The study indicates that the proposed project does not create a significant negative impact. The brine resulting from the regeneration of the ion exchange resin will be discharged to the Inland Empire Utilities Agency's (IEUA) North System Center Trunk industrial sewer line for transport and disposal out of the region, helping to further preserve and protect loca groundwater quality.		0	C	Chino Basin groundwater is a critical resource to the City of Chino. In 2010, local groundwater represented 83% of the City's potable water supply. However, past agricultural and industrial business operations in overlying areas of the Chino Basin have significantly impacted the quality of groundwater pumped from various City wells generally located in the northern portion of the service area. Well No. 14, located at intersection of State Street and Benson Avenue in the City of Montclair, was constructed in 1988. Groundwater produced at Well No. 14 has nitrate concentrations that exceed the Maximum Contaminant Level (MCL) of 45 mg/L (as Nitrate). The City previously operated Well No. 14 utilizing blending as a treatment technique in order to reduce nitrate concentrations to permitted levels. Well No. 14 groundwater was blended with treated surface water from the Water Facilities Authority located in Upland, CA. Monitoring performed in 2008 indicated that groundwater produced at Well No. 14 had a perchlorate concentration of 9.9µg/L, which exceeded the perchlorate MCL of 6 µg/L. Subsequent to this monitoring event, the CDPH, in a letter dated April 18, 2008, directed the City to discontinue operation of this well until "approved treatment is provided to meet all California Drinking Water Standards". Well No. 14 has a desigen canacity of approximately 2.297 gom	4,000,000	16,677	62,000 13	San Bernardino	V	2012
4576 3010046	3010046-009	City of Tustin	TUSTIN AVENUE WELL REPLACEMENT PROJECT	The proposed Tustin Avenue Well Replacement Project will consist of two phases- drilling and constructing and equipping a new well and related appurtenances. The new well will allow the City to pump groundwater that will satisfy part of Tustin's domestic water demands. The new well is expected to produce 1,936 AF annually. This new water supply will help reduce the City's reliance on imported water by an estimated 50%. The project will include the procurement of design services, design and construction of the well head, building, associated facilities/equipment, emergency power source and abandonment of two existing wells. In the drilling phase, the new well would be drilled to a depth of 1,200 feet. The diameter of the bore hole would be 36 inches. The drilled hole will be stabilized with alternating sections of solid and perforated 20 inch diameter stainless steel casing. The perforations maintain the integrity of the hole while allowing water to flow through it. A gravel pack, sanitary seal, and accessory tubes will be installed around the steel casing to ensure well stability and protect the local groundwater from potential contamination. A temporary sound barrier will be tested to determine its exist on minimize the effects of noise to the neighboring community during the eighteen day, twenty-four hour drilling process. The well will be test data with determine the sumple cancet. The test data with design	0 3 11 5	0	C	Tustin Avenue Well was constructed in 1952 and has been in service for 58 years. It's currently producing 580 AF a year. The production capacity has been dramatically decreased in recent years due to poor construction and inferior materials used.1. Sand: Some production from the Tustin Avenue Well has sand. This has potential to reach nearby customers, wear down equipment and decrease well reliability. 2. No sanitary seal: Tustin Avenue Well site lacks an adequate sanitary seal: Tustin Avenue Well site lacks an adequate sanitary seal. The well has the potential to allow contaminants to enter groundwater aquifer. 3. Security concerns: Well has no back up power and improved security is needed to meet post 9/11 standard. The lighting, fencing, access, and monitoring of the facility need improvement. 4. No disinfection: Well facility doesn't have ability to adequately disinfect water produced. The rehabilitation of the facility has been ruled out due to poor construction and inferior materials used. The construction of the new well on the same site is proposed.	4,250,000	14,071	62,100 08	Orange	v	2011

4577 1910092	1910092-010	MONTEREY PARK-CITY, WATER DEPT.	Russel Reservoir Replacement	The project consists of designing and constructing one 3 O MB steel reservoir to replace the outdated systems. The new reservoir will be modern and seismically approved.	0	C	Russell 1 is a concrete 1 MG reservoir constructed in 1922 and Russell 2 is a 2 MG concrete reservoir constructed in 1927. Both are currently out of service due to cracking/leaking. This project to construct a new reservoir will alow the City to meet the its water demand. More importantly, the new reservoirs will meet seismic standards. This project will be part of the City's Climate Action Plan to reduce its carbon footprint. The additional storage allows pumping wells at night, during off-peak hours. This practice will reduce the draw of electricity in the region and help to mitigate against rolling blackouts.	3,000,000	13,045	64,000 07	Los Angeles	IV	2012
4578 4310005	4310005-004	City of Milpitas	TASP Water Tank & Pump Station Installation, CIP 2002	The proposed project includes a study to identify feasible sites and purchase land for a new potable water system components anticipated to be housed at the site are: turnout, emergency generator, portable generators, surge tank, pressure reducing valves, and storage for piping, valves, and flexible hose. A preliminary site layout has determined that a minimum of three acres is needed. A larger site may be needed if the shape does not meet certain minimum dimensions. The new pump station and water tank will serve the SCVWD service area and is likely to be constructed near the Great Mall in south-central Milpitas. This area is preferred due to its proximity to the SCVWD wholesaler supply pipeline.	0	C	The City of Milpitas needs additional funding to purchase land for a new 6.6 million gallon potable water system tank and pump station. The Milpitas 2009 Water Master Plan Update identified a shortfall of 6.6 million gallons of potable water system storage in the City, impacting operational equalization capacity to minimize peak demands, emergency reserve to mitigate short-term water supply interruptions, and fire suppression storage. The City of Milpitas is located between the Cities of San Jose and Fremont. The City is home to approximately 71,000 residents, large and medium commercial retail outlets, and various industries, including high-technical/electronic facilities. The City purchases an average of 10.5 million gallons per day of potable treated water supply that connects to 16,500 service connections. The City is divided into two distinct wholesaler service areas: San Francisco Public Utilities Commission and Santa Clara Valley Water District (SCVWD). The SCVWD service area is comprised of about 2,800 acres and is predominantly zoned as industrial. The recently adopted Transit Area Specific Plan (TASP) converts a 437 acre subarea consisting primarily of light industrial zoning into high density residential, commercial and mixed use zoning. This zoning density increase is a cornerstone of the transportation corridor where the planned Bay Area	5,500,000	14,808	66,200 17	Santa Clara	Ι	2011

Rapid Transit system will interconnect with the existing

4579 4310005	4310005-005	City of Milpitas	Ayer Reservoir & Pump Station Improvements, Cli 7102	The project work consists of designing and constructing P seismic improvements to the Ayer Pump Station, sealin the pump station concrete floors to prevent moisture intrusion, replacing the hoist (used for moving large pieces of equipment), plumbing the tank discharge line to the sanitary sewer, and implementing various mechanical and electrical equipment upgrades at the pump station. The total project cost is \$1,350,000. The City is requesting \$1,100,000 in grant funding.	3 O 98	0	c	The City of Milpitas needs additional funding to rehabilitate its Ayer Water Tank and Pump Station. This facility primarily provides drinking water and fire flows to residential areas, including schools. The Milpitas water distribution system relies on storage to provide operational equalization capacity to minimize peak demands, emergency reserve to mitigate short-term water supply interruptions, and fire suppression storage. Several needed facility improvements have been identified. The City has already repaired the overflow structure settlement and is in the process of repairing or replacing pumps, motors, variable frequency drives, and controls. Remaining improvements include: seismic upgrades to the pump station building, sealing the floors to prevent moisture intrusion, replacing the hoist (used for moving large pieces of equipment), plumbing the tank discharge line to the sanitary sewer, and implementing various mechanical and electrical equipment uggrades. These improvements are required in order to assure continued reliability and a safe, potable water supply in the event of a catastrophic emergency; however, they are currently on hold due to a lack of funding. The City is completing a \$9 million rehabilitation project at the Gibraltar Water Tank and Pump Station and is unable to fund multiple large-scale projects. The City of Milpitas is located between the Cities of San Jose and Fremont.	1,100,000	14,808	66,200 17	Santa Clara	Π	2011
4580 4110006	4110006-003	California Water Service - Bear Gulch	Bear Gulch "City Wide" Water Conservation Program	The program has two "full service" elements that encompass a "City Wide Water Conservation Program" Element A: A team of trained plumbers will retrofit 13,176 residential homes / 26,352 bathrooms with one 1.5 gpm shower head, one 1.0 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 808 acre feet per year. Element B. A team of specialist will retrofit 4,425 residential yards with modern ET controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 136 acre fee per year. This program will save millions of tons of Co2 save electricity, save natural gas, save water and can be completed in 12 months or less. The program will employ 75 to 100 people for 12 months.	O	0	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 944 acre feet per year or 50.0 / 75.0 gallons per day, per person. Increasing the system water supply is not an option and saving water is the only practical option.	12,085,470	17,568	66,470 17	San Mateo	l	2009
4581 4110006	4110006-001	California Water Service - Bear Gulch		treatment plant upgrades-Particle Counter SCADA system connection, and Precursor removal for Total Trihalomethane (THM) control.	0	0	С	Treatment plant needs to be upgraded to assure maintenance of water quality standards.	120,000	17,568	66,470 17	San Mateo	II	1998
4582 0110008	0110008-004	City of Pleasanton		Drill new well and construct all ancillary facilities to replace lost production.	0	0	С	Well no.7 is out of service due to groundwater contamination from a nearby gasoline station.	1,200,000	21,516	67,876 04	Alameda	II	1998
4583 0110008	0110008-005	City of Pleasanton		Replace polybutylene water services with polybutylene service pipe.	· 0	0	С	Premature failure of polybutylene services represent a service reliability problem to customers.	24,000,000	21,516	67,876 04	Alameda	II	1998
4584 0110008	0110008-006	City of Pleasanton		Construct various system interties and install valves to improve distribution.	0	0	С	Low pressure and limited fire flow in various sections of the distribution system.	2,100,000	21,516	67,876 04	Alameda	П	1998
4585 0110008	0110008-003	City of Pleasanton		Evaluate design and construct well head water softening facilities.	0	0	C	Groundwater during the summer; customer complaints increased regarding hardness as well as complaints during other times of the year from dissoultion of CaC03 and colored water from corrosion.	15,000,000	21,516	67,876 04	Alameda	II	1998

4586 5610040	5610040-001	CAL AMERICAN WATER CO	Santa Barbra "District Wide" Water Conservatio Program	The program has two "full service" elements that in encompass a "District Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 23,250 residential homes / 46,500 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 1,426 acre feet per year Element B. A team of specialist will retrofit 7,750 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 475 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 – 24 months and employ 75 to 100 people.	0 , ,	0	C	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 2,162 acre feet per year or 50.0 / 75.0 gallons per day, per person.	25,879,500	20,135	67,894 06	Ventura	IV	2009
4587 3310021	3310021-015	Jurupa Community SD	56th Street Booster Station Expansion and Master Plan 18-inch Waterline from 56th Stree Booster Sta	The project consists of constructing approximately 2,000 feet of 18-inch pipe and installing an additional pumping unit in the empty pump can at the existing et 56th Street Booster Station. The project will allow further pumping redundancy and in conjunction with the pipeline installation greater pumping capacity to the 1100-foot pressure zone. Completion of the pipeline will benefit the overall system hydraulics and lower pumping costs.	O	0	с	The current Jurupa Community Services District distribution system does not have adequate redundancy for the main feed to the drinking water distribution system in the 1100-foot pressure zone. An existing 18- inch diameter waterline has been partially installed along the northern side of Indian Hills on Whitney Drive, with a section of approximately 2,000 feet pipe needs to be installed. The completion of the pipeline will provide the appropriate redundancy to the water system in the Indian Hills service area.	1,000,000	24,684	68,297 20	Riverside	V	2011
4588 3310021	3310021-016	Jurupa Community SD	JCSD-Rubidoux Interconnection Booster Station and Pipeline	The project consists of installing an inline booster station to deliver an additional seasonal range of 1,000 4000 gpm from the Rubidoux distribution system to the JCSD system. The booster station would provide the capacity to pump the additional water to the JCSD system and also would decrease the amount of electrical energy used to move water froom the 870- foot pressure zone to the 1100-foot pressure zone.Interconnection with the Rubidoux system will provide a more reliable water supply for JCSD.	0  e	0	с	An interconnection is needed to improve water supply reliability. The current Jurupa Community Services District distribution system does not have sufficient capacity to pump an additional seasonal range of 1,000- 4000 gpm of drinking water available from Rubidoux Community Services District. The Rubidoux water supply is at approximately 1060-foot pressure zone and the Jurupa system is at 1100-foot pressure zone, making pumping necessary to convey the water from the lower Rubidoux area to the JCSD service area. An efficient pumping system is needed to reduce the energy to move the water from one distribution system to the other.	1,250,000	24,684	68,297 20	Riverside	v	2011

## 4589 5710001 5710001-007 City of Davis

## Facilities

City of Davis Treated Design and construct local facilities to distribute treated O Surface Water Distribution surface water supplies delivered by the regional WDCWA to city customers. The distribution system improvements will include: 46,000 feet of transmission and distribution pipelines (varying in size from 12 to 42 inch diameter), one 4- million gallon terminal water storage tank to dampen regional surface water deliveries into the city water system, new booster pump facilities to pressurize surface water deliveries into the distribution system, SCADA system control improvements, and deployment of an advanced metering system (AMR/AMI) to better manage, monitor, and report system-wide water use and reduce peak demands. These improvements will transition the city from total reliance on local groundwater supplies to a conjunctive use operation with year-round treated surface water supplies augmented by groundwater during peak demand periods. The City of Davis was established in 1917, meaning some of the existing water distribution system infrastructure is aging and needs to be replaced. The required modifications to the distribution system will serve two purposes: (1) upgrade old infrastructure, and (2) facilitate efficient distribution of treated surface water deliveries to city customers.

nitrate, total and hexavalent chromium, selenium, manganese, boron, and other constituents) with a new treated surface water source to comply with water

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quality regulations, provide water that is more aesthetically acceptable to customers, and improve future water supply reliability. The city has identified that a conjunctive use water supply portfolio represents the least costly alternative to: (1) provide potable water supplies that meet all current and future water quality regulations; (2) meet all of the city's wastewater discharge requirements issued by the RWQCB (including elimination or reduction of salts and other constituent levels), (3) provide customers with water quality that does not require water softeners and/or home treatment devices, and (4) diversify water supplies so that the City does not rely 100% on local groundwater resources which have declining water quality, and are not able to meet current and future water quality regulations or demands, and will cause long term subsidence effects.

Replace old well capacity (high in: total dissolved solids,

22,400,000

16,339

68.420.09

Yolo

2011

4590 5710001 5710001-009 City of Davis Davis - Well 34 - Water Well Manganese System

Construct new deep aquifer Well 34 and well treatment O system to help supply current demands, comply with manganese secondary MCL levels, and improve source water quality for the city's wastewater treatment plant. The overall purpose of the new deep aquifer Well 34 and well treatment system is to replace lost well capacity to the City of Davis by providing a reliable source of high quality potable water that meets all regulatory requirements and results in the lowest overall cost to the consumer. Specific project objectives are to: Provide necessary groundwater supply lost from wells removed from service and compensate for historic increase in demand. 

Construct the well treatment system to obtain better water quality. • Meet current and anticipated primary and secondary drinking water standards established by CDPH. Improve aesthetic water quality and reduce consumer related costs. • Lower the level of constituents of concern in wastewater supplied to the City's wastewater treatment plant to minimize potential for violating current or anticipated NPDES permit requirements. The new deep Well 34 will be completed into the deep aguifer (to a depth between 700 and 2000 feet below ground surface) with a pumping capacity of 2,250 gpm. The new well will help supply current demands and replace 30 percent of the supply lost from the abandoned intermediate depth wells. The new well will

Significant water quantity problems caused by source water capacity are insufficient to supply current demand. The City of Davis relies solely on groundwater to meet 100 percent of its potable water demand. Since 1917, the City of Davis policy had been to utilize the intermediate depth aquifer. Therefore the current wells can range from 22 to over 50 years old. Since 1987, the City has had to remove seven intermediate depth wells from service due to age, poor water quality, production, and/or operations and maintenance problems. The total average well capacity removed from service is approximately 6,050 gpm, resulting in a significant water quantity problem and an inability to supply current demand. Since 1992, the city policy changed to require that all new wells be installed in the deep aguifer where the supply is better and of higher guality. A new deep aquifer Well 34 is required to replace lost well capacity to the City of Davis and meet current demands. The City strives to provide the best water quality possible to its customers. The intermediate depth aquifer has experienced water quality problems including elevated levels of calcium, manganese, TDS, nitrate, boron, hexavalent chromium, and selenium. Studies indicated that better water quality exists in the deep aquifer, with much lower levels of hardness, selenium, total salinity, nitrates and other contaminants. The new deep aquifer Well 34 will help

2 500 000	46 220	60 430 00	N-1-		2042
3,500,000	16,339	68,420 09	1010	1	2012

4591 5710001	5710001-010	City of Davis	City of Davis Automated	The City will replace meters when the warranty O 0 C	The City of Davis seeks to avoid the significant annual	3,700,000	16,339	68,420 09	Yolo	I.	2012
			Meter Reading	becomes expired. Current meters are nearing their end	cost associated with manual meter readings. Currently,						
				of life and may have to be replaced. If the City has to	the City reads its 16,350 water meters every two						
				change meter chambers and registers out, then	months with a contract meter reading firm. Difficulties						
				installing an updated meter reading system at the time	with manual meter reading include accessibility to hard-						
				is likely a logical collaborative step. The City will	to-reach locations, hazardous situations, loose dogs,						
				consider the lifetime of existing meters including	unfriendly homeowners, and water-filled meter pits. All						
				registers and chambers when implementing AMR and	of these difficulties contribute to the high labor cost of						
				installing Meter Interface Units (MIU). The City will pull	manual reading. Through the implementation of an						
				some meters in different zones and test for accuracy,	Automated Meter Reading (AMR) system, the City						
				and checking for sand especially near wells known for	would like to accomplish:1. Reduced meter reading						
				grit. Unlike meter chambers that may decline in	costs, 2. Improved water demand information to						
				accuracy, registers either function or fail. Note that the	support water conservation efforts, 3. Improved						
				majority of City registers were installed in 1998 and that	customer service, 4. Improved business operations,						
				new registers are required for real-time reads. Again,	and5. Reduced green-house gas emissions from manual						
				the longer the City waits the less efficiencies and cost	meter reading vehicular traffic. An AMR system will						
				savings gained by switching to AMR. (Currently, new	allow the city to read its water meters on an hourly						
				meters are going on with old registers.)The advantages	basis to: 1. Provide early leak detection notification to						
				and disadvantages of an AMR system are as	customers, 2. Read meters remotely for such purposes						
				follows:Advantages: • Very low annual operating cost •	as escrow closings, 3. Develop a water balance between						
				Continuous meter data collection • Data available in	water supply and demand meters to identify true						
				near real-time• Timely identification of leaks• Accurate	unaccounted for water losses, 4. Eliminate manual						
				data collection• Improved meter data management•	meter reading processes by both contractor and city						
				Increased water savings. The ability to catch leaks in an	staff to reduce city GHGe, and 5. Provide additional						
				efficient manner is significantly improved on both the	demand data to customers to improve water						
				customer side and system side. With the ability to	conservation decision-making. The City would like to						
				compare production and consumption values daily, it is	upgrade their water meter reading system to operate						
4592 1910026	1910026-010	COMPTON-CITY, WATER DEPT.	Well # 20 excess	Well # 20. at a cost of nearly \$ 3'000'000, is a key O O C	Well #20 in the Sibrie Park is located in the North West	1.000.000	14.055	71.000 22	Los Angeles	IV	2011
		,	Manganese Removal	componant of Compton's balabced water sistribution	area of the City of Compton. The Well Site was selected.	,,	,	,	0.00		
			System	system. It suffers from high level of Manganese. A	in compliance with the Water Department's Policy of						
				pumping flow rate of 1'500gpm to 2'000gpm must	relying on a network of 9 local wells, to meet most of						
				recieve treatment for the removal of excess	the Compton's water needs from Central Ground Water						
				Manganese, befor well # 20 could serve the city of	Basin. This Policy is to reduce the need for the more						
				Compton.	expensive water, provided by the Metropolitan Water						

District of Southern California (MWD). The City of Compton is determined to climb out of the pit of being a highly dis- advantaged community in the State. A "New Compton is being born. The Water Department's mission in support of a "New Compton", is to comply with water Quality, pressure and flow rate standards, at min. water cost. Well # 20, at a cost of nearly \$ 3'000'000, is a key componant of Compton's balabced water sistribution system. It suffers from high level of Manganese. A pumping flow rate of 1'500gpm to 2'000gpm must recieve treatment for the removal of excess Manganese, befor well # 20 could serve the city

of Compton.

3110025-009	Placer CWA - Foothill	Foothill Raw Water Supply	PCWA is proposing to construct a 14 700-foot-long 45 0	0	C	Foothill Raw Water Supply ProjectPCWA is proposing to	40 000 000	21 995	72 584 02	Placer	1	2009
5110025 005		Pipeline	39. and 33 inch raw water supply pipeline, 100.000	0	c	construct a 14.700-foot-long 45, 39, and 33 inch raw	10,000,000	21,555	, 2,50 . 02	i lucci	·	2005
			gallon hydraulic control standpipe and 500 foot-long, 36-			water supply pipeline, 100,000 gallon hydraulic control						
			inch overflow pipe, and a new outlet pipeline that could			standpipe and 500 foot-long, 36-inch overflow pipe, and						
			discharge up to 17 cfs of water from the raw water			a new outlet pipeline that could discharge up to 17 cfs						
			pipeline to the Dutch Ravine canal. The objective of the			of water from the raw water pipeline to the Dutch						
			project is to have operational flexibility, a backup raw			Ravine canal. The objective of the project is to have						
			water supply for the Dutch Ravine canal, and a			operational flexibility, a backup raw water supply for						
			redundant crossing of I-80 between the water source at			the Dutch Ravine canal, and a redundant crossing of I-						
			Ophir and the Foothill Water Treatment Plant (WTP).			80 between the water source at Ophir and the Foothill						
			Currently, water supply to Dutch Ravine and Foothill			Water Treatment Plant (WTP). Currently, water supply						
			WTP comes from PG&E's South Canal which is subject			to Dutch Ravine and Foothill WTP comes from PG&E's						
			to an annual PG&E maintenance. The project corridor is			South Canal which is subject to an annual PG&E						
			generally located in the communities of Newcastle and			maintenance. The project corridor is generally located						
			Ophir, Placer County, California. The proposed pipeline			in the communities of Newcastle and Ophir, Placer						
			would extend between PCWA's Ophir Road Pump			County, California. The proposed pipeline would extend						
			Station, located on Ophir Road, to the Foothill WTP.			between PCWA's Ophir Road Pump Station, located on						
			The Foothill WTP is located in Newcastle on the south			Ophir Road, to the Foothill WTP. The Foothill WTP is						
			side of Powerhouse Road, east of Newcastle Road. The			located in Newcastle on the south side of Powerhouse						
			14,700 foot long pipeline would begin at the Ophir Road			Road, east of Newcastle Road. The 14,700 foot long						
			Pump Station and would follow Ophir Road west toward			pipeline would begin at the Ophir Road Pump Station						
			the community of Newcastle to a point just east of			and would follow Ophir Road west toward the						
			Lozanos Road, where it would cross under I-80. After			community of Newcastle to a point just east of Lozanos						
			crossing I-80, the pipeline would be placed underground			Road, where it would cross under I-80. After crossing I-						
			across Dutch Ravine and then bored under the Union			80, the pipeline would be placed underground across						
			Pacific Railroad (UPRR) line. On the south side of the			Dutch Ravine and then bored under the Union Pacific						

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Railroad (UPRR) line. On the south side of the UPRR

250,000

21,995 72,584 02 Placer

2008

1

Water security improvements needed.

Placer County Water Agency 2009 Water System Security Improvements

4593 3110025

4594 3110025

3110025-007 Placer CWA - Foothill

Pacific Railroad (UPRR) line. On the south side of the UPRR line, the pipeline would follow an existing dirt This project includes fencing and security improvements O at several key water system facility sites. These sites include the Foothill Water Treatment Plant, the Sunset Water Treatment Plant, the Whitney Raw Water Reservoir, the Rocklin Road 1.0 MG Water Storage Tank, and the Sunset 2.5 MG Water Storage Tank. The Foothill Water Treatment Plant is PCWA's largest water treatment facility. It has a capacity of 55 MGD and is the primary source of treated water for this water system. The plant's current fencing is inadequate in many areas and does not meet PCWA's current stardard for security fencing at a water treatment facility. The project will bolster security in numerous areas of the perimeter fencing, install barbed wired atop existing fencing, and re-install fencing in areas that cannot bolstered. The Sunset Water Treatment Plant is the secondary source of treated water for this system. The plant's current fencing in need of security improvements in numerous areas. The Whitney Raw Water Reservoir is approximately 0.5 miles north of the Sunset Water Treatment Plant. The reservoir provides raw water storage for the Sunset WTP. Water is pumped from the reservoir directly to the WTP. The 14.7 acre site is currently fenced with rural style barbed wire fencing typically used for livestock. Some portions of the site do not have fencing. The project will install new fencing around the raw water reservoir, thus

4595 3110025	3110025-008	Placer CWA - Foothill	Ophir Water Treatment	The Ophir Water Treatment Plant (WTP) facility would O	0	с	The Ophir Water Treatment Plant (WTP) facility would	80,000,000	21,995	72,584 02	Placer	1	2009
			Plant	have a treatment capacity of 30 million gallons per day.			have a treatment capacity of 30 million gallons per day.						
				The project site would be located on the northwest side			The project site would be located on the northwest side						
				of Ophir Road, southwest of the City of Auburn, in			of Ophir Road, southwest of the City of Auburn, in						
				Placer County, California. The Ophir WTP facility would			Placer County, California. The Ophir WTP facility would						
				include the following facilities:Operations, Laboratory			include the following facilities:Operations, Laboratory						
				and Maintenance BuildingsThe maintenance building			and Maintenance BuildingsThe maintenance building						
				will be used for office and operational work for the			will be used for office and operational work for the						
				WTP. The laboratory building will be used for lab work			WTP. The laboratory building will be used for lab work						
				at the WTP. The maintenance building will be used for			at the WTP. The maintenance building will be used for						
				plant maintenance activities. Chemical Storage and			plant maintenance activities. Chemical Storage and						
				Feed Building Chemicals delivered to and used at the			Feed Building Chemicals delivered to and used at the						
				WTP will be stored within this building. Pretreatment			WTP will be stored within this building. Pretreatment						
				StructureThe pretreatment process (Actiflo® system or			StructureThe pretreatment process (Actiflo® system or						
				Plate Settler Pretreatment) is designed to reduce the			Plate Settler Pretreatment) is designed to reduce the						
				turbidity and total organic carbon content of the water			turbidity and total organic carbon content of the water						
				to achieve satisfactory filter performance and to meet			to achieve satisfactory filter performance and to meet						
				finished water quality goals and will be in an enclosed			finished water quality goals and will be in an enclosed						
				structure.Solids Handling FacilitiesSolids or sludge from			structure.Solids Handling FacilitiesSolids or sludge from						
				the pretreatment process and the backwash			the pretreatment process and the backwash						
				sedimentation basin will flow to the on-site sludge			sedimentation basin will flow to the on-site sludge						
				handling facilities. The drying beds will consist of in-			handling facilities. The drying beds will consist of in-						
				ground reinforced concrete basins. Filter StructureThe			ground reinforced concrete basins. Filter StructureThe						
				filter structure (either dual media filters or membrane			filter structure (either dual media filters or membrane						
				filters) consists of a concrete basin constructed below			filters) consists of a concrete basin constructed below						
				existing grade elevation. Disinfection and Storage			existing grade elevation. Disinfection and Storage						
				FacilitiesThese facilities include two above ground 5			FacilitiesThese facilities include two above ground 5						
4596 3610050	3610050-001	CITY OF UPLAND	9th Street IX Plant Booste	r The subject location treats groundwater through a fixed O	0	С	The City of Upland has three contaminated wells that	2,000,000	18,271	73,300 13	San Bernardino	v	2009
			Project	bed anion exchange (IX) treatment system followed by			can feed into it's Ion Exchange treatment plant at a total						
				passive air stripping system (PASS). Both the IX and			of 2600 gallons per minute. Unfortunately the booster						
				PASS systems were constructed in 2008 with local			pumps can only pump 1600 gallons per minute out of						
				grants. The primary pollutants to be removed are			the plant leaving 1.5 million gallons of water per day						
				nitrate and VOC. The treated water from the PASS is			unusable. That unusable water must be supplemented						
				discharged to a below grade concrete wet well. It is			with expensive imported water deliveries from						
				then adjusted for pH, chlorinated, and pumped to an			Metropolitan Water District. This is a drought year and						
				onsite above grade 0.2 MG steel storage reservoir,			MWD has significantly reduced deliveries, time is of the						
				using low head wet well vertical turbine transfer pumps.			essence to get these new boosters on-line so we can be						
				The potable water in the steel reservoir is then pumped			more reliable and self sufficient without having to rely						
				to the City's distribution system by a pump system (PS)			on imported water. The project is ready to go to bid if						
				that is outdated, insufficient and not reliable. This PS			the funds are made availble to the City of Upland. The						
				comprises of 3 different centrifugal horizontal split case			more efficiently we can operate our facilities, the better						
				pumps installed at different time in early 1960's. None			stewards we are of public funds and resources. Again,						

this improvement will greatly increase our reliability,

dependant on expensive imported water deliveries.

protect the public water supply, and allow us to be less

is the same as others. These pumps, when combined,

do not provide sufficient capacity (GPM), matching up

with the capacity of the IX process. In addition, during

normal operation, the system efficiency is only 55% to 60%, causing the City to incur a very high pumping cost to supply the needed water. It also does not provide the required necessary head to boost water to other part of the City. Furthermore, its associated pumping components are limited and unreliable due to wear and age, for example, the feed line from the reservoir serving these pumps is limited to 12-inch and electrical gear box is outdated.The City wishes to replace the

4597 4110022	4110022-005	City of Redwood City	Automatic Meter Reading Equipment Installation	The City has already installed the infrastructure needed O for automatic meter reading. This includes three Tower Gateway Base Stations (TGBs), servers, and miscellaneous hardware. The project would therefore only include the installation of new water meters at 18,655 single family homes.	0	C	The City of Redwood City is 100% dependent on the San Francisco Public Utility Commission for all of its drinking water supply. The City receives a water supply assurance in the amount of 12,243 acre feet per year. For the last ten years, the City has used an average of 700 acre feet per year over its supply assurance. This leaves the City extremely vulnerable during drought or water shortage emergencies. The City participated in an Aquacraft study that showed its 18,655 single family residential (SFR) homes have water leaks that account for as much as 14% of total water use. The City has implemented a pilot program to test automatic meter reading equipment that allows for leak detection and reporting and it has proven to be an effective tool for water conservation purposes. In addition, the meters that are used for this customer class are old and ineffecient, and the City's unaccounted for water loss is approximately 10%. The installation of new meters will have the potential for saving as much as 24% of total water use for this customer class, or 2,900 acre feet per year. Reducing the water use for this customer class will help provide a safe and reliable water supply for the City's 83,000 water customers. The water savings that could be achieved through the installation of these water meters will protect the City during drought. Not only will they help to provide an adequate supply of	6,510,000	22,992	75,402 17	San Mateo	Π	2009
4598 4310007	4310007-005	City of Mountain View		Removal of Bryant tank with system modifications. O	0	С	Demolition of Bryant Elevated water tank.	150,000	16,246	76,000 17	Santa Clara	П	1998
4599 4310007	4310007-016	City of Mountain View		Design and construct upgraded system controls at three O turnouts.	0	С	The City's existing control systems at the SFWD turnouts need to be replaced.	130,000	16,246	76,000 17	Santa Clara	Ш	1998
4600 4310007	4310007-004	City of Mountain View		Demolition and removal of pump station and reservoir. O	0	С	Demolition of storage reservoir.	60,000	16,246	76,000 17	Santa Clara	П	1998
4601 4310007	4310007-017	City of Mountain View	City of Mountain View - Water Meter Replacement	The City is requesting funding to replace its aging meter O inventory. New meters will be installed with remote reading technology, providing the ability to quickly identify leaks and excessive water use, ultimately improving conservation and reducing the amount of unaccounted for water. Customers will also be able to monitor real-time consumption using remote reading devices. Additionally, vehicle use and fuel consumption will be reduced, decreasing production of greenhouse gases. Although the project will provide more accurate and timely water reporting, improve the effectiveness of conservation efforts and assist in greenhouse gas reduction, the City has not identified adequate funding for this capital replacement. Requested funding will be used to purchase approximately 17,000 meters and remote reading devices, providing economic stimulus for the manufacturing industry. The program will also necessitate the addition of six employees for approximately 4-5 years to complete installation work and the purchase of several vehicles and related installation equipment and tools.	0	C	The City of Mountain View has approximately 17,700 water meters. The City's existing meters were installed in the early 1990s, indicating that City metering of water consumption is likely understated. The optimal operating life of a water meter is 15 years, and while meters function beyond this time frame they begin under-recording water use, reducing water sales revenue and increasing the amount of unaccounted for water. Based on manufacturer testing and American Water Works Association research, water consumption is underreported by 1% to 2% in meters 16 to 20 years old and 2% to 5% in meters 20 to 30 years old.	5,421,000	16,246	76,000 17	Santa Clara	Ι	2009
4602 4310007	4310007-010	City of Mountain View		Replace these smaller water system components and O make minor unscheduled improvements.	0	с	Certain smaller system components in the City's water system need to be replaced.	458,000	16,246	76,000 17	Santa Clara	II	1998
4603 4310007	4310007-009	City of Mountain View		Design and construct a replacement telemetry system. O	0	С	The City's telemetry system is obsolete and inaccurate.	1,200,000	16,246	76,000 17	Santa Clara	Ш	1998

4604 3010037	3010037-002	Yorba Linda Water District	YLWD Well No. 15 Removal of Arsenic and Manganese	The least expensive method of correction for these of chemical contaminants is adsorption by Iron-based adsoption media contactors-granular Ferric Hydroxide (GFH). This project would require piping modification, building enclosure, monitoring equipment, electrial improvement and pumping systems modification to Well No. 15. Typical installation of this system is in pressure vessels to allow a single pumping stage for the treatment system. Water continuously passes through the media bed where arsenic, manganese, and other heavy metals are adsorbed from the water into the media. The vessels are arranged in parallel or series with an empty bed contact time of about five minutes. The pressure vessels are backwashed once every two to six weeks to prevent bed compaction and to remove trapped particulates. Once the GFH media is exhausted, it is removed from the vessels and new media is installed. Exhausted media that has passed toxic characteristics leaching procedures tests in most instances can be disposed of in a non-hazardous landfill.	0	c	Presently the Well No. 15 water source exceeds the 10 parts per billion (ppb) arsenic primary drinking water standards. Currently, the 2-year average arsenic level of Well No. 15 is at approximately 16.42 ppb and marginally exceeds the 50 ppb secondary (aesthetic) standard for manganese. Currently, the District has an approved blending plan from the State for Well No. 15. In order to correct this problem, the District blends the water from Well No. 15 with 2-3 other wells. Currently, our staff must sample, test, and analyze, then log and report findings on the Arsenic and Manganese levels as well as; report the chemical contaminants could be treated in Well No. 15 as proposed in this application for funding, it would provide better flexibility of using the well on its own when demand decreases during the winter months and ultimately reduce the demand on Colorado River Water. In addition, it would decrease staff time spent on sampling and monitoring.	760,000	23,489	77,513 08	Orange	v	2007
4605 2810003	2810003-006	Napa, City of	Jamieson Canyon Water Treatment Plant Ozone Project	The Jamieson Canyon Water Treatment Plant (JCWTP) serves 6 water systems in Napa County including the City of Napa, American Canyon, Yountville, St Helena, Calistoga and the Congress Valley Water District. The JCWTP is a critical facility to supply water via normal/emergency interties with each of the aforementioned cities for a combined population of 114,000 Napa Valley residents. Ozone is among the strongest oxidants and when used as a pre-oxidant, can reduce the amount of coagulant required for carbon removal. The JCWTP uses high doses of Alum as a coagulant, especially during the episodes of high total organic carbon (TOC) and turbidity occurring in the source water. Addition of Ozone at the pre-treatment stage will reduce the presence of TOC prior to sedimentation and filtration, thereby reducing the occurrence of disinfection byproducts (DBPs) in the final treated water. The City has included pre-ozone and the potential for intermediate ozone in the plant improvement project scheduled for 2008. Construction of the Ozone system will include ozone generators, a liquid oxygen (LOX) storage and vaporization system, an ozone transfer system, an ozone contactor (with bypass piping) ozone residual monitoring, an ozone off-gas collection and	0	c	Background The Jamieson Canyon Water Treatment Plant (JCWTP) has been unable to meet the Stage 1 Disinfectants/Disinfection Byproduct Rule (D/DBPR.) The source water for the JCWTP is North Bay Aqueduct water that is subject to episodes of high concentrations of both dissolved organic carbon (OC) and turbidity. Nearly all of the total organic carbon (OC) and turbidity. Nearly all of the total organic carbon (TOC), the constituent identified in the D/DBPR, is in the source water as DOC. If TOC is present at the end of the treatment process, the addition of chlorine to the treatment process, the addition of chlorine to the treatment process, the addition of chlorine to the treated water results in the formation of disinfection byproducts (DPBs) including TMMs and HAAS that exceed the limits of Stage 1 D/DBPR. The City monitors TOC removal to verify compliance with the Stage 1 D/DBPR and during 2003 was unable to meet the efficiency removal goals based on raw water TOC and alkalinity concentrations. Future The City is highly concerned about the impending Stage 2 D/DBPR and must implement this project in order to come into compliance. In addition the upcoming regulation of endocrine disruptors and personal care and pharmaceutical products (PCPPs) will introduce greater challenges to maintaining a treatment system that meets regulatory compliance standards. It is important to note that the Easterly Wastewater	7,400,000	24,990	79,959 03	Napa	Ι	2007

4606 2810003	2810003-012	Napa, City of	Sludge handling equipment for Jamieson Canyon Water Treatment Plant	The project includes purchase and installation of filter belt presses for fast and efficient dewatering of sludge material from the sedimentation basins and filter backwash operations. Consolidation of the sludge material will reduce the water content of the material for off-haul and greatly reduce the total volume and weight of material that must be handled. Solids removal and reduction of the waste stream and will assist the City in meeting the Filter Backwash Recycle Rule (FBRR) such that the filter backwash makes up no more than 10% of the total plant flow. The improvements to the overall sludge handling process will also assist the City in ensuring compliance with the Cryptosporidium Action Plan (CAP) and meeting the 0.2 NTU compliance point for the supernatant Additional capacity for sludge handling on site will result due to the increased ability to reduce the volume of solids because the sludge will consist of 16-20% solids which is significantly higher than the current 6-8% solids. This project poses no significant environmental impacts. The site is currently under construction with a certified CEQA EIS. This project reduces maintenance procedures for ogoing water treatment operations. The design and procurement of the equipment can be completed within three months of notification of funding.	0	0	c	The City of Napa currently treats State Water Project water via the North Bay Aqueduct. The water frequently brings episodes of highly turbid water loaded with organic carbon. As a result, the Jamieson Canyon Water Tretment Plant is forced to increase chemical addition to facilitate coagulation and sedimentation of the organic matter. The result is a high volume of sludge production and difficulty in meeting the Cryptosporidium Action Plan (CAP) and the Filter Backwash Recycle Requirement (FBRR.) The limits of the site and the City's ability to decant the supernatant off of the earthen basins impedes the sludge handling process. The inefficient process requires intensive labor and energy to turn the sludge and allow drying such that it is able to be hauled off to a local landfill. The sludge drying process can be compressed from months to days or even hours with the use of a filter belt press to compress solids in preparation for for removal from the sludge ponds and off-haul and/or land application. The sludge handling equipment will reduce the carbon footprint of the operation by reducing the energy applied to the drying process by eliminating mechanical handling, turning over and drying of the material. The equipment will produce a dryer product thereby reducing the weight and volume of the material to be off-hauled, and the associated carbon footprint of the hauling operation.	1,500,000	24,990	79,959 03	Napa	Ι	2009
4607 2810003	2810003-001	Napa, City of		Rehabilitate or replace intake tower.	0	0	С	Lake Hennessey intake tower valves are old and in poor	700,000	24,990	79,959 03	Napa	Ш	1998
4608 2810003	2810003-005	Napa, City of	Napa Water System Security Improvements	Since completing the Vulnerability Assessment in 2003, the City of Napa has implemented a number of security improvements within the water distribution system and at the treatment plants including security cameras, fencing, lighting improvements, and access control gates. In 2008, the City will begin construction on the Jamieson Canyon Water Treatment Plant Improvements which includes security cameras, access control gates, perimeter fencing, security lighting, card key access, and control room monitors. The Jamieson Canyon Water Treatment Plant (JCWTP) treats State Water Project water for Napa, Calistoga, and Younville. It also supplies water to St. Helena, American Canyon, and the Congress Valley Water District under supply agreements. The JCWTP is a critical facility to supply water via normal/emergency interties with each of the aforementioned cities for a combined population of 114,000 Napa Valley residents. The existing security measures at JCWTP consist of a single access control gate, two cameras, and a sub- standard perimeter fence or lack of fencing in some areas. The planned security improvements included two additional cameras, screens in the operator control room to monitor all security cameras on the water	0	0	c	Security Project	900,000	24,990	79,959 03	Napa	Π	2007
4609 3610037	3610037-006	REDLANDS CITY MUD-WATER DIV	Replace wells	Design and construct new wells to replace source capacity	0	0	С	Source capacity is diminished by groundwater contamination	5,000,000	21,851	80,000 13	San Bernardino	V	2003
4610 1210013	1210013-010	Humboldt Bəy MWD	Ranney Collector 1 Lateral: Replacement and Pump Replacement	S The District has concluded focused engineering studies from 2002 through 2006 emphasizing the need for replacement or refurbishment to maintain water distribution at optimum levels. In early 2009, the District suffered a revenue loss approximating 55% of all receipts with the loss of industrial pulp mill operations. This delayed needed upgrades to maintain the quality of the current laterals and the two pumps retreiving the water. Our estimated replacement time is extended from 12-15 years to 25 and 40 for the respective pumps. The project is broken down into the following:Design, \$184,950Construction- \$1,230,864Pump Replacement - \$258,930Inspection- \$98,640Legal/Administration-\$151,257Total Project: \$,1924,641This project is a priority 3 project requiring the need to be addressed in less than a five year time- frame.	0	c	The Humboldt Bay Municipal Water District is a regional water district serving seven outside districts including more than one disadvantaged community. The Ranney collectors consist of concrete caissons installed to a depth approximating 600 feet in the Mad River of Eureka, California. The laterals collect the water and direct it to the central caisson for distribution. Engineering reports indicate all laterals are either plugged, capped or have the valves closed or nearly closed. Installation of new laterals will add operational life to the system and allow for an increase in production. This is especially useful for the summer time water requirements provided the valves and laterals can be re-opened. New lateral installation has been found to be cost and production beneficial based on past history of Collector 2 refurbishment and Collector 3 replacement.Pumping equipment supporting the distribution are 40 and 25 years old respectively (the replacement and upgrade cycle is 12 to 15 years). The pumps are running between 63% to 71% of efficiency creating excessive power and production costs despite rebuild efforts. Focused engineering studies recommend replacement within a minimum five year timeline.	1,950,000	224	80,000 01	Humboldt	1	2012	
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4611 3710005	3710005-001	Carlsbad MWD	Maerkle Pump Station Upgrade	The upgrades/replacements that will be performed as part of this project will replace failing components of the pump station. These components include switchgear, VFDs, soft starters, controls, relay, and contactors. Replacement of these facilities will assure a safe drinking water supply to the customers from CMWD's 200 MG storage facility. In addition, this project will upgrade the access gates to the site to improve site security.	0	C	CMWD is experiencing failures of various equipment at this pump station. These failures have a potential for interruption of water supply to CMWD customers. During outages of the aqueducts supplying CMWD, this storage facility is the only water supply for CMWD. In addition, the current access gates to the site are not secure and allow for easy access to the site.	400,000	27,517	80,800 14	San Diego	v	2009	
4612 3010003	3010003-003	City of Buena Park	Eighth Avenue Water Line Replacement of Aging Asbestos Cement Pipe	The City intends to abandon in place the existing ACP O water line, replacing it with new ductile iron pipe, increasing the size to meet today's demand and pressure requirements, as required by code. This project includes the installation of 1500 LF of 12" ductile iron water line in Eighth Avenue west of Knott. This project would include all design, potholing, permits, construction and repavement, traffic control, water quality management, inspection and project management. Construction would include the installation of ductile iron pipe and wrap, valves, connections, water service connections, dewatering, abandonment of existing facilities, fire hydrant service connections and necessary utility coordination and surveying. The project would be designed to City standards and inspected by City forces.	0	C	The City of Buena Park has an aging water supply system. The City has a program aimed at the replacement of existing asbestos cement pipe (ACP) installed in the 1960's. Most of this pipe is over 45 years old and the City intends to eventually replace all of its ACP with ductile iron pipe, replacing the older sections first.The Eighth Avenue west of Knott portion is 46 years old and due for replacement.	830,000	20,422	82,450 08	Orange	V	2009	
4613 4210004	4210004-009	GOLETA WATER DISRICT		Repair damaged line and construct rip rap protection O near creeks.	0	с	Improve Goleta West Conduit line.	150,000	16,088	84,000 06	Santa Barbara	IV	1998	

4614 4210004	4210004-017	GOLETA WATER DISRICT	CDMWTP Creek Crossing Project	Modify existing crossing using box culverts or constucting new bridge to raise access road above creek flooding levels.	0	0	c	The access road to Goleta Water Districts Corona del Mar Water Treatment Plant (CDMWTP) crosses McCoy Creek. This creek has flooded numerous times to levels where access to or from the treatment plant for several hours is not possible. Plant staff either cannot respond to plant alarm conditons or have to remain at the plant during these episodes. Modifying the creek crossing to an alow access to the plant at the higher creek flows will improve the staff's ability to address alarm conditions at the treatment plant.	170,000	16,088	84,000 06	Santa Barbara	IV	2011
4615 5610023	5610023-002	VENTURA WWD NO. 8 - SIMI VALLEY	Tapo Canyon Production Well	The project consists of installing a new, fully equipped groundwater production well in Tapo Canyon in an area that is not subject to surface influence or other potentially contaminating activities. Well collector pipeline will be installed to convey the untreated groundwater supply from the new well to the treatment plant.The new well will provide asurance that maximum potable water production and provide improved reliability of the water supply and its quality.	0	0	С	The City of Simi Valley, Ventura County Waterworks District No. 8 (District) operates two existing groundwater production wells to supply to its Tapo Canyon Water Treatment Plant to provide potable water for its customers in the City of Simi Valley. One of the existing production wells is located in close proximity to a natural drainage course, and the Water Supply Permit issued by the California Department of Public Health does not allow for the use of this well while the Plant is in operation when water is present in the drainage course due to concerns that the groundwater can be under surface influence. The potable local groundwater produced by the Plant is a blend of reverse osmosis-treated groundwater and untreated groundwater that receives chlorination and chloramination disinfection before entering the District's water distribution system. Loss of use of the well under surface influence limits the production and reliability of the Plant to produce potable local groundwater supply.	1,200,000	24,811	86,000 06	Ventura	IV	2009
4616 5610023	5610023-001	VENTURA WWD NO. 8 - SIMI VALLEY	Replacement of Alta Vista Tank No. 2	The project consists of the construction of a steel water storage tank, with a capacity of 126,000 gallons and a high-water elevation of 1404 feet, to be located adjacent to the existing Alta Vista Tank No. 1 that has the same capacity and high-water elevation. Construction of the tank will also include approximately 30 feet of 8-inch inlet-outlet pipeline to connect the tank to the existing water distribution system, approximately 100 feet of 8-inch drain line, appurtenances, and site improvements, and electrical monitoring equipment to connect the tank to the District's SCADA system that provides alarms to operators advising of facility malfunctions. The project will increase the water storage in the Knolls Pressure Zone to 252,000 gallons, from the current 126,000 gallons, to provide sufficient time for the District to respond to pump station failures or fire hydrant/water main breaks and avoid the loss of water pressure and supply. The project will also satisfy the minimum fire storage requirements by the Ventura County Fire Department for the Knolls Pressure Zone.	0	0	c	The City of Simi Valley, Ventura County Waterworks District No. 8 (District) operates the Knolls Pressure Zone (Zone) to supply water to the Santa Susana Knolls area.Water facilities for the Zone include the Alta Vista Tank No. 1, which is deficient in storage capacity with only 126,000 gallons that does not provide for adequate reliability and fire storage.Deficient water storage in the Zone has led to a loss of supply and water pressure due to pump station failures, power outages affecting pump stations, or broken fire hydrants or water mains. Boil water orders can result from such occurrences.The Zone requires a minimum of 130,000 gallons of operating storage to maintain proper pressure regulation plus a minimum of 60,000 gallons of additional storage in reserve to meet the minimum fire storage standard by the Ventura County Fire Department. Other facilities for the Zone include the Oak Knolls and Alta Vista Pump Stations that operate with the Alta Vista Tank No. 1. The original Alta Vista Tank No. 2 was removed due to its badly deteriorated condition.	300,000	24,811	86,000 06	Ventura	IV	2009
4617 3010064	3010064-012	City of Westminster		Purchase 730 fire hydrants over a five year period to replace inoperable fire hydrants in the water system.	0	0	с	Other system defects. Replace inoperable fire hydrants in the water system to aid in the water quality flushing program.	511,000	20,161	93,027 08	Orange	v	1998

4618 3010064	3010064-015	City of Westminster	Upgrade Existing Deficient 4-inch Waterlines	Abandon existing 4 inches waterline in several areas O and replace with new 6 to 8 inches waterline. The total length is approximately 2,800 linear feet. This project will also include replacing existing water valves and service laterals to residents and businesses. This will improve the water delivery capability to provide sufficient current water supply demand.	0	c	Existing water system is deficient to meet the current water demand in several areas. The existing insufficient 4-inch waterlines need to be upgraded to 6 or 8 inches to provide sufficient current water supply demand.	600,000	20,161	93,027 08	Orange	V	2009
4619 3710001	3710001-005	California-American Water Co	San Diego "District Wide" Water Conservation Program	The program has two "full service" elements that encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 23,250 residential homes / 46,500 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20% indoor water reduction). The estimated water savings is 1,426 acre feet per year. Element B. A team of specialist will retrofit 6,500 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 398 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 – 24 months and employ 75 to 100 people.	0	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 1,901 acre feet per year or 50.0 / 75.0 gallons per day, per person.	25,879,500	20,791	96,000 14	San Diego	v	2009
4620 4810008	4810008-001	City of Vacaville	Butcher Reservoir Control Valve Vault Improvements	The purpose of this project is to enhance water circulation in the reservoirs, and improve the water quality in the Butcher Reservoirs. This will ensure that all current and future water quality requirements are met. The project includes a new partially buried valve vault to house motor actuated valves for controlling the flow into and out of Butcher Reservoirs 1 and 2; and associated site improvements. Site improvements consist of pavement reconstruction, partial demo of existing valve vault no. 1, drainage improvements, security gate, fencing & lighting, and landscaping. The partially buried valve vault consists of reinforced concrete retaining walks, stairs, security doors, roof mounted maintenance hatches, 120/480 volt power supply, lighting & ventilation, two 18-inch diameter motor operated modulating valves, two 18-inch standard motor operated valves, other valves and appurtenances, and SCADA integration and radio communication. Approximately 1,300 linear feet of 18 inch and 24 inch diameter ductile iron pipe would be installed.	0	c	The City of Vacaville constructed the Butcher Reservoirs 1 & 2 in 1970 and 1979 respectively. The reservoirs are located between I-80 and Lagoon Valley Park and sited side by side. Reservoir 2 (4 MG capacity) is 11.5 ft deeper than Reservoir 1 (2 MG capacity) leading to water quality concerns because of the dead zone in the bottom of Reservoir 2. The water quality at these reservoirs is further impacted because they primarily receive treated surface water which contains more TOC than groundwater. The existing piping and valve arrangement allows the reservoirs to stay fuller than other system reservoirs for a longer period of time and minimizes the turnover of water further impacting water quality problems.	3,200,000	25,149	96,735 04	Solano	Ι	2009

4621 1910051	1910051-004	INGLEWOOD- CITY, WATER DEPT.	Water Transmission & Main Replacement	Water Transmission & Main Replacement Project is the O ultimate goal of the City of Inglewood to provide the City with the long range planning tool of resolving the problem of water quality system, meet the established criteria, maintain the system assets and prevent major pipeline breaks by replacing old pipes beyond useful lives. The project consists of replacing the old transmision main as well as replacing and upgrading the 6" CIP distribution pipes to 8" to 12" DIP including the installation of blowoff, Fire hydrants and sampling stations and provide some flexible couplings in earthquake fault line.	0	C	The City of Inglewood domestic water system consists of 802,000 ft. of pipes. Significant debris has been observed in the transmission main and loss of disinfectant residual occurs in the pump discharge pipe.Distribution Pipes are mostly consists of Asbestos Cement Pipes and Cast Iron Pipes in 6 inches diameter and installed between 1940's to 1990's. most of the pipes are old and beyond their useful life. Water breaks occur in different areas and warter quality impacts the continued use of the old pipes. Replacing the aging pipes is one of the key item in the water master plan to improve the water system.Because the City is continued growing and developing, large increase in population and water demands are also a great concerns for the water distribution system. The Citya use this factor in pipe-upsize proposal that was outline in the water master plan, This project is a very significant factor to increase the water system reliability, properly maintain the system assets, prevent major pipeline disaster and promote the well being of the community by providing a good water quality.	11,600,000	14,916	100,000 15	Los Angeles	IV	2011
4622 1910051	1910051-003	INGLEWOOD- CITY, WATER DEPT.	Water Treatment Facilitie	Its The City is currently working with the Corps to complete O the design of the rehabilitation of its Water treatment facilities. These improvements will provide for the treatment of groundwater; discharged from the new wells into the City's transmission and distribution system or reservoirs, for bacteriological, inorganic or organic contaminants as deemed appropriate through water quality testing procedures as designated by the State Department of Public Health (DPH).	0	C	Incorporated in 1908 the City of Inglewood serves a constituency of 112, 600 persons, located on the Coastal Plain adjacent to the Baldwin Hills in Los Angeles County. The City is responsible for domestic water supple to 14,000 customers. The City completed a water master plan update in 2005 which identified several major improvements to its water system. The programs and projects described herein will increase water system reliability for domestic and fire suppression supplies within the City's water service area. This effort will be completed in time to provide definitive input as to specific projects which will be initially addressed under the propsed "Water System Infrastructure Program" (WSIP). This program is considered to be a significant first step and of primary importance toward reaching the City's goal of a more effective and efficient water supply and storage system.	2,200,000	14,916	100,000 15	Los Angeles	IV	2009
4623 1910051	1910051-005	INGLEWOOD- CITY, WATER DEPT.	Replacement of Water Well No. 1 and 4	The project consists of replacing the old well with a new O well to achieve the efficient performance rate of the pumps/motors, heads, casing, bowls and other well accessories and produce significant sand including the removal of the TOC and other contaminants determine in water well No. 1	0	C	Water Well No. 1 was tested in 1999 and indicate that the operates at 1500 gpm and 461 total dynamic head. its current production rate fluctuates from 700 gpm to 1100gpm. the existing static water level is approximately 188 feet below ground surface, representing a drop of 43 feet. the well pump ocassionaly loses suction, indicating continued drop in the pumping water level. Excessive air may also result from cascading water through exposed well screens and low suction levels. Water quality issues includes the presence of iron, manganese, high ammonia and TOC ocncentrations. Water Well No. 4 was last repaired in July 1998. The pump suction bell is approximately 360 ft. below ground surface. The static and pumping water levels were aprroximately 180 ft. and 360 ft. below ground surface, indicating that the pump needs to be lowered to be able to continue production. Continued operation observed that the well has developed a sanding problem.	4,300,000	14,916	100,000 15	Los Angeles	IV	2011

4624 4810003	4810003-002	City of Fairfield	East-West Water Transmission Pipeline, Easterly Segment 3	The ambitious East-West Water Transmission Pipeline O (Project) was developed to address both of the previously described service and supply problems. The Project was originally planned in two large, distinct portions, including about 2.5 miles of 30-inch pipeline from Hale Ranch Road near the Fairfield Anheuser- Busch brewery to the intersection of Westamerica Drive and Echo Valley Drive ("Westerly Portion") and 7.5 miles of 36-inch pipeline from the intersection of Cordelia Road and Hale Ranch Road ("Easterly Portion").For economic and technical reasons, the City has divided the Project into 15 segments that will be constructed as individual projects. Construction is complete or underway on 3 segments to date. Of the remaining 12 segments, several have been assigned to development projects that are now delayed, but two that are "shovel ready" are under City control and could go out to bid as soon as financing is available: Easterly Segment 3 and Easterly Segment 6B.Descriptions:East- West Water Transmission Pipeline, Easterly Segment 3 (this application)Approximately 3,000 feet; 36-inch diameterBroadway and Illinois Streets from Union Avenue to Pennsylvania AvenueEstimated cost \$2,400,000East-West Water Transmission Pipeline, Easterly Segment 6B (separate application)Approximately 2,000 feet; 36-inch	0	c	As part of its water system planning in the 1980's, the City of Fairfield, California, identified the existing single 36-inch pipeline crossing of Suisun Valley from the central city to its Cordelia area as a fundamental weakness of the water system. Failure of this single line, or interruption of the lone treatment plant (Waterman WTP; the City has two plants) feeding that line, could result in an inability to supply water to Cordelia from the City system. Another concern was the existing system's inability to serve water to large parts of the City from the new North Bay Regional Water Treatment Plant (NBR Plant), which was the City's only source of Sacramento River delta water.	2,400,000	27,235	100,147 04	Solano	I	2009
4625 3710037	3710037-001	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed O on the attached CIP plan.	0	с	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	7,896,800	22,768	100,509 14	San Diego	v	1998
4626 3710037	3710037-012	Padre Dam MWD	Automated Meter Replacement Program	The AMR technology can minimize recording errors, minimizing the need for the District to go on the private property of residents, reduce travel costs and liabilities, and provide opportunities for monthly billing.Other options that are available include remote shutoff valves that can be installed and activated from the office for chronic shutoff users; availability of customer display units for in home consumption monitoring; and acoustical leak detection devices that would allow the District to monitor the adjacent water distribution system and send back results remotely.Ongoing drought concerns in Southern California have prompted the District to promote water conservation as a best management practice. An integrated AMR system could post reads to the web, thereby allowing customers and the District to manage usage in real- time. Furthermore, the ability to obtain daily and even hourly meter information could allow more options to the District to give incentives or penalties regarding water usage.The scope of this project will replace all existing meters within the District's service area with automated meters that will provide remote reads on more more frequent basis.	0	c	The primary purpose of water meters is to ensure that water customers are charged for water service according to the amount of water actually consumed by them. Metering water use is a water conservation Best Management Practice, as defined by the California Urban Water Conservation Council. However, water meters and their remote registers lose accuracy as they age and must be replaced periodically to ensure accurate billing. Padre Dam's Automated Meter Replacement Project will replace existing customer meters with new meters that transmit hourly and daily water use data to the District. The meter sensors and system software will alert staff to customer leaks, allow staff to enforce irrigation excited and control their own water use. These are critical water conservation strategies. Benefits of an AMR system include: B Save on regular "on-cycle" meter reading to Obtain more easily initial and final meter readings for opening and closing accounts B Streamline high bill investigations B Flag potential high consumption before customers get a high bill B Data available to initiate and enforce conservation efforts B Help pinpoint system losses B Help detect theft of service B Enable more frequent readings with little incremental cost B Enable customers B Support customers B Support customers (e.g., for large customers) B	7,000,000	22,768	100,509 14	San Diego	v	2009

4627 3710037	3710037-013	Padre Dam MWD	Customer Service Center - Emergency Generator	Following the devastating Cedar Fire in 2003, the District's CSC was used as an EOC. The scope of this project includes the installation of an emergency generator for the CSC and appropriate instrumentation and controls.	0	0	с	During the devastating Cedar Fire in 2003, the District's Customer Service Center (CSC) was used as the emergency operations center (EOC). Subsequent to large, local wildfires in 2007, it was determined that a more reliable power supply was needed for the EOC. Without proper power supply, the District's ability to mobilize and manage resources during an emergecy will be severely compromised.	250,000	22,768	100,509 14	San Diego	v	2009
4628 3710037	3710037-002	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed on the attached CIP plan.	0	0	с	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	12,241,500	22,768	100,509 14	San Diego	v	1998
4629 3710037	3710037-008	Padre Dam MWD	Santee Turnouts Upgrade Project	The District's wholesale facilities receive water from SDCWA from two sources: SDCWA Connection No. 4 located at the west end of the WSA on Mission Gorge Road and Connection No. 6 located at the west of the ESA in the southeast corner of Lakeside Water District. The water is then distributed via 5-metered connections (turnouts) to the WSA (Santee Connection No.1 through No. 5), 2-metered connections to the Riverview Water District (Riverview No.1 and No.2), 3 metered connections to the Lakeside Water District (Lakeside No.1 through No.3), and a single connection to the ESA via the El Capitan Pump Station. This project is to upgrade and replace old and dilapidated turnout structures and facilities at Turnouts 3 and 4. In addition, the Meter (6-Inch) Retrofit project (Project No. 202007) will be constructed as part of this project.	0	0	с	The purpose of this project is to replace two of Padre Dam's 10 turnouts, meter/flow control connections within the District's service area. The two turnouts that will be replaced are old and dilapidated with outdated instrumentations and controls. This project also includes replacement of some of the larger meters and structures within the retail area (6-inch and larger). An efficient water system depends on accurate meters and flow control devices. Old meters tend to "under read" and indicate water loss within the system that does not exist. Together, old meters and outdated flow control devices make it difficult for system operators to determine when the right amount of water is supplied to the system. When too little water is supplied to the system, pressure problems throughout the service area can result. When too much water is supplied, water quality problems result in more system flushing.	1,100,000	22,768	100,509 14	San Diego	v	2009
4630 3710037	3710037-004	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed on the attached CIP plan.	0	0	с	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	14,932,700	22,768	100,509 14	San Diego	v	1998
4631 3710037	3710037-003	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed on the attached CIP plan.	0	0	с	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	21,777,700	22,768	100,509 14	San Diego	v	1998
4632 3710037	3710037-005	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed on the attached CIP plan.	0	0	С	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	15,971,700	22,768	100,509 14	San Diego	V	1998

4633 3710037	3710037-007	Padre Dam MWD	Security for Water Storage and Pumping Facilities	Padre Dam Municipal Water District of Santee, CA requests consideration for funding under Proposition 50: Water Security, Clean Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et seq.), Chapter 3 – Water Security. Padre Dam MWD intends to address the hazard of water contamination to the District's potable water system through the installation of an IP based video surveillance system. The District comprises approximately 404 miles of water pumping stations. The lack of system redundancy and the large geographical area served by Padre Dam engenders an apparatus where the long term loss of any facility would result in the loss of potable water to whole regions - in some cases to approximately 50% of the District's population. Padre Dam MWD proposes to utilize Chapter 3 funding for the following: a) to eliminate or reduce the risk of water contamination to Padre Dam's water storage facilities; b) to eliminate or reduce the risk of vandalism to Padre Dam's pump stations and reservoirs; and c) to reduce the above mentioned risks by identifying and prosecuting the perpetrators of vandalism at Padre Dam MWD's sites. Furthermore, the District seeks to strengthen its Emergency Response's ability to respond quickly to security breaches and minimize consequences. The	o	0	c	Security Project	750,000	22,768	100,509 14	San Diego	v	2007
4634 3710037	3710037-006	Padre Dam MWD		Miscellaneous projects to remedy deficiencies as listed on the attached CIP plan.	0	0	С	System deficiencies and upgrades of water system including pump stations, reservoirs, distribution and transmission lines, future water sources.	14,337,940	22,768	100,509 14	San Diego	v	1998
4635 4110013	4110013-001	City of Daly City	New main, pump, and	Install new main, pump station and reservoir.	0	0	С	Undersized main, inadequate reservoir capacity.	7,000,000	22,316	103,000 17	San Mateo	Ш	2002
4636 1910102	1910102-010	PALMDALE WATER DIST.		Construct piping and valving necessary to tie area into 3000' water system. Project involves: Design to solve problem and Construction	0	0	С	Area of substandard flows due to not fully being integrated into the District's water distribution system. (see Executive Summary of 1996 Water Master Plan.)	100,000	27,030	105,234 07	Los Angeles	IV	1998
4637 4310012	4310012-001	City of Santa Clara		Demolish and reconstruct 11 well heads.	0	0	С	The well heads and related equipment need to be rebuilt	1,275,000	26,610	105,831 17	Santa Clara	Ш	1998
4638 5610017	5610017-008	VENTURA WATER DEPARTMENT		Construct transmission main from 210 zone to 430	0	0	С	Needs to improve distribution system.	3,200,000	31,312	107,490 06	Ventura	IV	1998
4639 5610017	5610017-009	VENTURA WATER DEPARTMENT		Design and construct improvements to remove 5 common inlet and outlet tanks or other means to increase mixing in tanks. Purchase 2 potable chlorine disinfection trailers for emergency response.	0	0	С	Disinfectant being changed from free chlorine to chloramines in 2002. City has 13 zones with varying detention times at different rates. Some tanks have common inlet/outlets and may be prone to nitrification	507,000	31,312	107,490 06	Ventura	IV	2002
4640 5610017	5610017-007	VENTURA WATER DEPARTMENT	San Buenaventura, City of	Build 1600 LF of 14 inch pipeline and a 0.90 MG reservoir.	0	0	с	Needs to improve the distributrion system storage demand.	1,600,000	31,312	107,490 06	Ventura	IV	1998
4641 5610017	5610017-002	VENTURA WATER DEPARTMENT		Expand existing plant from 4 MGD to 8 MGD and drill/install new well.	0	0	С	Needs backup source and expand treatment plant capacity to meet water demand reliabily.	4,000,000	31,312	107,490 06	Ventura	IV	1998
4642 5610017	5610017-003	VENTURA WATER DEPARTMENT		Drill new well in Mound Basin and treat at Bailey Plant.	0	0	с	Needs to improve source capacity.	1,400,000	31,312	107,490 06	Ventura	IV	1998

4643 5610017	5610017-015	VENTURA WATER DEPARTMENT	Gosnell Pump Station Rehabilitation Project	The project will include the design and construction of new mechanical and electrical equipment, an evaluatio of the current site, and a structural evaluation of the condition of the existing building. The new pump static shall be capable of providing the near-term maximum day demand of the zone with one pump operating, and a second pump of the same capacity as a back-up pum and fire pump. The electrical service and SCADA syster shall be provided to meet current City standards and integrate into the existing system. A permanent on-sit generator shall be provided for reliability.	O on d p n	0	c	The 400 Pressure Zone is deficient in storage. The 400 Zone takes suction from the 210 Zone, which has an excess of storage. The 400 Zone has two existing storage tanks with 2.2 MG of storage, however the water does not turn over during times of low demand. Constant operator action is required to achieve water turnover in the reservoirs. The existing Valley Vista Pump Station does not have excess pumping capacity to provide fire flow. The Gosnell Pump Station used to serve this zone but was taken out of service due to failing equipment and lack of funds needed to rebuild the pump station. The Gosnell Pump Station will provide additional pumping and fire flow capacity to the zone, and will help circulate water in the reservoirs.	1,300,000	31,312	107,490 06	Ventura	IV	2012
4644 5610017	5610017-004	VENTURA WATER DEPARTMENT		Build new 2.1 MG reservoir in 260 Zone	0	0	С	Needs to improve the distribution system for storage deficit.	4,800,000	31,312	107,490 06	Ventura	IV	1998
4645 5610017	5610017-005	VENTURA WATER DEPARTMENT		Construct two 2 MG reservoirs and new pipeline.	0	0	С	Needs to upgrade storage and distribution.	6,500,000	31,312	107,490 06	Ventura	IV	1998
4646 5610017	5610017-006	VENTURA WATER DEPARTMENT		Design and build 1.0 MG reservoir	0	0	С	Needs to improve storage capacity to meet storage deficit.	2,000,000	31,312	107,490 06	Ventura	IV	1998
4647 1910179	1910179-001	BURBANK-CITY, WATER DEPT.	Replacement of resrvoir #	1 Demolish existing structure and reconstruct reservoir with the same capacity, meeting current codes and standards.	0	0	C	Reservoir #1 is 6.9 MG concrete reservoir with wood roof, constructed in 1928. The reservoir does not meet current structural codes, and the single inlet/outlet does not allow for thorough mixing to prevent nitrification episodes.	9,000,000	26,301	108,029 07	Los Angeles	IV	2008
4648 3010004	3010004-037	Mesa Consolidated WD	Wellhead Color Treatmer at Wells 7 and 8	t The District is proposing to install wellhead treatment reduce the level of color in the wells.	to O	0	с	The District is unable to consistently meet the secondary MCL for color (15 CU) at Wells 7 and 8.	3,200,000	23,179	108,724 08	Orange	v	2002
4649 1910017	1910017-002	SANTA CLARITA WATER DIVISION	New Well Development t Improve Source Capacity	The proposed project will develop a new, municipal groundwater well in the City of Santa Clarita. The proposed project involves three phases: (1) well drillin and construction, (2) pump development and testing operations and (3) construction of the well housing. Well drilling and construction will be conducted over approximately 23 days. This phase would require minor grading to prepare the flat site for the construction tasks would include the mobilization of the drill rig to and from the project site, drilling of the pilot hole, and installation of well casing. The drilling of the pilot hole, well would require approximately 24 days. The borehole, installation of well casing, and development of the well would require approximately 24 days of 24-hour site activity. Pump development will require approximately 24 days of 24-hour site activity. The well will be drilled to a total depth of 160 feet below the ground surface and will have a pumping rato of 750 to 1,000 gallons per minute (gpm).An approximately 50-foot by 50-foot structure would be built onsite to house the well pumping equipment. The well supprise the well pumping equipment.	O g of e e	0	c	During periods of reduced rainfall, groundwater well levels within the eastern portion of our service area drop precipitously. This forces us to abandon well pumping in those wells until rain returns and the groundwater levels rise. The loss of this groundwater supply is compounded when simultaneous reductions in State Water Project allocations occur and especially now after the recent court ordered water transfer restrictions intended to protect endangered species. Increasing our source water capacity by drilling additional groundwater wells in the western portion of our basin where water levels remain relatively stable, will provide a more reliable source capacity for our system and help compensate for the deficiencies in our eastern wells and the reductions in the State Water Project deliveries.	400,000	27,911	111,000 22	Los Angeles	IV	2008
4650 2710010	2710010-004	CWSC Salinas	Salinas "City Wide" Wate Conservation Program	r The program has two elements. a. Indoor: CWSC will replace / retrofit 19,000 bathrooms (toilets & shower heads) and the estimated water savings is 1,171 acre feet per year. b. Outdoor: CWSC will replace 6,113 ET controllers and the estimated water savings is 188 acre feet per year.	0 2	0	С	CWSC intends to reduce the district total water consuption to match the long term water supply.	18,243,540	25,451	114,840 05	Monterey	II	2009

4651 3310012	3310012-011	Elsinore Valley MWD		The District has an arsenic groundwater treatment plant O currently treating arensic contaminated groundwater from two other wells in the same area. The plant is located about 1.3 miles north of the two subject inactive wells with high arsenic. An engineering study is almost complete to investigate the viable alternatives to blend or treat these two arsenic laden wells so the treated groundwater can be used for domestic supply, thus reducing imported water demand. This project will involve approximately 10,000 LF of 20-inch pipeline to convey the arensic contaminated well water to the groundwater treatment plant. The existing plant must also be expanded in treatment capacity to accomodate this extra incoming source. The preliminary estimated cost for this project is about \$2,500,000.	0	C	Two active groundwater production wells, originally used for domestic water supply, have been shut down because of elevated arsenic concentrations, i.e., above the 10.0 ug/L arsenic MCL. The combined production capacity of these two wells is about 3.0 mgd. Without these two wells offline, the District has to purchase additional imported water to meet the water demand of the system.	2,500,000	36,817	121,420 20	Riverside	v	2009
4652 2710004	2710004-001	Cal Am Water Company - Monterey	Monterey "District Wide" Water Conservation Progam.	The program has two "full service" elements that encompass a "District Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 36,000 residential homes / 72,000 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated at 20 % indoor water reduction). The estimated at 20 % indoor water reduction Element B. A team of specialist will retrofit 12,000 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 736 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 – 24 months and employ 75 to 100 people.	0	c	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 2,945 acre feet per year or 50.0 / 75.0 gallons per day, per person.	35,136,000	38,236	122,492 05	Monterey	Π	2009
4653 4810007	4810007-003	City of Vallejo	Vallejo - Watermains Capital Improvements	Control of the transmission of the transmission main along Nebraska Street New Pyter Station suction and discharge line from 12" to 18" addresses the suction headloss problems of Tennessee Street Pump Station; Replacement of 1500 feet of 20" transmission main along Couch Street permanently eliminates the property damages that consistent failures of this section of the transmission main causes in the area; Installation of 2500 feet of 12" transmission main along the transmission main the Persaka and Tuolume Street completes the link between the major transmission main along Nebraska Street that links the West Grid pressure zone with that of the 20" C&H transmission main thereby greatly reducing headloss in the Grid Zone transmission system and enhancing system pressure and service reliability; Construction of over 9000 feet of 8" water mains along Benson Avenue, 14th Street, Alabama, Denton Court, Grapewood Street, Cottonwood Drive, Grenna Court, Illinois Street, and Indiana Street eliminates the pressure, flow, leakage, and water quality issues brought about by the existing old corroded 2" and 4" water mains.	0	c	The project aims to improve water circulation (age) concerns, water quality, fire protection, and to replace severely corroded and leaking distribution water mains in the City of Vallejo. It intends to prevent possible contamination of potable water in the affected water mains. While that is not currently a problem, the potential is there for backsiphonage of dirty groundwater into the leaking water mains should a sudden loss of water pressure be experienced by the affected areas. In addition, the corroded pipes have severely restricted the flows that water age due to stagnation and poor circulation has become a problem. Also, the flow restrictions greatly reduced the fire flows available in the affected areas well below the Fire Code requirements. The project also addresses suction pipe severe headloss problemst at the Tennessee Street Pump Station by upsizing the old 12" suction line to an 18" pipe. It also intends to complete the link between transmission mains at Tuolumne and Nebraska Streets as well as replace a section of an od 20 transmission main that has caused extensive property damage during its failures in the last five years.	3,000,000	36,663	125,000 04	Solano	Π	2009

4654 4310014	4310014-001	City of Sunnyvale	Refurbishment of Water Tanks at Wright Ave	This project will refurbish two water storage tanks. This O work entails exterior and interior coating and a seismic retrofit.	0	C	This project will refurbish two Wright Avenue water storage tanks, inside and out, in accordance with a complete structural and coating evaluation done in 2004 that found the tanks to be in poor condition. The Wright Avenue tanks hold 10 million gallons of water. The City follows a routine tank maintenance schedule in order to assure water tanks are properly maintained. A maintenance review is done every 10 years to determine the condition of the tanks and to make recommendations on coating repair, recoating, cathodic protection and/or structural modifications. Structural repairs, seismic retro-fits and interior coating of both tanks and interior coating of Tank #1, along with seismic retrofit of Tank #1 will be completed in this project. Refurbishing the tanks in useable condition for up to 40 years. The water tanks in useable condition for up to 40 years. The water tanks in useable condition of current City water-storage capacity. This is a critical project to comply with California Department of Public Health scores for water tanks. Without the tanks, it is possible that the City may not have enough water in case of emergencies (fire, earthquake) and possibly	3,763,000	29,324	133,751 17	Santa Clara	Ι	2009
4655 3010027	3010027-010	City of Orange	Water Well No. 28	Currently, Well 28 is in the study and planning phase to 0 determine the best suitable site. The well's capacity; however, has been decided to be of 3,000 gpm and is scheduled to begin construction in 2013. According to the City of Orange Water System Master Plan, with this well in service and the ability to drop water from upper pressure zones down, pressure zone 370 will meet the demand of the coming years.	0	С	Pressure zone 370 which comprised of all the west side of the City is the earliest developed area in the City and therefore, equipped with older water infrastructures, such as production wells, reservoirs, main lines, pump stations, etc. The City of Orange Water System Master Plan, which was completed in 02/2007, indicated the need for at least two new water wells in pressure zone 370 to mitigate the deficient supply and enhance the reliability of the City's water production in the near future. Besides, the addition of a new well will enable the Water Division to accomplish routine maintenance services on the existing wells without compromising any shortage of water supply within our system.	2,000,000	35,645	138,640 08	Orange	v	2008
4656 3010027	3010027-007	City of Orange	Watermain Installation Under Cannon Street Bridge	Hydraulic analysis of the water system recommend that O a 16 in. watermain to be installed in parallel to the existing 12 in. and that both to remain in services after installation of the 16 in. watermain. In addition to eliminate the bottle neck effect in the system, this new 16 in. pipe will provide redundancy to the existing 12" main. Currently, design of plans and specifications for approximately 520 linear feet of 16 in. pipe had been completed and construction shall commence as soon as funding is available.	0	с	Currently, the water pumping into Reservoir 6 to serve the northeast area of the City is transported via a 16 in. watermain. This main, however, is reduced to 12 in. as it goes under the Cannon Street Bridge due to the limited space of the bridge deck. In order to eliminate this bottle-neck effect, the existing 12 in. watermain needs to be upsize to 16 in. or another watermain needs to be installed in parallel to the existing 12 in.	450,000	35,645	138,640 08	Orange	V	2008

4657 3010027	3010027-009	City of Orange	Annual Watermain Replacement	The City of Orange Water Division had identified watermains in five areas that need to be replaced to address the concerns listed above. The total length of watermain in the five indentified areas is approximately 23,000 linear feet. For the year of 2008-2009, approximately 6,000 – 8,000 linear feet will be replaced to minimize the number of water main breaks, the repaired costs at the same time to improve the fire flow and better serve the areas.	0	0	с	The City of Orange Water System Master Plan, which was completed in 02/2007, indicated the need to install approximately 1 – 2 mile of new watermain annually to replace existing watermain within the system. Additional analysis performed by the City's Water Division staff which incorporated factors such as age, pipe condition, leak/break history, fire flow deficiency, etc., help to identify and prioritize the areas. Completion of this project will help to ensure the reliability of the system, increase the fire flow capacity and reduce the cost to repair breaks.	1,100,000	35,645	138,640 08	Orange	v	2008
4658 3010027	3010027-003	City of Orange	Reservoir 3A	The new Res 3A is proposed to be constructed next to one of the City of Orange existing reservoir (Res 3) mainly because there is enough room at this particular site. Res 3A, upon completion will help to alleviate the demand shortage during emergency by providing additional storage and enabling the shifting of water between the pressure zones.	0	0	С	The City of Orange Water System Master Plan, which was completed in 02/2007, indicated the need for a minimum of two new reservoirs by the year of 2030 to meet the future demand and more importantly is to mitigate shortages during emergency. The first reservoir (Res. 3A) will have a capacity of 1.0 MG and will be in needed as early as 2009.	1,350,000	35,645	138,640 08	Orange	V	2007
4659 3010027	3010027-002	City of Orange	Water Well No. 27	Tentatively, the new well (Well 27) is proposed in the northwest quadrant of the City (within pressure zone 370. Well 27 will have a minimum capacity of 2,500 gpm and is scheduled to begin construction in spring 2008. According to the City of Orange Water System Master Plan, with this well in service and the ability to drop water from upper pressure zones down, pressure zone 370 will meet the demand of the coming years.	0	0	С	The City of Orange Water System Master Plan, which was completed in 02/2007, indicated the need for a new water well in pressure zone 370 to mitigate the deficient supply in the near future. Besides the addition of a new well will enable the Water Division to accomplish routine maintenance services on the existing wells without compromising any shortage of water supply within our system.	1,700,000	35,645	138,640 08	Orange	V	2007
4660 3010027	3010027-013	City of Orange	City of Orange Marywood Pump Station	The City of Orange Water Division has hired a consultant to conduct a feasibility study to determine the most cost efficient option of replacing the existing Marywood Pump Station. Construction of the MPS will begin as soon as funding is available. The MPS will include installation of all new piping, bigger pumps, other associated mechanical equipment and building and site work. Once completed, this new pump station will enhance the ability to transport water between the two pressure zones more effectively.	ο	0	с	The existing Marywood Pump Station (MPS) was built in 1964 and is located on the south side of Villareal Drive East of Santiago BL, within the City's northeast quadrant of service area. The MPS is currently in use to pump water from Pressure Zone 2 from Reservoir 2 to Pressure Zone 3 into Reservoir 3. This pump station is very old with aging piping and equipment. With only 2 submersible pumps, the capacity of this station is very limited. In addition, access into the station for maintenance is in an undesirable condition i.e., it is a confined space because it was constructed inside an underground vault pit. MPS is one of 18 vital pump stations within the City's water system which is critical to ensuring the adequate and timely distribution of	1,500,000	35,645	138,640 08	Orange	v	2012

water to meet customer demands.

4661 3010027	3010027-015	City of Orange	City of Orange Watermair Replacement	h The City of Orange Water Division has identified aging watermains in twelve different study areas (within the City's water service boundaries) that will need to be replaced to address the issues listed above. The total length of watermain to be replaced in the twelve areas is approximately 67,710 linear feet. The City is targeting five key areas in particular which continue to be subject to frequent mainline breaks. The total amount of pipeline to be replaced for the five study areas equals 22,975 linear feet. For FY 2009-2010, 7,760 linear feet of watermain was installed. For FY 2011-2012, approximately 10,000 linear feet of pipe is proposed for replacement.	0	0	C	The City of Orange has about 480 miles of water pipelines serving approximately 139,000 customers. Many of these waterlines were constructed in the 1960's, have reached the end of their useful life and need to be replaced. In accordance with the City's Water System Master Plan dated February 2007, about 2 miles of main is recommended to be replaced annually. Funding from CDPH will enable the City to continue to meet its annual target goals for replacing its aging pipelines and ensure a continued reliable water supply. Additional analyses performed by the City's Water Division staff incorporated such factors as age, pipe condition, leak/break history, fireflow deficiency, etc., to help identify and prioritize the key areas for replacement. Completion of this project will help to ensure the system reliability, enhance fire flow capacity, reduce the cost to repair breaks, minimize staff (labor) expenses to repair/maintain the distribution system, and eliminate service interruptions to City customers.	2,000,000	35,645	138,640 08	Orange	V	2012
4662 3010027	3010027-012	City of Orange	City of Orange Big Serrand Pump Station	b The Big Serrano Pump Station will feature three (3) pumps, each with a minimum capacity of 1,000 gallons per minute. The scope of this project will include preparation of plans and specifications, construction of new piping, mechanical equipment, pump station, building, landscaping, and site work. The design and construction phases are expected to begin as soon as project funding is available. When completed, the Big Serrano Pump Station will provide redundancy to and enhance the City's water distribution system in the event of a power outage, routine maintenance activities, and/or during an emergency (e.g. fire, earthquake, etc.).	ס	0	С	This temporary pump station is located in the northeast quadrant of the City of Orange's service area, and is used to pump water from Pressure Zone 3 to Pressure Zone 4 to serve a major residential development. This temporary station has three horizontal closed coupling pumps, each with a capacity of 700 gallons per minute. Currently, there is no building structure enclosing the pumps. All of the piping and pump equipment are completely exposed to the outdoor elements. In addition, the capacity of this facility needs to be upgraded to enhance water service to the area, and accomodate anticipated growth in the future.	1,500,000	35,645	138,640 08	Orange	v	2012
4663 3010027	3010027-014	City of Orange	City of Orange Reservoir Seismic Retrofitting	Until 2009, five (5) of the City's sixteen (16) existing C reservoirs have been seismically retrofitted to enhance their ability to absorb seismic forces and groundshaking movements. The City of Orange Water Division's goal is to upgrade the remaining eleven (11) reservoirs in the next 2-3 years. By completely retrofitting the inlet/outlet pipes, this program will: enhance the ability of the inlet/outlet piping to sustain seismic forces and movements; minimize labor, material and equipment costs to repair such damage; and avoid taking these eleven City reservoirs out of service for extended periods of time.	D	0	C	The City of Orange water distribution system currently includes 16 reservoirs ranging in capacity from 0.5 MG to 5.0MG (million gallons). Total system storage is approximately 43.0 MG. Collectively, the City's reservoirs provide storage that is critical in meeting a broad range of functions including emergency and fire protection requirements, equalizing daily supply and demand needs, increased operating convenience, balancing pumping requirements (i.e. minimizing cycling of pumps), decreasing power costs, surge relief, increasing chlorine detention time, and blending water from different sources. Most of the City's reservoirs were constructed in the 1970's. As a result, the Water Division has been working to improve these reservoirs by replacing the rigid connection in the inlet and outlet pipes with flex-coupling joints. Flex coupling joints have been proven to withstand seismic forces and groundshaking movements more effectively than their rigid counterparts.	1,000,000	35,645	138,640 08	Orange	v	2012

## 4664 3710006 3710006-011 Escondido, City of

Sodium Hypochlorite Onsite Generation

Water Treatment Plant To eliminate the continued use of chlorine gas and the O numerous hazards it presents alternative disinfection methods were evaluated. The evaluations included elements for ease of operation and maintenance, risk reduction and life cycle cost. The alternatives included continued use of chlorine gas, bulk delivery of 12.5% sodium hypochlorite, onsite generation of high concentration sodium hypochlorite, and onsite generation of low concentration sodium hypochlorite. The onsite generation of low concentration sodium hypochlorite was the selected option and is currently under design. There are several manufacturers of the onsite generation equipment and depending on the manufacturer generally come as 3,500 or 4,500 pound units. Preliminarily depending on the supplier the plant will require 2 or 3 duty units and 1 standby unit. It is generally planned to provide storage of the generated 0.8% sodium hypochlorite for a minimum of 3 average days. This will likely be 2 to 3 tanks depending on size. Two brine tanks will be required for the salt itself. Metering pumps will be located at the tank farm while the sodium hypochlorite generators will be located in the existing chlorine building. The chlorine dioxide generators will be replaced with a proprietary Purate system which will require a Purate tank and acid tank. Supplemental equipment required for the process conversion includes A contract for a pre-design report is currently under 0 way and upon completion the City will proceed directly to final design and contract documents. Construction is projected to begin in 2012. Part of the pre-design report will address a new tank site that will provide

additional area to accommodate additional storage

grade line. The design will be for 2 million gallons of

capacity at a higher elevation to increase the hydraulic

storage in two circular prestressed concrete tanks each

holding 1.0 million gallons. The use of two tanks will

provide the flexibility to take a single tank off line for

maintenance if required while the other continues to

shall be stainless steel or non-metallic to eliminate

provide separate fill and discharge pipes as well as

with the tanks including state of the art valves and

the existing tank will be upgraded to reach the new

tanks at their higher elevation. This upgrade will

will be at a new site, the project will include all

control systems. The booster pump station which fills

include emergency generator capability. As the tanks

necessary piping from the booster pump station to the

tanks and re-connection of the distribution system. The project will also include the required road construction

seismically flexible joints outside the tanks. All

supply customers. Interior piping elements and fixtures

future corrosion concerns. Piping shall be improved to

overflow, drain pipe and fixtures will be built concurrent

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The City of Escondido operates the Escondido-VID Water Treatment Plant currently rated at 75 MGD and in the process to re-rate the plant to its design capacity of 90 MGD. Currently disinfection is achieved through the use of chlorine gas. The Escondido-VID Water Treatment Plant is the largest treatment plant in San Diego County still using chlorine gas for disinfection. The plant also has chlorine dioxide generators which are used when treating local water due to its high organic levels, the chlorine dioxide is introduced at the head of the treatment process. The treatment plant uses 17 ton cylinders of gas which are delivered by truck from Los Angeles, more than 2.5 hours on the road and the last 20 minutes are through the streets of Escondido. Escondido is a community of more than 140,000 residents with the nearest residences being less than a half mile and down gradient from the chlorine gas facility. For these reasons the Department of Homeland Security has a special interest in the security of the plant. Additionally the last time the gas supplier contract was out to bid only one supplier submitted a bid

8.500.000

25.828

140,000 14

San Diego

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2012

The Vista Verde Reservoir is a 63-foot diameter welded steel tank. The tank was constructed in 1979 with a nominal storage capacity of 0.75 million gallons. The welded steel tank sits on a concrete ring foundation with no anchor bolts, making it susceptible to excessive movement during a seismic event. The tank is located on a leased lot and is very limited in size being approximately 10 feet from the tank to the existing fence or slope on all sides. Inspections and cleaning are done periodically, the most recent was completed in 2010. Inspections are done by a diver with the tank full. The latest inspection showed extensive progression of ongoing corrosion within the tank. The heaviest corrosion being above the normal operational water surface on both the walls and the inside of the roof. The beams spanning from the walls to the center column are heavily corroded along with the roof plates. Some steel purlins are missing from the roof and were found on the floor of the tank. One beam is so corroded that the bottom flange has separated from the web. Knee braces at beam seats on the wall are also heavily corroded. Significant corrosion also exists below the water surface on the walls and floor as well as on the fill/discharge pipe. The overflow pipe is also heavily corroded. Some areas of the wall are visibly deformed when viewed from the outside. The roof is a safety concern and staff have been directed to keep off unless 6,900,000 25,828 140,000 14 San Diego 2012 V

4665 3710006 3710006-009 Escondido, City of

Vista Verde Reservoir Replacement

4666	3710006	3710006-008	Escondido.	City c

Lindley Reservoir A contract for a pre-design report is currently being executed and upon completion the City will proceed directly to final design and contract documents. The design will be for a minimum of 3 million gallons of storage in two circular prestressed concrete tanks 1.5 million gallons each. The use of two tanks will provide the flexibility to take a single tank off line for maintenance if required while the other continues to supply the customers. Interior piping elements and fixtures shall be stainless steel or non-metallic to eliminate future corrosion concerns. Piping shall be improved to provide separate fill and discharge pipes as well as seismically flexible joints outside the tanks. The new tanks will be located on or adjacent to the existing tank site and the old steel tank will be removed. The

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The Lindley Reservoir is a 120-foot diameter steel tank. The tank was constructed in 1950 with a nominal storage capacity of 2.0 million gallons. The welded steel tank sits on a concrete ring foundation with no anchor bolts, making it susceptible to excessive movement during a seismic event. Inspections and cleaning are done periodically, the most recent was completed in 2010. Inspections are done by a diver with the tank full. The latest inspection showed extensive progression of ongoing corrosion within the tank. The heaviest corrosion being above the normal operational water surface on both the walls and the inside of the roof. The beams spanning from the walls to the center column are heavily corroded along with the roof plates to the extent that flakes would fall when someone walked on the roof Significant corrosion also exists below the water surface on the walls and floor as well as on the fill/discharge pipe. The overflow pipe is also heavily corroded.The tank has performed well for over 60 years and has reached the end of its useful life as maintenance costs are increasing. The fill/discharge pipe outside the tank is also steel of the same age and is approaching the end of its useful life as well. The Water Master Plan is currently being upgraded and the preliminary analysis indicates that the zone in which Lindley operates requires additional storage capacity due to the development over the past 60 years. Lake Wohlford, located northeast of the City of

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Escondido, is a man-made reservoir that was formed by Lake Wohlford Dam. Current uses of Lake Wohlford include water supply, flood control, power generation, and recreation. Lake Wohlford supplies 30% of the City of Escondido's water as well as water to another 120,000 customers in the Vista Irrigation District who live nearby in parts of northern San Diego County.Lake Wohlford Dam was constructed in 1895 to store water from the San Luis Rey River via the fourteen-mile Escondido Canal. In 1924 the seventy-six foot dam height was raised an additional twenty-four feet to increase the overall height and storage capacity to its current value of 6,500 acre-feet (AF). The expansion used hydraulic fill material. In 2004 FERC directed the City of Escondido to complete an evaluation of the potential for liquefaction-induced failure. The geotechnical study conducted found that a liquefactioninduced mudflow slide of the upstream slope of the dam would likely occur in a maximum credible earthquake. As a result, in 2007 FERC began requiring the City of Escondido to maintain Lake Wohlford at least 20 feet below the spillway crest level from dam safety purposes. This resulted in the water level being lowered to 43% of storage capacity, or 2,800 AF.Following FERC's determination, the City of Escondido began pursuing alternatives to retrofit Lake

15,798,100 25,828 140,000 14 San Diego 2012 V

4667 3710006 3710006-010 Escondido, City of Lake Wohlford Dam Replacement Project

Replacement

Therefore, at this time specific construction specifications are not known. The following paragraphs generally describe construction efforts that will be necessary to complete the Lake Wohlford Dam Replacement Project These subtasks are based on information within the alternatives analysis, which contained a conceptual design of the dam. Final construction specifications are anticipated to be determined in 2012, and construction is anticipated to begin following Construction Contracting in 2014. The upstream dam shell, a portion of the dam embankment upstream of the core, will primarily consist of earthfill. The makeup of the earthfill will consist of 3-inch minus materials placed against the downstream face of the existing dam with appropriate filter material placed between the two. Much of this earthfill may be available onsite from excavations for the foundation and abutments. Additional material may result from the spillway excavation near the northerly abutment. The southerly abutment may generate additional material from a borrow area and realignment of Oakvale Road. The desirable material for the earthfill would be decomposed or highly weathered granite having roughly 20% fines and classified as silty sand according to the Unified Soil Classification System. The upstream face would have a slope of 3:1 (horizontal:vertical). The

valves and controls for the new tanks will all he new

fixtures will be replaced concurrent with the tank. The

supply piping down the drive that the tank site shares

with several residences will be replaced. The supply

replaced or prioritized for a future project as required.

piping which continues down the street will be

Final design has not yet begun for this project.

evaluated during the pre-design report phase and

and state of the art. All overflow, drain pipe and

4668 1910033	1910033-003	CALIFORNIA WATER SERVICE CO DOMINGI Rancho Dom Wide'' Water Program	inguez "City The program has two "full service" elements that conservation encompass a "City Wide Water" Conservation Program. Element A: A team of trained plumbers will retrofit 66,750 residential homes / 133,500 bathrooms with one 1.5 gpm shower head, one .90 gpf dual flush toilet and one sink aerator per bathroom to save 50.0 gallons per day per person or 20,000 gallons per home, per year (Estimated at 20 % indoor water reduction). The estimated water savings is 4,095 acre feet per year. Element B. A team of specialist will retrofit 22,000 residential yards with modern ET water controllers and save 50.0 gallons per day, per yard (Estimated at 30% water reduction). The estimated water savings is 683 acre feet per year. This program will save millions of tons of Co2, save electricity, save natural gas, save water and can be completed in 12 months or less. The program will employ 75 to 100 people for 12 months.	0 e	0	C	Basic issue / problem: The district needs to reduce their customer's water consumption to match the local water supply. Solution: Create water via system wide water conservation programs. The programs (indoor & outdoor) reduce the total water use by 4,778 acre feet per year or 50.0 / 75.0 gallons per day, per person.	64,687,500	33,637	143,664 22	Los Angeles	IV	2009
4669 1910070	1910070-025	LOS ANGELES CO WW DIST 4 & 34-LANCASTI Arsenic Trea	timent in Well This project is for the removal of arsenic from the groundwater pumped from Well No. 4-44 to ensure compliance with the new arsenic standard. To accomplish this goal, the District proposes using one of the commercially available ion exchange systems for arsenic treatment. Ion exchange is designated as Best Available Technology by the US EPA for the removal of arsenic from drinking water sources and some ion exchange treatment systems have already been permitted by the California Department of Public Health and are in operation in the State. Also, a typical ion exchange treatment process is simple, robust, compact, easy to automate, and can be operated on demand. The treatment goal is to remove the arsenic in the effluent (treated) water to less than 4 ppb, meeting the arsenic standard of 10 ppb.	O h , d	0	C	Arsenic is the primary contaminant to be addressed by the project. Arsenic in drinking water has been shown to impact human health and is considered one of the prominent environmental causes of cancer in the world. The Safe Drinking Water Act Amendment of 1996 required the United States Environmental Protection Agency (USEPA) to finalize a new drinking water standard for arsenic. In January 2001, the USEPA adopted a new arsenic standard of 10 parts per billion (ppb). The new standard became effective in January 2006. The Los Angeles County Waterworks District No. 40, Antelope Valley, Regions 4 & 34, Lancaster (Regions), serves approximately 145,000 people through over 47,000 service connections in the Lancaster and Palmdale areas of the Antelope Valley. During 2006, approximately 20 percent of the water supply in the Regions was groundwater. The groundwater is extracted from 33 wells drilled into the aquifers in the Lancaster Subunit of the Antelope Valley Groundwater Basin impacted by arsenic, which is naturally present in rocks and minerals.	1,000,000	46,878	144,215 16	Los Angeles	IV	2007
4670 0110006	0110006-037	CITY OF HAYWARD	Replace 16 inch pipeline with 30 inch pipeline.	0	0	с	Inadequate hydraulic capacity	1,181,000	31,678	146,398 04	Alameda	П	2002
4671 0110006	0110006-032		inlet and sewer line arrangement.	0	U	L	disinfectant.	1,300,000	31,078	140,398 04	Aldmeud	п	2002
4672 0110006	0110006-040	CITY OF HAYWARD 4.9 Million G Reservoir	allon Design and construct a 4.9 million gallon reservoir in the 250 elevation zone.	e O	0	С	Insufficient emergency water storage in the 250 elevation zone.	7,165,000	31,678	146,398 04	Alameda	П	2002
4673 0110006	0110006-038	CITY OF HAYWARD	Replace water mains and install special fittings.	0	0	С	Water system needs retrofitting where water mains cross the Havward fault line.	1,137,000	31,678	146,398 04	Alameda	Ш	2002
4674 0110006	0110006-031	CITY OF HAYWARD	Project to recoat the interior and exterior of the south Walpert tank	0	0	С	Water reservoir has many paint blisters, exposing the underlying steel to corrosion.	500,000	31,678	146,398 04	Alameda	Ш	2002
4675 0110006 4676 0110006	0110006-034	CITY OF HAYWARD	Replace with larger main. Replace approximately 700 feet of 12-inch water lines	0	0	C C	Undersized water main. existing water line impacted by CalTrans construction	1,600,000 140,000	31,678 31,678	146,398 04 146 398 04	Alameda Alameda	11	2002
4677 0110006	0110006-049	CITY OF HAYWARD	at the Calaroga Avenue Overcrossing Make required additions to the planned Hesperian	0	0	c	Inter agency water availability with adjacent water	625,000	31,678	146,398 04	Alameda		2004
4678 0110006	0110006-025	CITY OF HAYWARD	Booster Pump Station Construct Booster Station off the 42 inch aqueduct.	0	0	с	districts Inadequate water supply.	7,550,000	31,678	146,398 04	Alameda	Ш	2002
4679 0110006	0110006-024	CITY OF HAYWARD	Construct emergency water supply groundwater well.	0	0	с	Provide an emergency water supply in case of cut-off from Hetch-Hetchy water system.	1,450,000	31,678	146,398 04	Alameda	II	2002

4680 0110006	0110006-026	CITY OF HAYWARD		Make various structural and piping modifications to	0	0	С	Retrofit reservoir against earthquakes	1.000.000	31.678	146.398 04	Alameda	ш	2002
4000 0110000	0110000 020			Harden Reservoir.	0	0	c		1,000,000	51,070	140,000 04	Alameda	"	2002
4681 0110006	0110006-035	CITY OF HAYWARD		Replace mains.	0	0	С	65 year old water mains - hydraulic capacity. Inadequate	3,000,000	31,678	146,398 04	Alameda	II	2002
4682 0110006	0110006-039	CITY OF HAYWARD	New Booster Pump Station	Design and construct a new booster pump station off the 42" aqueduct	0	0	С	Inadequate water supply to meet the needs of a growing population	7,550,000	31,678	146,398 04	Alameda	П	2002
4683 3310037	3310037-005	Corona, City of	Groundwater Desalting Feasibility Study	The City of Corona is proposing to evaluate the feasibility of constructing an additional reverse osmosis facility. In order to reduce the TDS / TIN in the City's wastewater discharge, a reverse osmosis treatment facility will be evaluated as a means of reducing these contaminants. The City has identified several site locations and this study will help evaluate all locations and provide the most feasible option. The City has currently identified the options of: expanding the existing desalter or the construction of a new desalter on the west side of town (Mangular well system), at Water Reclamation Facility No. 1 (wastewater effluent) or on the east side of town (El Sobrante Groundwater Treatment Project). The desalter to be constructed on the east side of town will also improve known groundwater contaminants as identified in the City's approved AB3030 Groundwater Management Plan. The proposed feasibility study will include a preliminary analysis will evaluate site location, groundwater capacity, and infrastructure improvements. Upon completion of the preliminary analysis and site identification, an Engineering Design Report. The greater the proposed feasibility study will evaluate site location, groundwater capacity, and Infrastructure improvements. Upon completion of the preliminary analysis and a the ginetification, an Engineering Design Report will be prepared to help facilitate the necessary CEQA compliance and funding opportunities.	0 s ), e	0	C	The City of Corona, as part of its Wastewater Discharge Permit, has to meet certain discharge levels for TDS and TIN. Currently, the City operates at or near the upper limits of these levels. The City currently operates the Temescal Desalter which desalts a portion of its groundwater supply in order to improve the quality of the wastewater discharge. An additional desalter can be used to further reduce the TDS / TNI levels within the City's groundwater thereby improving the City's wastewater discharge levels.	240,000	41,861	150,253 20	Riverside	v	2009
4684 3610041	3610041-026	SAN GABRIEL VALLEY WC - FONTANA	Plant F17 Nitrate Treatment Facility	The proposed project will augment the existing 10- vessel perchlorate removal ion exchange system with an additional ten vessels dedicated to nitrate removal. Site grading will include mobilization and demobilizatio and cleanup. Portions of the site will be regraded to provide a well-draining site with appropriate Storemwater treatment facilities and new Ion Exchange System facilities. The Ion Exchange system consists of eight 1,500 GPM ion exchange reactor vessels for nitrate and perchlorate removal on a reinforced PCC foundation pad and related piping.	O m e	0	С	Fontana Water Company's Plant F17 occcupies an approximately 4.15-acre lot just east of the southeast corner of the intersection of San Bernardino and Cherry Avenues about two blocks north of the I-10 Freeeway in the City of Fontana. The plant is a primary production and delivery point to south west portion of th service area producing approximately 5,000 gpm. Currently the plant is equipped with an ion exchange system to remove perchlorate. The site wells F17B and F17C have high levels of Nitrate which also must be removed. The same ion exchange system cannot be used for both pollutants due to differential removal rates for the same pollutant with a given media resin. A different resin must be used for each pollutant, therefore, a new ion exchange system must be used to remove nitrates. Well F17B has an historic high nitrate level of 70.0 ppm and well F17C has an historic high nitrate level of 50.0 ppm.	2,000,000	42,871	153,647 13	San Bernardino	v	2008
4685 3610041	3610041-017	SAN GABRIEL VALLEY WC - FONTANA	Install ion exchange treatment Well F35A	Install treatment using ion exchange technology to remove perchlorate	0	0	с	Well F35A is contaminated with perchlorate above the AL	1,750,000	42,871	153,647 13	San Bernardino	v	2002
4686 3610041	3610041-015	SAN GABRIEL VALLEY WC - FONTANA	Install ion exchange treatment Well F18A	Install treatment using ion exchange technology to remove perchlorate	0	0	С	Well F18A is contaminated with perchlorate above the AL	1,750,000	42,871	153,647 13	San Bernardino	V	2002
4687 3610041	3610041-011	SAN GABRIEL VALLEY WC - FONTANA	Install Ion Exchange Treatment Well F3A	Install treatment using ion exchange technology to remove nitrate and perchlorate	0	0	с	Well F3A is contaminated with nitrate above the MCL and perchlorate above the AL. (Well is inactive)	1,750,000	42,871	153,647 13	San Bernardino	V	2002

4688 3610041	3610041-023	SAN GABRIEL VALLEY WC - FONTANA	Plant F25 Perchlorate and Nitrate Treatment Facility	The proposed project will construct twelve (12) ion exchange vessels for nitrate and perchlorate treatment. The project includes grading, site work, and twelve ion exchange vessels on reinforced PCC foundation pads together with related piping and electrical facilities.	0	0	с	This project is intended to address treatment of groundwater sources with maximum contaminant level exceedances of nitrate and perchlorate. This treatment facility will treat groundwater from three sources, F25A, and F18A. The combined capacity from these three wells is approximately 7,000 gpm. All three sources are currently out of service. Perchlorate levels in these sources range from 6.0 ppb to 16.0 ppb and nitrate levels range at or above 45.0 ppm.	5,000,000	42,871	153,647 13	San Bernardino	V	2008
4689 1910039	1910039-015	SAN GABRIEL VALLEY WATER COEL MON	TE Plant No. 8 Perchlorate & 1,4-Dioxane Treatment Facility	Construct and operate a 5,000 gpm ion-exchange and advanced oxidaiton with ultra-violet light treatment facility to remove perchlorate and 1,4-Dioxane from Wells 88,8C, 8D, and 8E at Plant No. 8. The funds requested would cover engineering, equipment, and construction of the treatment facilities.	0	0	C	San Gabriel Valley Water Company's (San Gabriel) Plant No. 8 lies within the South El Monte Operable Unit of the USEPA San Gabriel Valley Superfund. Perchlorate at half the DPH established MCL of 6 ppb and 1,4-Dioxane at 0.57 ppb. San Gabriel currently operates a 5,000 gpm VOC treatment facility at Palnt No.8. Should perchlorate or 1,4-dioxane go above the MCL or NL respectively, San Gabriel will have to take Plant No. 8 off line due to the inability of the existing VOC treatment technology to remove perchlorate and 1,4-Dioxane. Plant No. 8 is a vital water supply facility for San Gabriel. San Gabriel proposes to design and construct a 5,000 gpm ion-exchange treatment facility to remove perchlorate and an advanced oxidation with ultra-violet treatment system to remove 1,4-Dioxane from Wells 88, 8C, 8D, and 8E and Plant No.8.San Gabriel currently also supplies emerency water supply for a municipal water agency, City of Monterey Park, from its Plant No. 8. The City of Monterey Park is currently affected by VOCs, and percholorate and are operating DPH approved treatment facilities to remove VOCs and perchlorate. Should Plant NO. 8 have to go off line due to perchlorate and 1,4-Dioxane, not only would San Gabriel not have this water supply available but, also the City of Monterey Park would not have this emergency supply available to augment their water supply needs.	5,534,700	46,304	161,945 22	Los Angeles	IV	2008
4690 1910126	1910126-011	POMONA - CITY, WATER DEPT.	Well 38 Drill & Equipment	The project will have the following components: 1. Engineering and Design 2. Land Aquisition (Possible) 3. Well Drilling 4. Equipping of Electrical, Mechanical, Piping, Etc., 5. Well Head Treatment 6. Construction of Housing for Well Head Treatment and/or equipment 7. Monitoring & SCADA Installation 8. Brine Disposal Pipeline.	O f	0	С	With the increasing water demand generated by changes in population, Pomona has had to secure additional water supply sources. To meet this need, the City has determined that additional pumping in Six Basins is feasible. It is expected that this project will help Pomona meet its growing needs by adding an additional water source and providing flexibility in it water operations. The Six Basins, as in the neighboring groundwater basins, has been subject to high levels of nitrates. To that end, any new facilities brought on line will require a well head treatment in the form of an Ion Exchange Facility.	6,700,000	30,281	162,140 15	Los Angeles	IV	2007

4691 1910126 1910126-012	POMONA - CITY, WATER DEPT.	Treatment - Ion Exchange (Pomona Basin Wells)	This project will have the following components: 1. O Engineering and Design 2. Equipping of Electrical, Mechanical, Piping, Etc., 3. Well Head Treatment 4. Construction of housing for well head treatment and/or equipment 5. Monitoring & SCADA Installation 6. Brine Disposal	0	с	Because of the high nitrate and perchlorate levels from Well 3, Well 7, Well 8 and Well 32, it is necessary to blend MWD water for nitrate and perchlorate treatment. As we move forward with the statewide drought it is expected that MWD supplies will be cut back in response to the drought. This action, from MWD, is expected to render these water sources in- active.	4,531,375	30,281	162,140 15	Los Angeles	IV	2007	
							By establishing a regional ion exchange treatment facility, the well sources are not as vunerable to the actions of MWD. In addition, the treatment will lend flexibility to the water system operations by reducing the dependency on the City's 15 MGD Anion Exchange Plant located in the central part of Pomona.						
4692 1910126	1910126-013	POMONA - CITY, WATER DEPT.	Spadra Basin Well & Treatment	The project will have the following components: 1. O Engineering and Design 2. Land Aquisition (Possible) 3. Well Drilling 4. Equipping of Electrical, Mechanical, Piping, Etc., 5. Well Head Treatment 6. Construction of Housing for Well Head Treatment and/or equipment 7. Monitoring & SCADA Installation 8. Brine Disposal.	0	с	With the increasing water demand generated by changes in population, Pomona has had to secure additional water supply sources. To meet this need, the City has determined that additional pumping in the Spadra Basin is feasible. It is expected that this project will help Pomona meet its growing needs by adding an additional water source and providing flexibility in its water operations.	6,700,000	30,281	162,140 15	Los Angeles	IV	2007
							The Spadra Basin, as in the neighboring groundwater basins, has been subject to high levels of nitrates and perchlorate. To that end any new facilities brought on line will require a well head treatment in the form of an lon Exchange Facilities.						
4693 1910124	1910124-002	PASADENA-CITY, WATER DEPT.	Sunset Well Perchlorate Treatment Facility	The proposed project includes installation of an ion exchange perchlorate treatment system (Ion Exchange System), a booster pump station, a chloramination system, and piping at PWP's Sunset Reservoir. The proposed Ion Exchange System will be designed to remove perchlorate contamination from groundwater produced from either the Copelin and Sunset wells or the Bangham well by iself. Ion Exchange treatment technology is a proven and accepted method of removing perchlorate. Currently, average perchlorate concentrations at the Copelin and Sunset wells are approximately 18.5 micrograms per liter (ug/L) and 16.4 ug/L respectively. These perchlorate concentrations exceed the California Department of Public Health (DPH) Notification Level for perchlorate of 6 ug/L.The proposed Ion Exchange System will be designed for an initial capacity of 2,300 gallons per minute (gpm) with the potential to upgrade to an ultimate capacity of 4,200 gpm. The Ion Exchange System includes the following process- groundwater is introduced to the ion exchange vessels using a piping manifold equipped with piping flow control valves to evenly distribute water into each of the lead ion exchange vessels. Depending on the system chosen, either two or three pairs of ion exchange vessels will operate in lead-lag mode,	0	c	Several Pasadena Water and Power (PWP) groundwater wells are contaminated with perchlorate, a component of solid-rocket fuel. Weekly water samples were taken from January 1998 to Ocotber 2001, while monthly samples have been taken from October 2001 to present. During that time, perchlorate levels have ranged from "Not Detected" (ND) to 33 parts per billion (ppb). The California Office of Environmental Hazard Assessment (OEHHA) has set the perchlorate public health goal (PHG) at 6 ppb, which is also the perchlorate Notification Level (NL) set by the California Department of Health Services (DHS).Currently, eight groundwater wells have been shut down due to perchlorate contamination exceeding the NL. Specifically in the Sunset Reservoir, three wells have been shut down. The loss of these three wells represents a loss of 17,000 are-feet (AF) of groundwater pumping capacity.As a result of the shut downs, PWP has increased its purchase and reliance on imported water from the Metroplitan Water District (MWD) and is forced to increase its draw from the remaining active wells, increasing power consumption and "wear and tear" of the wells. If the perchlorate plume continues to spread through the groundwater aquifer, PWP could be forced to shutdown additional wells and increase reliance on imported water. In addition to perchlorate contamination, PWP faces a challenge with the method	1,149,633	36,830	168,700 15	Los Angeles	IV	2009

4694 3610034	3610034-001	ONTARIO, CITY OF	Water Facilities Security Improvements	The current City of Ontario Water System Security O Vulnerability Assessment (WSSVA) outlines renovations and upgrades that need to be made to all the City's water facilities to ensure the security of the City's water system. All well sites, reservoirs, pressure regulating stations, and booster pump stations were evaluated. The major recommendations include replacing or upgrading facility fencing and access gates, installing facility intrusion alarms and connecting the alarms to the City's SCADA system, and installing motion sensing lighting.	0	C	Security Project	1,200,000	34,006	172,701 13	San Bernardino	v	2007
				Phase 1 of the project is currently under way. Several reservoir sites are getting fencing and access gate upgrades and intrusion alarms are being installed on eleven reservoir hatches which currently do not have any alarms. The alarms are also being connected to the Citty's SCADA system. Several of the reservoirs are located in the City of Upland and in City parks, so not only will this portion of the project benefit the City of Ontario's water security, but also help ensure the safety of the City of Upland's residents and people who visit the parks. A second portion of the project is to replace the access gates at the City's Public Works Agency. All new gates will be motorized and have a keypad entry system.									
4695 3010062	3010062-005	City of Garden Grove	Getaway Transmission Lin	e The City of Garden Grove (City) is seeking grant funds in O the amount of \$4,940,000, to fund the City's Getaway Pipeline Project. This project is located across the length of Garden Grove, beginning at Lampson Avenue east of Ninth Street, going westerly in Lampson Avenue to Euclid Street, going northerly in Euclid Street to Chapman Avenue, and going westerly in Chapman Avenue past Western Avenue where it empties into West Garden Grove Reservoir (a 10 million gallon storage facility). The Getaway Pipeline will interconnect with an existing transmission main located in Lampson Avenue at Beach Avenue and Santa Rosalia Street. These interconnects provide for better hydraulic distribution and will also allow Garden Grove to supply its own water to a City area presently served by a private water company. This project is scheduled to begin in September 2012 and will be publicly bid and awarded to the lowest responsive bidder, a properly licensed contractor with necessary experience, bonds, and insurance. The selected contractor shall be required to comply with all facets of the contract documents that include labor compliance practices in accordance with the Davis Bacon Act.The grant monies will fully fund project costs for equipment, installation, construction, legal, administrative and permits. The design and implementation of this project (funded by	0	C	The City of Garden Grove (City) currently has two major booster pump / reservoir sites within a half mile from each other on the east end of the town. The two sites, Westhaven and Lampson Pump Stations, have 20 million gallons and 8 million gallons of storage capacity respectively. The proximity of these two sites has lead to underutilization of their storage capacity due to water aging concerns and resulting in nitrification during certain times of the year. Concurrently, the west end of town was master planned to replace its Well 16 due to its age, concentrations of iron and manganese, and lack of waste discharge storm drain facilities. The Lampson site currently has two filling wells that can supply the 8 million gallons of storage at this site. However, one of the wells with a capacity of 4,000 gpm, Well 28, has been turned off due to recent high nitrate concentrations. Well 28 had traditionally blended its flow with that of Well 23, but Well 23 conveys only half the flow of Well 28 and Well 28 became too costly to run with pinching the flow down to reach acceptable blended nitrate concentrations with Well 23. It is also noted that Well 23 is a 33-year-old cable tool well that needs to be replaced with a larger and higher water quality well. The new well, Well 31, is currently being drilled. Well 31 is being constructed to ensure reliability of flow into the Lampson site storage. It is anticipated that Well 31 will be fully utilized with Well 28, upon its	4,940,000	34,077	172,781 08	Orange	v	2011

4696 3610039	3610039-018	SAN BERNARDINO CITY	Waterman Pump Station Upgrade	Existing pump station has a total capacity of 8,800 gpm O pumping from a reservoir to a higher pressure zone with a static head differential of 167 ft. The project consists of removal of an existing yault roof slab and replacing it with a new slab designed to support the weight of the new pumps resting on the slab. The new pumps will be can-type submersibles with the motor above the slab and the pump below the slab. Suction and discharge piping from existing pumps will be re- routed to the new pumps in accordance with a schedule aimed at minimizing disruption of service. Work also includes new valves, fittings, pipe supports, control transmitters and other instrumentation, and necessary electrical equipment to complete the installation of the pumps. Disinfection, testing, and start-up is also part of the work. The old vault will be abandoned in place after the new pumps and controls are in in satisfactory operation.	0	C	The existing pumps in this project are located in a buried vault deep in the ground. The facility is about 60 years old based on the needs of the time. Maintenance is costly and difficult. Current confined space regulations make it even more difficult to maintain this facility. Pump controls are obsolete and require frequent physical monitoring. New pumps are desired to be can-type submersibles with above-ground motor. This will allow for better system operation, less costly maintenance, and better capability to respond to emergencies.	1,500,000	42,301	173,359 13	San Bernardino	V	2007
4697 3610039	3610039-040	SAN BERNARDINO CITY	Replacement of a 12" Pipe with a 16" Pipe on Meridian Avenue	This project is located in the Upper Pressure Zone (also O known as 1416 Zone) of the City of San Bernardino. The project is located in Meridian Avenue between Baseline Street and Etiwanda Avenue for a distance of 2,900 LF. This pipe provides the link between a 20" diameter pipeline in Baseline Street and the distribution network. As such, it is an important part of the distribution system and needs to meet industrial fire flow demands. The Master Plan network analysis recommends the additional 16" pipeline to meet the increasing demands.	0	С	The San Bernardino Municipal Water Department's 2007 Water Master Plan identified certain pipe segments in the water distribution network that are undersized to meet the increasing current and future water demands. The Master Plan recommends that these undersized pipes be improved in accordance with a priority schedule. Priority 1 projects are those that need to be implemented within 5 years from the date of the Master Plan (2007). The replacement of a 12" pipe with a 16" pipe in Meridian Avenue is a Priority 1 project that needs to be implemented by 2012.	696,000	42,301	173,359 13	San Bernardino	v	2011
4698 3610039	3610039-019	SAN BERNARDINO CITY	Additional Capacity for Pump Station pumping from Upper to Mountain Zones	O to as Mountain Pumping Plant is also referred to as Mountain Pump Station and is located on Electric Drive north of Northpark. The combined capacity of this pump station is 1,500 gpm. The Master Plan recommends additional pumping capacity of 2,000 gpm as Priority 1 and 900 gpm as Priority 2, for a total of 2,900 gpm additional capacity. This additional pump pacity at the required hydraulic head requires 300 horsepower of additional pumps. The existing pump stations will need to be modified to accommodate the additional pump, motor, electrical equipment and wiring, as well as control instrumentation.	0	C	The San Bernardino Municipal Water Department has sixty six (66) water pumping facilities in its service area. These pumping stations pump water from lower pressure zones to higher pressure zones, when water demand in the higher zones is more than the source and storage capacity available within that zone. The Water Master Plan of 2007 for the City of San Bernardino has identified thirteen (13) water pump stations which are deficient in capacity and need capacity improvement. The Master Plan recommends additional capacity for the 13 facilities. The capacity increase has been given priority rates on the scale of 1 through 3, with 1 being the highest priority. Priority 1 and 2 projects are recommended for early implementation. The Upper to Mountain Zone Pump Station is one of the 13 deficient pumping facilities that needs to be improved.	1,000,000	42,301	173,359 13	San Bernardino	v	2007
4699 3610039	3610039-047	SAN BERNARDINO CITY	Enhancement of San Bernardino Basin Area Groundwater Flow Model	Provide update to the groundwater flow model. O	0	С	An updated model will verify that existing contamination treatment is effective and identify new contamination if present. This effort is to ensure proactive surveillance and protection of the groundwater basin.	1,422,758	42,301	173,359 13	San Bernardino	v	2012

4700 3610039	3610039-021	SAN BERNARDINO CITY	3 MG Reservoir in Terrace Zone	The Terrace Pressure Zone, also known as 1312 Zone, is O located at the south west area of the City of San Bernardino. Construction of a 3 MG reservoir requires finding an appropriate site to accommodate a reservoir of this size. Once an appropriate site is found and acquired, the project needs to be designed and constructed. The dimensions for the reservoir will be approximately 130 feet in diamter and 32 feet high.	0	С	The existing reservoir capacity in the Terrace Pressure Zone of the City of San Bernardino is 2.4 MG (million gallons). The Water Master Plan of 2007 identifies the need for an additional 3 MG capacity in this pressure zone as Priority 1. Priority 1 is the highest priority for a project and it means that the project needs to be constructed in the near future in order to sustain an adequate water service with due regard to public health and safety. The Water Master Plan also identifies another 3 MG of capacity as priority 3, which is in addition to the 3 MG under Priority 1. The Priority 3 work allows a lapse of time before that project is constructed.	3,250,000	42,301	173,359 13	San Bernardino	V	2007
4701 3610039	3610039-020	SAN BERNARDINO CITY	Additional Capacity for Pump Station pumping from Upper to Sycamore Zones	O on 48th Street in the City of San Bernardino. O on 48th Street in the City of San Bernardino. The combined capacity of this pump station is 6533 gpm. The Master Plan recommends an additional pumping capacity of 1,606 gpm of additional capacity as Priority 2. This additional pump capacity at the required hydraulic head requires 150 horseper of additional pumps. The existing pump station will need to be modified to accommodate additional pump, motor, electrical equipment and wiring, as well as control instrumentation.	0	C	The San Bernardino Municipal Water Department has sixty six (66) water pumping facilities in its service area. These pumping stations pump water from lower pressure zones to higher pressure zones, when water demand in higher zones is more than the source and storage capacity available within that zone. The Water Master Plan of 2007 for the City of San Bernardino has identified thirteen (13) water pump stations which are deficient in capacity and need capacity improvement. The Master Plan recommends additional capacity for the 13 facilities. The capacity increase has been given priority rates on the scale of 1 through 3, with 1 being the highest priority. Priority 1 and 2 projects are recommended for early implementation. The Upper to Sycamore Zone Pump Station is one of the 13 deficient pumping facilities that need to be improved.	500,000	42,301	173,359 13	San Bernardino	v	2007
4702 3410001	3410001-013	Sacramento Suburban Water District	SSWD - Second Groundwater Well at North Antelope Site	The District proposes to construct a second ground of water well on the Antelope North Road well site. Based on the test hole data and analysis, the ground water aquifer characteristics under the existing Antelope Well site show the potential for a second well to be drilled on this same site. The District proposes to construct a second ground water well on the existing Antelope North Road Well site. In 2000, during the design of the Antelope North Road Well site. In 2000, during the design of the Antelope North Road Well, the siting of the well and layout of the site was set up for two wells. The layout of the pump house, disinfection system, discharge piping and underground piping was set up to handle two groundwater wells. Within the pump house additional space exists for a second motor control center to operate a second well and pump. The proposed additional well and pump has the potential of another 2,000 gallons per minute thus increasing the potential production capabilities of this site to over 4,000 gallons per minute. The proposed project would call for drilling a new second well adjacent to the first well. The depth of the wall would be set to match the previous well at the 330 – 450 foot levels. The proposed new well would constructed similar to the first well connecting into the same underground line into the distribution system and utilizing the same pump house building. A new motor control center	0	c	In 2001, the Sacramento Suburban Water District (District) constructed the Antelope North Road Production Well and Pump Station (Antelope). The location of the well is near the Sacramento/Placer County Line west of Antelope North Road. The well is 18-inches in diameter and completed to a depth of 500 feet. The sanitary seal reaches a depth of 50-feet. The well is constructed with potential recharge capabilities; however recharging to not currently being practiced. The well is equipped with a 250 HP pump capable of producing approximately 2,200 gallons per minute. A concrete block building houses the motor control center and disinfection equipment. After drilling the test hole, the data was analyzed. The data showed similar aquifer characteristics as in a previous production well located south of this site, which currently supports three deep ground water wells. The test pump data also showed the specific capacity of the existing Antelope well to be 110 gpm/ft at a rate of 2,450 gpm. The geophysical characteristics of the Antelope Well demonstrates a possibility that this site can support two deep ground water wells. The general land use in the area is single- family residential housing. With future growth in the area consisting of more single-family housing, the District sees a need for additional potable source water for domestic and fire protection. The District's policy is to have sufficient ground water supplies at 15% over	1,500,000	44,744	177,000 09	Sacramento	1	2008

3610018-002	Cucamonga Valley Water District	Zone 1 to 3 Pump Facilitie	s The project is made up of two parts a 6,000 to 10,000- gpm pump station and 20,000 liner feet of 18" -24" pipeline. The pump station would be located at the District's existing Reservoir 1 site. Estimated cost for the projects is \$8,750,000.	O e	0	С	The District has numerous producing wells in Zone 1. These wells produce water in excess of the Zone 1 needs. These projects would allow the District to better utilize its existing groundwater supplies by improving the ability to move the water from Zone 1 to Zone 3. This is critical to support the Lloyd W. Michael Water Treatment Plant during times of shutdown or reduced flow because of State water reduction due to environmental and drought conditions.	8,750,000	46,667	185,534 13	San Bernardino	V	2009
3610018-001	Cucamonga Valley Water District	30″ 1B-1C Transmission Line	This Project is to design and construct 8500 lineal feet of 30" Transmission Main from the 1B Pump Station header in Cleveland Ave to the 1C pipeline at 6th St to Charles Smith Road . The scope of work will include the construction of 2 PRV stations; one at 6th Street and Rochester Avenue and the other at the 1B Pump Statio header. The complexity of the project includes extra depth requirements, traffic control, bore and jacking, and extensive paving and median island replacement.Estimated cost for the project \$4,015,000	0 2 n	0	c	The pressure and water system in Zone I is currently maintained through 1B Pump Station. The purpose of this Project is to construct a dedicated transmission main which will allow the District to operate the 1B pump station more efficiently. This pipeline would direct water into Zone 1 and the 1B Pump Station from the Zone 2 and would also efficiently use three new wells (Wells 39, 40, and 43) north of Foothill Boulevard recently brought in service.	4,015,000	46,667	185,534 13	San Bernardino	V	2009
2110002-006	Marin Municipal Water District	Desalination Plant	Build desalination plant to treat water from San	0	0	С	Insufficient potable water supply. Russian River supply is uncertain	20,000,000	60,599	190,800 18	Marin	Ш	2002
2110002-003	Marin Municipal Water District		Install an air compressor at Alpine Lake to eliminate or	0	0	С	Lake stratification causes water quality problems.	250,000	60,599	190,800 18	Marin	Ш	1998
3710034-005	Otay Water District	Middle Sweetwater River Basin Groundwater Well Pilot Project	control the problems. The purpose of the Middle Sweetwater River Basin Groundwater Well Pilot project is to identify the feasibility of developing a groundwater resource production system and to determine and assess any limitations or constraints that may arise. The Middle Sweetwater River Basin Groundwater Well Pilot Project scope of work will accomplish six primary goals as follows: Update project setting • Update applicable project alternatives analysis • Prepare groundwater we pilot project implementation plan• Construct and test pilot monitoring and extraction wells• Provide recommendations regarding if treatment facilities are required, projected costs, and feasibility to develop a groundwater Well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of potable water• Prepare groundwater well production project implementation plan and scope of workThe groundwater conjunctive use concept planned to be developed is described as the extraction of the quantity of water from the groundwater within the basin. This quantity has been estimated to be on the order of 12.5% of the total consumption of the Otay WD customers within tha basin as measured bu their water measure. In the	O t III	0	c	The development and/or acquisition of potential groundwater supply projects by the Otay Water District (WD) has been resurrected in response to the regional water supply issues related to climatological, environmental, legal, and other challenges that have impacted regional water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta, the current ongoing western states drought, and the spiraling water pricing pressures. Local ground water supply projects will allow for less reliance upon imported water, achieve a level of independence of the regional wholesale water agencies, and diversify the Otay WD water supply portfolio consistent the March 2007 Integrated Water Resources Plan.As a result and in recognition of the need to develop sufficient alternative water supplies, the Otay WD has moved to the next step for development of a production groundwater well within the Middle Sweetwater River Basin, which is the implementation of a pilot well project. The Middle Sweetwater River Basin is located within the Sweetwater River Basin is that reach of the river from Sweetwater Reservoir to the upstream Loveland Reservoir. The ultimate objective of the Otay WD is to develop a groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of nortable water sa local sunnut. The primary desired	2,000,000	45,446	191,500 14	San Diego	v	2009
	3610018-002 3610018-001 2110002-006 2110002-003 3710034-005	3610018-002 Cucamonga Valley Water District 3610018-001 Cucamonga Valley Water District 2110002-006 Marin Municipal Water District 2110002-003 Marin Municipal Water District 3710034-005 Otay Water District	3610018-002 Cucamonga Valley Water District Zone 1 to 3 Pump Facilitie   3610018-001 Cucamonga Valley Water District 30" 1B-1C Transmission Line   2110002-006 Marin Municipal Water District Desalination Plant   2110002-003 Marin Municipal Water District Desalination Plant   3710034-005 Otay Water District Middle Sweetwater River Basin Groundwater Well Pilot Project	3610018-002 Cucamonga Valley Water District Zone 1 to 3 Pump Facilities The project is made up of two parts a 6,000 to 10,000-gmp nump station and 20,000 liner for 18°-24°   3610018-001 Cucamonga Valley Water District 30° 1B-1C Transmission This Project is to design and construct 8500 lineal feet of 30°-24°   3610018-001 Cucamonga Valley Water District 30° 1B-1C Transmission This Project is to design and construct 8500 lineal feet of 30°-27°   3610018-001 Cucamonga Valley Water District 30° 1B-1C Transmission This Project is to design and construct 8500 lineal feet of 30° Transmission Main from the 1B Pump Station header in Ceveland Ave to the 1C preline at 60 fts to Charles Statin Road . The scope of work will include the construction of 2 FW stations; one ad is first end and Rochester Avenue and the ether at the 1B Pump Statio header. The complexity of the project includes setter depth requirements, traffic control, bore and jacking, and extensive paving and median island replacement.Estimated cost for the project \$4,015,000   2110002-003 Marin Municipal Water District Desalination Plant Build desalination plant to treat water from San Francisco Bay   3710034-005 Otay Water District Desalination Plant Build desalination plant to a determine and assess any limitations or construct and east asses any limitations regarding if trestation wells e	3610018-002 Cucamonga Valley Water District Zone 1 to 3 Pump Facilities The project is made up of two parts a 6,000 to 10,000 · O   3610018-001 Cucamonga Valley Water District Soft 16 - 10 Pump Facilities Soft 16 - 10 Pump Facilities   3610018-001 Cucamonga Valley Water District 30° 18 - 10 Transmission Line This Project is to design and construct 8500 lineal feet 10 of 30° Transmission Main from the 18 Pump Station header in Cleveland Are to the 12 pipeline at 6th 5t to Charles Smith Road. The scope of work will include the construction of 2 PEV stations; on at 6th Street and Rochester Avenue and the other at the 18 Pump Station header. The complexity of the project 154,015,000.   2110002-006 Marin Municipal Water District Desalination Plant Build desalination plant to treat water from San Groundwater Weit Pilot Project O   3710034-005 O tay Water District Desalination Plant Build desalination plant to treat water from San Groundwater Weit Pilot Project O O   3710034-005 O tay Water District Desalination Plant Build desalination plant to treat water from San Groundwater Weit Pilot Project O O   3710034-005 O tay Water District Desalination Plant Build desalination plant to treat water frow Basin Groundwater Weit Pilot Project main and assess any limitations or constraints that may arise. 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4708 3710034	3710034-001	Otay Water District	IP Surveillance for Water Security	Otay Water District, CA, requests consideration for funding under Proposition 50: Water Security, Clean Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et seq.), Chapter 3 – Water Security. The District serves 190,000 residents over 125 square miles of southeastern San Diego County, California. Otay facilities serve the water and/or sewer service needs of the people living in the communities of southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, eastern Chula Vista, East Lake and Otay Mesa along the international border with Mexico. The District has 37 operational reservoirs and 27 pump stations with 666 miles of potable water mains and 86 miles of sewer mains. The Metropolitan Water District of Southern California imports the Otay Water District's water, which it acquires through five connections to San Diego County Water Authority aqueducts. The District's 2004 Yulnerability Assessment found eight sites at high risk for terrorist threats, vandalism, and theft. The Assessment recommended increased perimeter security. Currently, Otay Water District' for address the increasing incidences of vandalism and theft at their water facility sites. The 5% validity of perimeter alarms further supports the District's decision to overhaul perimeter security with requisite video surveillance. Otay Water District proposes to use Proposition 50, Chapter 3, funds to secure and police	0	0	C	Security Project	2,500,000	45,446	191,500 14	San Diego	v	2007
4709 3710034	3710034-002	Otay Water District	San Diego County Water Authority Regional Inter- Agency Security Cooperative	The San Diego County Water Authority (SDCWA) Regional Interagency Security Cooperative requests an invitation to apply for funding under Proposition 50: Water Security, Clean Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et. seq.), Chapter 3 – Water Security. SDCWA's Regional Interagency Security Cooperative comprises six water districts in District #14, San Diego County, CA, seeking regionalized, comprehensive communications interoperability in a collaborative effort to address the unreliability of their water safety security systems. The six water districts initiating this solution are as follows: 1) Otay Water District, serving population of 190,000 with 37 reservoirs, 27 pump stations; 2) Padre Dam Municipal Water District, serving population of 18,000; 4) Rincon del Diablo Municipal Water District, serving population of 28,200; 5) Santa Fe Irrigation District, serving population of 20,900; and 6) Valley Center Municipal Water District, serving population of 24,800. The total population served by these six collaborating districts is approximately 378,684. Geographically, these districts span the length of San Diego County. As San Diego County Water Authority (SDCWA) member agencies, the districts receive an estimated 90% of their imported water from SDCWA, the sole source of which is the Metropolitan Water	0	0	C	Security Project	20,000,000	45,446	191,500 14	San Diego	v	2007

4710 3710034	3710034-006	Otay Water District	Otay Water 1296-3 Reservoir	This project consists of constructing a new 2.0 million gallon reservoir adjacent to the two existing reservoirs. The scope of work for the project includes a new access road providing easier access for large vehicles, a new 22 inch inlet pipeline and 16-inch outlet pipeline, extensive grading, relocation of a homeowner's water service, acquisition of access easements and temporary construction easements, reservoir appurtenances, and replacement of pavement on Bear Mountain Way. In order to create a self-sustaining and more environmentally friendly project, a solar power generating system was added to this project. The solar system includes a 75 square-foot photovoltaic panel for generating power, which is tied to the SDG&E power grid. When the demand for power at the site is low, the site has the capability of being self-sufficient.	0 5 0- 2	0	c	This project addresses the issues of expansion and reliability, increased capacity, emergency storage, and reliability. According to the Otay Water Districts 2002 Water Resources Master Plan the 1296 pressure zone will require 3.03 MG of additional storage to meet the ultimate demand of 6.06 MG. Based on the existing demands, the existing storage of 3.03 MG is deficient by 1.00 MG. The 1296-3 Reservoir will add 2.0 MG of storage to the 1296 service area, resulting in a total storage of 5.03 MG.	3,640,000	45,446	191,500 14	San Diego	v	2009
4711 0110010	0110010-001	Zone 7 Water Agency	DVWTP Electrical Power System Upgrade	This project involves replacement of the main plant switchboard as well as the motor control center and switchgear for the backwash pumps and service water pumps, which were originally installed in 1975. The new equipment will have better electrical fault protection and the capability to communicate with our SCADA system, and will be designed with expansion capacity to support the plant for the next 35 years.	0	0	C	The Del Valle Water Treatment Plant's (DVWTP) main switchboard and motor control center is in extreme need of replacement. This equipment is well past its useful life, is in imminent danger of failure and is a potential safety hazard. This project will ensure that DVWTP has the ability to provide power to maintain continual operation and meet our water supply permit and safety requirements. Also, per Zone 7's 2006 Asset Management Plan (AMP) Condition Assessment, these assets are currently in poor condition, and have already outlived their expected useful lives. There are no available spare parts if any components were to fail. Failure of this system will take this 40MGD plant out of service for up to 9-12 months. Furthermore, the existing main switchboard has several code violations that pose a potential safety hazard to staff. It was recommended in the AMP that these assets be replaced immediately to minimize the chances of asset failure and the associated impacts on levels of service.	1,300,000	39	195,230 04	Alameda	Ι	2009
4712 0710003	0710003-013	Contra Costa Water District		two pipelines will be retrofitted with new encased at the crossing locations	0	0	с	Encase two oil pipelines crossing the Canal to minimize potential contamination	3,200,000	60,476	200,000 04	Contra Costa	Ш	1998
4713 0710003	0710003-016	Contra Costa Water District	Contra Costa Water District	Continue study to determine the best approach to reduce the impacts of the discharge. Construction of a diffuser, extending the discharge pipe. Controlling the timing of drainage discharge.	0	0	с	Water systems source of supply, distribution mains or storage facilities situated in close proximity to sewage, sewage effluent or animal waste facilities.	7,000,000	60,476	200,000 04	Contra Costa	II	1999
4714 0710003	0710003-014	Contra Costa Water District		Construct a new intake 7 miles south of the existing intake.	0	0	с	Construct new raw water intake and pump station for water quality and volume improvement.	121,000,000	60,476	200,000 04	Contra Costa	II	1998
4715 0710003	0710003-019	Contra Costa Water District		Construct a 7300 foot of 24-inch diameter pipeline extending from the 24 inch main.	0	0	С	Low-head transmission line. Reranked to O from H (1/18/02)	2,752,000	60,476	200,000 04	Contra Costa	Ш	2006
4716 0710003	0710003-010	Contra Costa Water District		Construct an in-line sedimentation basin near intake.	0	0	с	Construct in-line sedimentation basin to improve raw water quality in Canal.	1,000,000	60,476	200,000 04	Contra Costa	II	1998

4717 0710003	0710003-024	Contra Costa Water District	Contra Costa Canal Water Quality Protection	The project would replace the unlined portion of the federally-owned Contra Costa Canal (Canal) with a 10- foot diameter buried pipeline. The project will increas flood protection of a federal facility in an area that is experiencing rapid residential growth, increase public safety and security, improve drinking water quality, ar improve reliability of CCWD's transmission system. The unlined Canal and associated levees are very similar to the USBR Truckee Irrigation Canal which failed in northern Nevada in January 2008. Both canals serve a flood protection for encroaching communities that are being built close to the canal and rely on the earthen levees to prevent flooding. This project is included as high priority in the 2008 Federal Legislative Platform adopted by Contra Costa County and received support from the City of Oakley and the City of Brentwood, the local jurisdictions where the facility is located and area that would be directly affected by flooding. The water quality improvements associated with this project will enhance the ability of the Central Valley Project to me State water quality standards in the Canal thus reduci upstream reservoir releases. Environmental documentation is complete, \$2,800,000 of environmental mitigation implemented and all regulatory permits are in place. Design work is complete, construction has commenced on the initial phase (Phase 1) to encase 1,900 lineal feet of the cana A single bid package containing the main replacement and valve rehabilitations is currently under design. The main replacement portion of the project consists of the replacing seven (7) cast iron water mains totaling approximately 6,000 feet in length in Dawn Drive, E. Vivian Drive, Celia Drive, Phylis Drive, Anelda Drive, Peggy Drive and Marta Drive in Pleasant Hill, Californit The existing 6-inch and 8-inch PVC pipelines. In addition, all 4-inch wharf head fire hydrants within the project area, but will also improve system hydraulics through lower friction losses	o se se a a t e a a t e a a c s c a a c a a a c a a a a a a a a	0	c	The federally-owned Contra Costa Canal (Canal) was completed in 1940 to convey agricultural water to rural Contra Costa County. The area surrounding the Canal has urbanized and the Canal is now the backbone of the CCWD's water conveyance system, which provides water to over 550,000 people. The levees associated with the 21,000-foot unlined portion of the Canal have experienced damage in past storms and are susceptible to failure in a seismic event.Approximately 21,000 feet of the Canal, a water supply aqueduct, is unlined between the intake at Rock Slough and Pumping Plant No. 1. Consequently, improvements to this unlined portion of the Canal are needed to eliminate the susceptibility to water quality degradation and to ensure long-term compatibility with planned land uses in the project vicinity. Hydraulically isolating drinking water supplies in a pipeline instead of conveying supplies through an unlined, porous, open canal will ensure water quality improvement to CCWD's 550,000 customers. Without remedy, CCWD's water supplies in the unlined portion of the Contra Costa Canal will be vulnerable to continuous degradation and additional safety, security, and liability risks as development in this area increases. CCWD has developed the Contra Costa Canal Water Quality Protection Project to protect and improve drinking water quality, protect public safety, increase system security, reduce seepage into and out The purpose of the Sherman Acres II Main Replacement portion of the project is to ensure reliable, cost efficient delivery of treated water through replacement of existing pipelines that have experienced significant leak repair hill, California and are over 50 years old. The pipes are problematic and have required numerous repairs over the years due to water main leaks or breaks. Deteriorating cast iron pipe is subject to internal leakage and can eventually experience sudden burst failures. Excessive leakage can lead to washout of bedding and subsequent structural failure.	500,000	60,476	200,000 04	Contra Costa	I	2009
4719 0710003	0710003-012	Contra Costa Water District	Contra Costa Water District	Install culverts at two high potential slide locations and perform earthwork at one.	d O	0	С	Improve raw water conveyance facilities by repairing sections with potential landslide hazards.	1,800,000	60,476	200,000 04	Contra Costa	Ш	1998
4720 0710003	0710003-011	Contra Costa Water District		Construction of a parallel seismically sound pipeline ar pump station/	nd O	0	С	Construct seismically sound raw water pump station and pipeline for system redundancy.	12,100,000	60,476	200,000 04	Contra Costa	Ш	1998
4721 0710003	0710003-009	Contra Costa Water District		Relocate the drainage discharge	0	0	С	Relocate agriculture drainage channel to minimize contamination to the raw water quality.	3,500,000	60,476	200,000 04	Contra Costa	Ш	1998
4722 0710003	0710003-020	Contra Costa Water District		Drainage diversion, reversal of groundwater flow.	0	0	с	Surface drainage into lined canal. Groundwater seepage into unlined canal.	1,500,000	60,476	200,000 04	Contra Costa	Ш	1999

4723 0710003	0710003-025	Contra Costa Water District	Treated Water Reservoir Water Quality Improvement	The District is in the process of procuring and installing O new reservoir mixing systems and additional monitoring at fifteen remaining high priority reservoirs to address the water quality problems previously described: Kirker Pass, East, Oakhurst, Keller Ranch, Powerline, Clayton Valley, Murchio, Nob Hill, Irish Canyon, Divide, Shell Ridge, Newhall, Castle Rock, Northgate and Rancho Paraiso. The mixing system designs for each reservoir are unique since they vary in size, materials of construction (i.e. concrete or steel), and configuration (i.e. rectangular or cylindrical) with some located above ground and others below ground. Mechanical and/or hydraulic mixing systems can be cost effectively retrofitted without draining or entering the reservoirs. In addition, the work will include new monitoring capabilities with connection to radio telemetry to allow District staff to respond quickly if a water quality problem occurs. At reservoirs where mixing systems and updated monitoring have been installed (e.g. Midhill 2) it was found that consistent chlorine residual and water temperature is distributed through the entire depth of the reservoir and helps minimize long water age, loss of chlorine residual, and nitrification. No reportable coliform incidents have occurred in the retrofitted reservoir or adjacent water distribution systems. The District is confident that similar results can be achieved at the reservoirs listed above. To provide cathodic protection of all applicable metalic O pipelines in the City.	0	c	Contra Costa Water District (District) is experiencing chloramine decay and nitrification in the water distribution system that causes significant water quality problems that impact regulatory compliance (Total Coliform Rule); taste and odor complaints from customers; and system operations. The District operates 40 treated water storage reservoirs at 32 sites and over 780 miles of pipelines that are affected by chloramine decay and nitrification, especially in remote areas of the distribution system. The District has had several reportable coliform violations to CDPH over the past few years related to loss of chlorine residual and nitrification, however, the violations were addressed quickly and fortunately did not affect public safety or require public notifications. The District conducted a study in 2006 to quantify the level of chloramine decay and nitrification in its storage reservoirs and prioritize remedial action. The District's goal is to maintain a chloramine residual in the distribution system between 0.2 mg/l and 3.0 mg/l and the target total chlorine residual is 0.5 mg/l. These goals are consistent with American Water Works Standards. The 2006 study found that only seven of the 40 reservoirs meet the target levels more than 90 percent of the time. Measures have been taken to address the problems by installing mixers, new inlet/outlet piping, booster chlorination systems, flushing programs, and additional Color and odor problem in 8 groundwater wells	5,000,000	52,314	200,000 04	Contra Costa	Ν	2009
4725 1910048	1910048-007	CASTAIC LAKE WATER AGENCY	Rio Vista Water Treatmen Plant Expansion	t Construction of new facilities to provide for additional O treatment capacity (increasing from 30 to 60 million gallons per day) at the Rio Vista Water Treatment Plant will include additional intake pumps, clarifiers, filters, chlorine storage and injection facilities, ozone improvements, washwater return treatment improvements, a new raw water connection to MWD's Foothill Feeder, and improved maintenance facilities.	0	с	The population is growing rapidly in the Agency's service area. Additional treatment capacity is needed to accomodate future users and to ensure that high quality water consistently meeting health requirements is reliably delivered to the customers.	36,000,000	25	230,000 22	Los Angeles	IV	2009
4726 1910048	1910048-009	CASTAIC LAKE WATER AGENCY	Saugus Early Warning Monitoring Wells	The project will consist of the construction of two or monitoring well clusters upgradient of the Saugus 1 and Saugus 2 Wells. The well locations will be selected based on travel time to the wells, position of the plume, and facility of installation. For each location a cluster of three wells will be drilled into different hydrostratigraphic units so that all likely pathways of contamination can be monitored. Work will include mobilization, drilling, installation, well development, proper disposal of drilling wastes, and preparation of location maps, boring logs, and documentation. All work will be performed in accordance with industry standards and in compliance with DPH standards.	0	с	Several drinking water wells perforated in the Saugus Formation of the Santa Clarita Valley were contaminated with perchlorate in excess of the current maximum contaminant level of 6 ug/L. The likely source is a former munitions manufactuing site in Saugus. These wells have been out of service since 1997. Some have since been abandoned. Some have been replaced with wells far removed from the contamination area. Two of the wells have been rehabilitated and will be connected to a treatment plant to remove the perchlorate. This treatment plant to remove the perchlorate. This treatment plant is undergoing construction. A number of monitoring wells have or will be installed by various parties (Whittaker Bernite, the U.S. Army Corps of Engineers, Castaic Lake Water Agency) to characterize the groundwater in the region and to provide an early warning should the perchlorate concentration increase or should other contaminants from the site (e.g. volatile organic compounds) also threaten the wells. DPH staff has stated that adequate protection is an important feature needed hefree start.	750,000	25	230,000 22	Los Angeles	IV	2009

up will be permitted and compliance will be achieved.

4727 1910048	1910048-006	CASTAIC LAKE WATER AGENCY	Groundwater Transmissior MainsPhase 2	The project will consist of construction/installation of new distribution infrastructure including 1,650 linear feet of pipeline and related valves and appurtenances; saw-cutting and excavation; and restoration and repaving of sidewalks, curbs, gutters, and streets.	0	0	c	Several drinking water wells perforated in the Saugus Formation of the Santa Clarita Valley were contaminated with perchlorate in excess of the current maximum contaminant level of 6 ug/L. These wells have been out of service since 1997. Some have since been abandoned. Some have been replaced with wells far removed from the contamination area. Two of the wells have been rehabilitated and will be connected to a treatment plant to remove the perchlorate. This treatment plant is undergoing construction. A portion of the the pipelines that will convey contaminated water to the plant is also under construction as are a portion of the pipelines that will deliver treated water to the Agency's customers. A second phase has been designed and will be ready soon for construction. It is the second phase of the pipelines for which we seek funding.	1,300,000	25	230,000 22	Los Angeles	IV	2009
4728 3010092	3010092-007	Irvine Ranch Water District	IRWD Emergency Interconnection – Phase B	The Southern Orange County water agencies, Irvine Ranch Water District, MWDOC, and the Orange County Water District (agency responsible for groundwater basin management) have entered into agreements to deliver water via the Irvine Ranch Water District system infrastructure to the Southern Orange County water agencies in the event of a planned or emergency disruption to the regional imported water system, thus providing a more reliable, cost effective alternate water supply. The only other options available would be much more costly and energy intensive. The proposed project constructs a permanent pumping station facility at the Irvine Ranch Water District Zone 1 Reservoir. The proposed pumping station will allow excess available capacity to be delivered from the Orange County Groundwater Basin to the existing interties with the regional pipeline facilities that deliver water to the Southern Orange County water agencies. The project will also construct a pumping station uggrade to facilitate delivery of excess water to Southern Orange County.	0	0	c	Southern Orange County retail water agencies receive almost all drinking water from a single source, the Metropolitan Water District of Southern California (MWD) via the Municipal Water District of Orange County (MWDOC). This supply is comprised of imported water from the Colorado River and the State Water Project and is subject to quantity restrictions whether by regulatory/judicial controls, planned system outages, long-term drought, and/or natural disasters. Without a reliable alternate supply source, these water agencies have only a few days' potable water storage capacity. A water supply interruption of longer duration, a protracted drought, or large-scale wildfires, could require severe water rationing for hundreds of thousands of residents and adversely impact a multi- billion dollar per year economy. The Irvine Ranch Water District has the ability to supplement their imported water deliveries from MWD with local water supplies from the Orange County Groundwater Basin that the Southern Orange County water agencies do not have access due to the physical location of the groundwater basin.	15,269,000	88,423	316,000 08	Orange	v	2009

4729 3010092	3010092-004	Irvine Ranch Water District	Well 106	Well 106 is an existing well located in Irvine that currently produces 1000 gallons per minute of good quality water except for color units of an average of 30. Since this well is not of potable quality, it is currently supplementing IRWD's non-potable water system. IRWD proposes to add treatment so that Well 106 can be utilized in the potable water system. Well 106 will be pumped to the existing Irvine Desalter Project Potable Treatment Plant which desalts brackish groundwater using low pressure reverse osmosis (RO) membranes. Connecting Well 106 water to this treatment plant will require some additional piping, RO membranes, and pumping equipment. There will also be operational and maintenance (0 & M) costs associated with the production and treatment of the water from Well 106. The increased flow of water to the IRWD potable water system will be approximately 1100 acre-feet per year which is enough for 2200 homes. This is a very cost-effective project when compared against the cost of imported water which is currently over \$600 per acre-foot. The cost of Well 106 water after treatment will be approximately \$700 per acre- foot comprised of \$150 per acre-foot for amortized capital and \$550 per acre-foot for 0 & M costs. If IRWD receives a loan - with principal relief - in the amount requested of \$1,000,000, then the capital portion will be reduced and the total capital and 0 & M cost to	0	0	c	The State of California is in a statewide drought situation because of two consecutive years of below- average rainfall. Significant restrictions on diversions from the Delta due to various environmental factors have severely limited the State Water Project water supply deliveries to Southern California. Irvine Ranch Water District (IRWD) receives 35% of its drinking water supplies imported from Metropolitan Water District of Southern California (MWD). MVD gets its supplies from the Colorado River and the State Water Project and is faced with water shortages in these supplies. IRWD receives 65% of its drinking water supplies from the local groundwater basin and desires to further enhance potable supply reliability by constructing treatment for an existing non-potable well. Increasing local supply sources will reduce demands on imported state supplies.	1,000,000	88,423	316,000 08	Orange	v	2009
4730 3010092	3010092-008	Irvine Ranch Water District	Baker Regional Water Treatment Plant	The proposed Baker Regional Water Treatment Plant (WTP) is a new microfiltration (MF) plant. The selected site is the former Los Alisos Water District Baker Filter Plant site in Lake Forest, which is located near the terminus of the Baker Pipeline. Project partners include Irvine Ranch Water District (IRWD), Moulton Niguel Water District (MNWD), Trabuco Canyon Water District (TCWD), El Toro Water District (ETVD), Santa Margarita Water District (SMWD) and the Municipal Water District of Orange County (MWDOC). The main objective of the Baker WTP project is to improve the water system reliability in south Orange County. One of the project's key reliability features is supply of untreated water to the Baker WTP from Irvine Lake in case of Santiago Lateral or MWD Lower Feeder outage. The Baker WTP capacity will be 22 mgd, operating on a continuous basis. Treated water from the Baker WTP will be delivered to south Orange County water agencies through an existing connection between the Baker Pipeline and the Allen McColloch Pipeline at the facility site or by constructing a new product water pipeline to South County Pump Station. The Baker WTP will treat raw water from Santiago Lateral or Irvine Lake via the Baker Pipeline. The Santiago Lateral or Irvine Lake via the Baker Pipeline from Lake Mathews via the MWD Lower Feeder. The raw water quality in Irvine Lake is	0 2 1 1	0	c	The State of California is in a statewide drought situation because of two straight years of below- average rainfall. Significant restrictions on diversions from the Delta due to various environmental factors have severely limited the State Water Project water supply deliveries to Southern California. Recent petitions filed by the State Water Resources Control Board state that Metropolitan Water District (MWD) is in urgent need of additional imported water to meet its municipal needs during this statewide drought. Irvine Ranch Water District (IWWD) and neighboring agencies, as part of Municipal Water District of Orange County (MWDOC), which is a member agency of MWD, are faced with local shortages and need new sources of water supply.Besides water supply shortages, water system reliability in south Orange County is a significant problem for IRWD, Moulton Niguel Water District (MNWD), Trabuco Canyon Water District (TCWD), El Toro Water District (ETWD), and Santa Margarita Water District (SMWD). The majority of the treated water supply for these agencies comes from the MWD Diemer Filtration Plant, which is located in north Orange County. The Allen McColloch Pipeline (AMP) is the primary connection for treated water deliveries to south Orange County without a treated water supply.	5,000,000	88,423	316,000 08	Orange	V	2009
4731 0110001	0110001-004	Alameda County Water District	Upgrade PT Blending Facility chemical feed system to Neal Feed	Upgrade PT Blending Facility	0	0	С	The PT Blending Facility experiences deficiencies in water quality & system reliability	1,000,000	79,088	324,796 04	Alameda	II	2003

4/32 0110001	0110001-009	Alameda County Water District	Physical Security Improvements at Critical Facilities	The project involves the installation of upgrades to perimeter site security, video surveillance for rapid alarm assessment, and other key asset protection enhancements at critical drinking water production, treatment, and distribution system storage facilities.	U	U	L	Ine Alameda County Water District (ACWD) provides potable water to over 330,000 people in the cities of Fremont, Newark, and Union City, California. Improvements to physical site security are needed to increase ACWD's ability to deliver safe and secure supplies of high quality drinking water by reducing the risk of water contamination or other malicious activities at critically important water infrastructure sites. Regional water supply benefits will result from the protection of stored drinking water which could be shared with other agencies through existing pipeline inter-connections. Local economic benefits include the creation of electrical, communication, and integration specialist jobs, as well as underground construction labor for the initial installation Long term security monitoring jobs will also be created. This project is consistent with the objectives outlined within the US EPA Water Security Initiative which was developed as a national effort in response to Homeland Security Presidential Directive 9. The project also complies with the national aggregate measures of water security as outlined by the National Drinking Water Advisory Council (NDWAC) in June 2005.	2,345,000	79,088	324,796 ()4	Alameda		2009
4733 0110001	0110001-011	Alameda County Water District	ACWD HQ Building, ADA, Structrual and EOC Improvements	This project will: 1) upgrade ACWD's emergency operations center; 2) add an area that will be used to stage field crews in the event of an emergency; 3) seismically strengthen vulnerable portions of the Headquarters building and radio communication antenna tower to meet current seismic building code standards; and 4) implement interior and exterior accessibility upgrades to comply with current America with Disabilities Act (ADA) standards.	O	0	с	The Alameda County Water District (ACWD) provides potable water to over 330,000 people in the cities of Fremont, Newark, and Union City, California. ACWD's headquarters building is located near the Hayward Fault, which is seismically active. Retrofitting the building for a seismic event and increased emergency operations and communications capability are needed to more effectively assist with water service restoration in the event of a large earthquake or other emergency conditions in the ACWD service area. Retrofit includes replacing the older existing lighting system with new, energy efficient fixtures, to reduce energy consumption. Improved access for physically challenged employees and customers is also required. The project will also	5,294,000	79,088	324,796 04	Alameda	Π	2009

stimulate the economy through the creation of jobs

required for the construction work.

4734 0110001	0110001-007	Alameda County Water District	Niles-Newark Intertie Pipeline	This project consists of the installation of approximately 15,000 linear feet of 24-inch diameter high density polyethylene (HDPE) pipe and associated valves and appurtenances. Special construction details have been incorporated into the design for the pipe to withstand a maximum credible earthquake event.	y 0 a	0	C	The Alameda County Water District (ACWD) serves over 330,000 people with potable water in the cities of Fremont, Newark, and Union City. Local groundwater from the Niles Cone Groundwater Basin constitutes 40% of ACWD's overall water supply on average. Other supply sources consist of imported water from the California State Water Project and the San Francisco Public Utilities Commission Hetch-Hetchy system. The Hayward Fault bisects ACWD's distribution system into eastern and western areas. A pipeline is needed to transmit high mineral content ground water, produced at the Peralta-Tyson Wellfield (east of the Hayward Fault), to the Desalination Facility (west of the Hayward Fault), to the Desalination Facility (west of the Hayward Fault), which produces low mineral content reverse- osmosis water, in order to produce blended water that more reliably meets water quality, the project will also result in other significant benefits. Because most of ACWD's water production capacity is located east of the Hayward Fault, construction of the pipeline will be to fault in the event of a seismic event.Pumping restrictions in the Sacramento-San Joaquin Delta, caused by degrading environmental conditions, result in a reduced, less reliable, water supply for ACWD. This project will allow ACWD to further leverage its local The PT Blending Facility experiences deficiencies in	13,469,000	79,088	324,796 04	Alameda	1	2009
4733 0110001	0110001-003	Alameda County Water District	Facility chemical feed system to Neal Feed	Opgrade FT blending Facility	0	0	c	water quality & system reliability	1,000,000	73,088	324,750 04	Alameda	n	2005
4736 0110001	0110001-010	Alameda County Water District	Water Treatment Plant No 2 Process Improvements	b. Convert the existing ozone air preparation equipment to a liquid oxygen feed system, add a second membran filter press, and upgrade major equipment components including chemical feed and storage, solids handling.Implementation of this project provides benefits in several areas:•Because of recent federal court-mandated pumping restrictions at the Sacramento-San Joaquin Delta pumps, the ability to treat water when it is available has become increasingh more important. The provision of a second membrane filter press and improvements to several major equipment components will better ensure that residual management or other various subsystems of the plant do not become a constraint on water plant production.•Conversion of the existing ozone air preparation equipment to a liquid oxygen feed system will be more energy efficient and reduce ACWD's consumption of electricity. •Execution of the project will result in significant job creation in the depressed manufacturing sector for the fabrication and assembly of the press itself, as well as provide local skilled jobs to perform the mechanical, electrical, and control systems work needed for installation.	o s, y Is s	0	c	The Alameda County Water District (ACWD) provides potable water to over 330,000 people in the cities of Fremont, Newark, and Union City, California. Water Treatment Plant No. 2 treats water delivered via the South Bay Aqueduct of the State Water Project. Reliable water production at the plant is critical for ACWD to meet its customers' water demands. Improvements are needed to address several operational issues with this facility: •The existing ozone disinfection system is maintenance and energy- intensive. •The existing single membrane filter press used for solids dewatering constrains water production and reduces plant reliability •Wear on several major equipment components associated with chemical feed and storage, solids handling, and other systems is reducing plant reliability	10,804,000	79,088	324,796 04	Alameda	Ι	2009
4737 0110001	0110001-008	Alameda County Water District	Polybutylene Service Line Replacement	This project involves the replacement of polybutylene service laterals (approximately 1,000 laterals each year over the next five years) with copper laterals, proactively before they fail.	0	0	с	Replacement of polybutylene service laterals is needed to reduce the loss of unaccounted for water in the ACWD distribution system. The polybutylene lines continue to fail prematurely causing loss of water and property damage.	10,500,000	79,088	324,796 04	Alameda	II	2009

4738 3010001	3010001-007	City of Anaheim	Water Main Corrosion Control	Feasibility studies indicate that several ductile iron O water mains in the Anaheim Hills area should be replaced with polyvinyl chloride (PVC) mains. Currently, five sections have been identified as a high priority at an estimated project cost of \$2.0 million. Several PVC mains have been installed in the Anaheim Hills area and have been found to function well. They are corrosion resistant and require low maintenance. These projects will utilize Categorical Exemptions for CEQA compliance and since the design phase is relatively short, Anaheim can easily begin construction by early 2010.	0	c	The City of Anaheim's water system contains ductile iron water mains which have experienced high rates of corrosion in the Anaheim Hills section of the City. Corrosive soils in these areas have oxidized the iron in these pipes and caused many main breaks. Main breaks may cause numerous negative impacts, including: potential for water quality impacts via intrusion of dirty water during the repair; intrusions of water from cross connections during low pressure event; loss of water, both prior to the shut down of the line and for flushing following the repair; hamper fire fighting capabilities; water outages for customers; prevent the flow of water into or out of reservoirs or closed zones in the water system; property damage (especially streets and other underground utilities); street closures; and of course, financial costs. Preventing main breaks would help protect water quality, improve reliability, and reduce costs.	2,000,000	62,445	346,823 08	Orange	v	2009
4739 3010001	3010001-005	City of Anaheim	La Palma Blending Plant Rehabilitation	Per the results of an economic feasibility study, this O project would replace the two asphalt-lined, subterranean reservoirs with two 2MG fully enclosed, partially buried, prestressed concrete reservoirs. The new reservoirs would meet all current seismic standards and would allow continued operation of the La Palma Blending Plant. This plant allows Anaheim to reduce the levels of TCE and PCE in its drinking water and to meet all regulatory requirements. The use of the contaminated aquifer has multiple benefits for regional water management: a) it makes use of a resource that would otherwise not be utilized, b) using this resource helps to relieve the burden on other wells or imported water (Well #14 has historically produced about 600 acre-feet per year, but it's possible that following this rehabilitation project, it could produce a higher volume), c) it helps to contain the contaminatin fume and protect other downgradient production wells, d) it removes some of the contamination from the aquifer, and e) since the final blend of the water at the plant contains no detectable contamination, it meets all drinking water standards and public health goals.	0	C	Portions of the Orange County Groundwater Basin are contaminated with volatile organic compounds. One of Anaheim's production wells, Well #14, contains low levels of trichloroethylene (TCE), tetrachloroethylene (PCE), and other chlorinated hydrocarbons that have State and federal MCLs. The water from this well is blended at Anaheim's La Palma Blending Plant with water from another well that does not contain chlorinated hydrocarbons. This process ensures that plant effluent water contains no detectable lelvels of TCE, PCE or other regulated compounds. The plant, which is permitted as a blending plant by the DHS, utilizes two reservoirs for blending. The two dugout, asphalt-lined reservoirs were constructed in the 1950s and are need of significant repairs and seismic upgrades. An economic analysis determined it was more economically feasible to replace the reservoirs rather than make repairs.	5,000,000	62,445	346,823 08	Orange	v	2007

4740 3010001	3010001-006	City of Anaheim	Emergency Interties Between Anabeim and	Intertie with the City of Buena Park:	0	0	с	Security Project	600,000	62,445	346,823 08	Orange	v	2007
			Neighboring Cities	The City of Buena Park has no emergency interties and their 2005 Water Master Plan Study recommended several be installed. The proposed intertie between Anaheim and Buena Park water systems would be a two way emergency only intertconnection. Buena Park would connect an existing 12 inch water main to an underground interconnection facility in a secured vault at one of several possible locations. The interconnection facility will include components such as control valve, check valve, isolation valve, blow off valve and flow metering. The control valve would automatically activate in case of pressure drop to either water system. Once constructed, the intertie will provide both cities with access to supplemental water during an emergency that interrupts flow from their own sources. The proposed intertie will be able to deliver up to 4.5 MGD during emergencies.	)- e									
				The proposed intertie between the water distribution systems of the cities of Anaheim and Orange is a two- way emergency interconnection. The intertie would connect two existing 12 inch water mains with an										
4741 3310009	3310009-053	Eastern Municipal WD	Eastern Municiapl Water District - Operations and Maintenance Center Sercuity System Upgrade	intertie facility to be located in a secured underground Installation of video surveillance and event activated perimeter mointor system at the District's Operations and Maintenance Center.	0	0	с	video surveillance and event activated perimeter mointor system is needed at the District's Operations and Maintenance Center.	250,000	141,243	414,710 20	Riverside	v	2008
4742 3310009	3310009-065	Eastern Municipal WD	Eastern MWD - Perris II Desalter Project	Project Description The Perris II Desalter will provide up to 5.4 million gallons per day (MGD) of potable water from brackish wells feeding into a reverse osmosis (RO) desalination plant. The plant will be constructed to an initial capacity of 5.4 MGD. This new water source will supply up to 11,000 families in the disadvantaged community of Perris, California. The proposed Perris II Desalter project consists of pre-treatment facilities (iror and manganese removal), RO treatment facilities to dispose of brine concentrate and deliver finished potable water to the distribution system. Iron and manganese facilities will pre-treat the entire raw well water feed to remove potential foulants to the RO membranes. RO treatment facilities will include cartridge filters, RO feed pumps, RO membranes, and chemical storage and feed (for addition of disinfectant, control of PH, threshold inhibitor, and RO membrane cleaning agents). The project includes pumping facilities to dispose of brine concentrate and to deliver finished water to the distribution system. The project includes other required supporting facilities including instrumentation and control, laboratory facilities, maintenance facilities, HVAC, and electrical. The project will also include: up to seven new wells and associated equipment, approximately 60,000 feet of pipeline	0	0	c	Problem DescriptionThe goals of this project are to:• Mitigate exceedances of the primary MCLs for Nitrate and Perchlorate;• Mitigate exceedances of the secondary MCL for Total Dissolved Solids (TDS);• Reduce demand on imported water;• Protect drinking water sources; and• Supplement water supplies for disadvantaged communities using:o Desalination which provides an efficient use of local water resources and is more energy efficient than imported water supplies thereby reducing our Greenhouse Gas footprint; and o Water that would not otherwise be usable thereby conserving water resources for use in other areas. Eastern Municipal Water District (EMWD) provides water to a 555 – square mile area in western Riverside County, serving approximately 660,000 people. EMWD's total potable water demand of 134,000 acre feet per year (AFV) includes 82% of imported water from the state water Project and Colorado River Aqueduct and the remainder is provided by local groundwater. EMWD has successfully constructed two groundwater desalination plants and implemented a desalination program in the Perris Valley. Currently, up to 8 million gallons per day (MGD) of locally derived potable water can be generated by the desalters. These efforts were implemented in order to:• Increase reliance on local groundwater, decreasing dependence on imported water; • Increase reliance on local water; increase reliance on local	91,200,000	141,243	414,710 20	Riverside	v	2012
4743 3310009	3310009-058	Eastern Municipal WD	Eastern Municipal Water District - Remote Site Security Improvements	Installation of remote event action video monitoring equipment and perimeter security systems are remote water distribution sites including treatment plants, pump stations, and reservoirs.	0	0	С	Water security improvements needed.	750,000	141,243	414,710 20	Riverside	V	2008

4744 1010007	1010007-001	FRESNO, CITY OF		INSTALL DIESEL-POWERED ELECTRICAL GENERATORS AT O 28 PUMP STATIONS.	0	с	INSUFFICIENT EMERGENCY BACKUP POWER FOR GROUNDWATER PUMP STATIONS. DURING AUGUST 1996, A POWER OUTAGE CAUSED PRESSURES TO DROP TO 0-10 PSI THROUGHOUT THE SYSTEM FOR MORE THAN 14 HOURS.	1,500,000	128,152	457,511 11	Fresno	Ш	1998
4745 3810011	3810011-001	SFPUC City Distribution Division	SFPUC Headquarters Building	The San Francisco Public Utilities Commission (SFPUC) is O a department of the City and County of San Francisco that provides regional and local Water for 2.4 million customers. This project, a portion of the SFPUC's new administration building, is a Supervisory Control and Data Acquisition (SCADA) system that will monitor and control the SFPUC's regional and local water transmission and distribution system and supplement the SFPUC's emergency response capacity. This system will centralize the SFPUC's monitoring of its water system during emergencies. The agency will have a centralized rapid response system to immediately identify breaks, isolate areas of contamination and address other emergencies to prevent contamination during emergencies to prevent contamination and manage safety of the entire system. The project has secured all entitlements such as Final Environmental Impact Report certification, SFPUC Commission and San Francisco Board of Supervisors approvals, Civic Design review approval and secured a general contractor for construction. Federal infrastructure stimulus investment for this project would provide in excess of 500 construction jobs.	0	c	The project will be built in a "disadvantaged" community neighborhood, the Tenderloin District, of the City of San Francisco. The SFPUC needs a new headquarater facility that allows operational and emergency response from a centralized location.	10,000,000	175,154	802,650 04	San Francisco	Ν	2009
4746 4310011	4310011-053	San Jose Water Company	Steel Tank Lining and OSHA compliance issues a Perie Ln Station	These improvements will increase the level of safety for O at personnel working in the area as well as the level of service following seismic events. This alternative ensures that consumers benefit from many decades of a high quality and reliable water supply. The estimated cost for making the improvements at Perie Lane Reservoir is \$622,500. These costs include all labor, materials and permits needed to install the new coatings, perform a seismic retrofit and replace the ladder with a safety cage and hand railing for safe roof access. Major components of this cost estimate are:PERIE LANE STATION RESERVOIR IMPROVEMENTSCOST ESTIMATE AmountMaterial 4,600Company Labor 25,000Contract 482,000Permit 13,000Contingencies (5%) 26,230Subtotal 550,830Overhead (13%) 71,670Total 622,500	0	C	The steel tank and its appurtenances at Perie Lane Reservoir are over 40 years of age and approaching a point in their asset lives when major improvements are needed to maintain function and to allow SJWC to provide to our consumers a high quality and reliable water system. There are a number of improvements proposed for this facility that will accomplish these goals and include:• New Interior Coating• Seismic Retrofit• New Tank Ladder With Safety Cage and Hand RailsTank coatings are applied to provide corrosion protection from natural elements as well as the stored water. It is the experience of SJWC that steel tanks' interior lining have useful lives of approximately 20 years. Given a tank's useful life of 35 to 50 years, new coatings are often applied at some point during its life. The Perie Lane tank coatings are over 40 years old and new coatings are required in order to provide the desired level of corrosion protection. The majority of tanks within SJWC's distribution system were constructed with bottom penetration inlets/outlets and overflows. Data from the 1989 Loma Prieta Earthquake revealed that tanks with bottom penetrations have a high probability of failure due to their rigidity and response to seismic events. SJWC has developed an ongoing seismic retrofit program that includes replacing bottom tank shell penetrations with side penetrations and adding flexible couplings. Perie Lane tank was one	622,500	219,571	998,000 17	Santa Clara	U	2009
4747 4310011	4310011-005	San Jose Water Company		Install 125 dedicated, lockable sampling stations. O	0	с	Hosebibs used in sampling result in occasional false positives for total coliform.	375,000	219,571	998,000 17	Santa Clara	П	1998

4748 4310011	4310011-024	San Jose Water Company	Pumps & Motors - Energy Efficiency Program	Category O Project - Repair and/or replace 25 inefficient O pumps & motors at booster stations and well fields to achieve 85% overall efficiency or better. Pumps & motors will be more reliable and save energy. This project will save or create at least 4 full-time jobs in the	0	С	Category O Project - Repair and/or replace 25 inefficient pumps & motors at booster stations and well fields.	1,000,000	219,571	998,000 17	Santa Clara	II	2009
4749 4310011	4310011-023	San Jose Water Company	72-Kw Hydro-turbine at Cox Station (green energy project)	Category O Project - This is the type of "green energy" O project that is championed by Title IV, Page 55, of the American Investment and Recovery Act of 2009. The proposed 72-Kw hydro-turbine will generage 631,000- Kwhr annually to be fed into PG&E's electric grid. San Jose Water Company can use most of the energy to drive its booster pumps at Cox Station and lower our operating cost and increase reliability. The source water propelling the turbine is water imported continuously from a turnout with the Santa Clara Valley Water District. This "economic stimulus" project will create at least 5 new full-time jobs in the state.	0	С	Category O Project - This is the type of "green energy" project that is championed by Title IV, Page 55, of the American Investment and Recovery Act of 2009.	750,000	219,571	998,000 17	Santa Clara	II	2009
4750 4310011	4310011-001	San Jose Water Company		Install hypochlorinators at 12 additional wellfields. O	0	C	Need to provide for the disinfection of groundwater to	1,500,000	219,571	998,000 17	Santa Clara	П	1998
4751 4310011	4310011-037	San Jose Water Company	Montevina WTP Clearwell No. 2 Retaining Wall Replacement	Replace retaining wall between Montevina WTP O Clearwell No. 2 and Alma Bridge Road.	0	С	Existing retaining wall is failing in multiple locations and compromising the seven million gallon clearwell No. 2 at Montevina water treatment plant.	148,400	219,571	998,000 17	Santa Clara	II	2009
4752 4310011	4310011-048	San Jose Water Company	Water Main Replacement, Canyon Vista Dr, Santa Clara County	Category O Project – Replace 4,000-ft of 12" water main O on Canyon Vista Dr, County of Santa Clara, CA, from Yona Vista Dr to Chula Vista Dr. Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	0	C	Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SJWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	1,199,700	219,571	998,000 17	Santa Clara	II	2009
4753 4310011	4310011-027	San Jose Water Company	600-Kw Photolvoltaic Solar System at Williams Station	r Category O Project - This is the type of "green energy" O project envisioned in Title IV, Page 55, of the American Investment and Recovery Act of 2009. The proposed 600-KW photovoltaic solar system will generate 1,100,000-Kwhr annually to be fed into PG&E's electric grid. San Jose Water Company can use most of the energy to drive our booster pumps and well pumps at Williams Station, a major well field, lowering our operating cost and increasing reliability. This "economic stimulus" project will create at least 20 new full-time manufacturing and construction jobs in the state.	0	c	Category O Project - This is the type of "green energy" project envisioned in Title IV, Page 55, of the American Investment and recovery Act of 2009.	8,250,000	219,571	998,000 17	Santa Clara	Ι	2009

4754 4310011	4310011-047	San Jose Water Company	City wide water conservation program	Indoor water conservation retrofit project. SJW plans to O retrofit 34,400 bathrooms over 12 month with .90 gpf dual flush toilets, 1.5 gpm shower heads and 1.0 gpm sink aerator. The estimated water savings is 1,055.21 arcre faet are year	0	С	The system / city has a long term water supply issue. The city needs to lower thier total water consumption by 20 percent over the next 5 to 10 years.	13,227,456	219,571	998,000 17	Santa Clara	II	2009
4755 4310011	4310011-029	San Jose Water Company	Replace Water Main on Kirk Ave, San Jose	Category O Project – Replace 3,000-ft of 20" water main O on Kirk Ave in San Jose, CA, between Alum Rock Ave & Toyon Ave.Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SIWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	0	c	Category O Project – Water Main Replacement: A critical need for replacement of potable water transmission and distribution system infrastructure has been identified by SIWC due to the changes in demography in the 1950's and 60's. Based on past San Jose Water Company developed infrastructure studies, as well as publications and reports from American Society of Civil Engineers (ASCE) and federal agencies such as EPA and GAO, SJWC's water main replacement performance over the last decade has averaged approximately 9 miles per year. The latest revised program to normalize replacement of pipeline infrastructure describes an annual length of pipeline replacement increase to about 17 miles in 2009, about 21 miles in 2010 and leveling off at about 25 miles in 2011 and beyond. SJWC total length of pipeline infrastructure is approximately 2,400 miles. Thus a rate of about 25 miles per year is in line to achieve a 1% per year recommended replacement rate.	1,092,500	219,571	998,000 17	Santa Clara	Π	2009
4756 4310011	4310011-011	San Jose Water Company	100-Kw Hydro-turbine at Hostetter Turnout (green energy project)	Category O Project - This is the type of "green energy" O project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009. The proposed 100-Kw hydro-turbine at Hostetter Turnout will generate 875,000-Kwhr annually to be fed into PG&E's electric grid. The source water propelling the turbine is water imported from a turnout (connection) with the Santa Clara Valley Water District. This prospective "economic stimulus" project will create at least 5 new ful-time jobs in the state.	0	С	Category O Project - This is the type of "green energy" project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009.	700,000	219,571	998,000 17	Santa Clara	II	2009
4757 4310011	4310011-031	San Jose Water Company	600-Kw Photovoltaic Solar System at Williams Statior #2	Category O Project - This is the type of "green energy" O project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009. The proposed 600-Kw photovoltaic solar system will generate 1,100,000-Kwhr annually to be fed into PG&E's electric grid. The San Jose Water Company can use most of the energy to drive our booster pumps and well pumps at the Williams Station #2, a major well field, lowering our operating cost and increasing reliability. This prospective "economic stimulus" project will create at least 20 new ful-time manyfacturing and construction jobs in the state.	0	c	Category O Project - This is the type of "green energy" project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009.	8,750,000	219,571	998,000 17	Santa Clara	Ι	2009
4758 4310011	4310011-026	San Jose Water Company	67-Kw Hydro-turbine at Alum Rock Turnout (green energy project)	Category O Project - This is the type of "green energy" O project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009. The proposed 67-Kw hydro-turbine will generate 585,000-Kwhr annually to be fed into PG&E's electric grid. The source water propelling the turbine is water imported from a turnout (connection) with the Santa Clara Valley Water District. This prospective "economic stimulus" project will create at least 5 new ful-time jobs in the state.	0	С	Category O Project - This is the type of "green energy" project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009.	670,000	219,571	998,000 17	Santa Clara	Ι	2009

4759 4310011	4310011-015	San Jose Water Company	800-Kw Photovoltaic Solar System at Twelfth Street Station (green genergy project)	Category O Project - This is the type of "green energy" C project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009. The proposed 800-Kw photovoltaic solar system will generate 1,450,000-Kwhr annually to be fed into PG&E's electric grid. The San Jose Water Company can use most of the energy to drive our booster pumps and well pumps at the Twelfth Street Station, a major well field, lowering our operating cost and increasing reliability. This prospective "economic stimulus" project will create at least 20 new ful-time manyfacturing and construction jobs in the state.	2	0	С	Category O Project - This is the type of "green energy" project that is championed by Title IV, Page 55, of the American Investment & Recovert Act of 2009.	9,000,000	219,571	998,000 17	Santa Clara	Ι	2009
4760 4310011	4310011-057	San Jose Water Company	Montevina Treatment Plant Improvements	San Jose Water CompanyPre-Application for FundingProject Description – Montevina Water Treatment PlantKennedy/Jenks Consultants (KJC), was engaged by San Jose Water Company to assess the water quality data, regulatory drivers, infrastructure condition, develop detailed project objectives, evaluate technologies, and recommend a microfiltration membrane alternative with powdered activation carbon (PAC), improve washwater and solids handling, and provide structural and seismic improvements. The analysis confirmed the need for a water treatment process that can robustly handle "flashy" water quality and reliably meet the IESWTR turbidity parameters. The overall project objectives for the Montevina WTP Improvements Project include: Modification, replacement or addition of treatment processes with 30 MGD capacity to reliably produce treated water meeting State and Federal requirements from source water with turbidity levels of 100 NTU and short-lived turbidity spike over 300 NTU. Doperation of the facility up to 30 MGD and as low as approximately 3 MGD to take full advantage of the source water available to the Montevina WTP. <sup>III</sup> Reduction of TOC and DBP precursors to reduce DBPs in the distribution system to meet the DPB2 requirements. <sup>III</sup> Improvements on the washwater, solids handling systems and filtration processes as needed to comply with various regulations, design and	0	0	C	Montevina Water Treatment Plant (WTP) is the primary source of supply for the Town of Los Gatos and surrounding communities. Without Montevina WTP, water service to these elevated portions of San Jose Water Company's service area would rely on a limited source of supply and booster pumping capacity, which cannot meet peak summer demands. The current Montevina WTP was commissioned in 1970. Although several upgrades have been made to the WTP since that time, the treatment process – direct filtration and chlorination – remains unchanged. The existing Greenleaf filters lack modern features such as individual filter effluent control valves and filter-to-waste piping. The State and Federal regulatory requirements for turbidity removal, disinfection, and disinfection byproducts have become more significantly stringent.In addition to new regulations, the WTP is challenged by aging infrastructure. Many of its key components are at or beyond their useful lives, and the concrete structures do not meet current structural or seismic standards.In January and early February 2008, Montevina WTP exceeded the California Code of Regulations (CCR) Title 22 Operating Criteria for Interim Enhanced Surface Water Treatment Rule (IESWTR) individual filter effluent turbidity limits. The Corrective action required that Montevina WTP is limited to treating raw water of 15 NTU or less because of the limitations of the direct	73,700,000	219,571	998,000 17	Santa Clara	Ι	2011
4761 4310011	4310011-043	San Jose Water Company	Saratoga WTP Backwash Treatment Upgrades	This project will rebuild the backwash pond treatment C system to allow additional detention and settling time for backwash water, and to prevent intrusion of creek water into the pond.	0	0	С	Existing backwash treatment facilities are failing and improvements are necessary to meet regulatory requirements. Problems with existing facilities include a failing retaining wall and intrusion of water from the adjacent creek.	262,500	219,571	998,000 17	Santa Clara	II	2009
4762 3710020	3710020-056	San Diego - City of	Serra Mesa pump station	Construct a new water pump station with five 5-mgd Construct a new water pump station capacity will be 20-mgd. The pump plant will pump water from the Alvarado Zone to the Northwest Mesa Zone.	ס	0	С	Convey water from the Alvardo WTP system to a portion of the Miramar WTP system, this pump station will allow the Alvarado WTP to support the Miramar WTP service area and free up capacity within the overall Miramar WTP system.	5,426,000	273,015	1,266,731 14	San Diego	v	2002
4763 3710020	3710020-070	San Diego - City of	Miramar Clearwells	Construction of two new rectangular (vertical wall) 0 clearwells with a combined capacity of 58.3 MG, bottom elevation of 686' and overflow level at 712'; Construction of a new chlorine contact chamber for 1.0 log giardia inactivation with an ammonia diffusion system and an effluent weir that will split the flow equally between both clearwells; Two clearwell inlets from the chlorine contact chamber (84" CMLC Steel PL); Clearwell effluent PL on the north side of the clearwell connected to the Miramar 2A PL (60" CMLC Steel PL); Two clearwell outlets on the south side of the clearwell connected to the Miramar PL (54" CMLC Steel PL); Replacement of the Miramar PL (54" CMLC Steel PL); Replacement of the Miramar PL (54" CMLC Steel PL); Outlet (54" & 66" CMLC Steel PL); Costruction of a new 60' by 100' maintenance facility; Landscaping and paving that will not be covered under Miramar WTP Upgrades, Contract D, including entrance modifications, security guard shack, and entrance security surveillance; The above scope will allow the Miramar Water Treatment Plant to convert its current disinfection strategy of running free chlorine through the filters to biologically active filters. This option provides the largest amout of storage of all the alternatives studied which should help during high summer demand periods and with the amount of required flow changes for the treatment plant. Covering the onen flume sections or replacing with a 0	0	c	This project is driven by the need to replace aging infrastructure that has deteriorated and now has the potential to fail and compromise the water distribution system. Additionally, identify the remaining upgrades needed in the Miramar Water Treatment Plant (MWTP) site so that no additional large CIP projects would be needed in the near future; In 1959, the original MWTP and Clearwell No. 1 were built to supply newly developed regions of the City of San Diego. In 1974, due to increased demand in the Miramar Service Area, the plant was expanded to 100 MGD and Clearwell No. 2 was built. The plant expanded to 140 MGD in the 1980's. During the current MWTP Upgrades project that increased plant capacity to 215 MGD, several clearwell shutdowns were required in order to install new influent and effluent pipelines. It is during these clearwell shutdowns that gave City staff and consultants a chance to inspect the clearwells and determine that replacement of the clearwells was isminent. In July 2000, Bayez & Patel, Inc. performed a seismic evaluation and structural condition assessment of Clearwell No. 2, which stated that Clearwell No. 2 no longer met current seismic codes and needed a major seismic rehabilitation. No such report was done for Clearwell No. 1, but one can assume that conditions for this clearwell are similar or worse since this clearwell is 15 years older. During the MWTP Early Start This is a 12-mile open channel section of the Barrett	66.000.000	273,015 1,266,731 14	San Diego	v	2012		
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4764 3710020	3/10020-067		Barrett Flume Cover	pipeline to preempt fines and sanctions for reposurce agencies; benefits include maintaining water quality as well as reducing maintenance and down time.	0	C	Flume which is an excessive maintenance burden due to the need to remove soil, sediment, and sunlight-caused algae build-up; Precious golden eagles, deer, and other nearby wildlife drown in this section of the open channel.	66,000,000	273,013 1,200,731 14	240 Diego	v	2012		
4765 3710020	3710020-054	San Diego - City of	new flow control facility Miramar	Design and construct a new flow control facility to O continue to meet the needs of the raw water supply to the Miramar WTP.	0	с	Miramar WTP flow control facility requires upgrades to the facility and the treatment process to comply with regs. Continued increase in water demand due to pop. growth has required additional rehab.	8,000,000	273,015 1,266,731 14	San Diego	V	2002		
4766 3710020	3710020-069	San Diego - City of	Otay 1st/2nd Pipeline Consolidation - West of Highland	<ol> <li>Otay 1st Pipeline – Replace the existing 30" and 36"</li> <li>O main with a 16" pipeline. Consolidate all existing parallel pipeline. Replace Interstate 805 crossing with 30" pipeline. Replace Interstate 805 crossing with 30" pipeline. The pipeline limits are from the interconnection of Wightman Street and Highland Avenue to the intersection of Oregon Street and Polk Avenue. The length of Otay 1st Pipeline is 11,480' (2.17 miles).2. Otay 2nd Pipeline – Eastern Segment - Replace the existing 30" and 36" main with a 42" pipeline. Replace existing parallel pipelines to Otay 2nd PL with a 12" pipeline. The pipeline limits are from the interconnection of Wightman Street and Highland Avenue to the intersection of Wightman Street and Swift Avenue. The length of Otay 2nd Pipeline is 8,340' (1.00 miles). Western Segment – Install a 42" pipeline and replace existing parallel pipelines to the proposed Otay 2nd PL with a 12" and 16" pipeline. The pipeline intersection of Wightman Street and Swift Avenue to the intersection of Wightman Street and Swift Avenue to the intersection of Wightman Street and Swift Avenue to the intersection of Upas Street and 30th Street. The length of the propose Otay 2nd Pipeline is 5,560' (1.58 miles).3. Otay 2nd PL 16" Extension – Replaced Otay 2nd PL with a 16" PVC from the intersection of Wightman Street and Swift Avenue to University Heights Reservoirs. Replace Interstate 805 crossing with a 36" pipeline. The length of Otay 2nd PL with a 16" PVC from the intersection of Wightman Street and Swift Avenue to Wights Reservoirs. Replace Interstate 805 crossing with a 36" pipeline. The length of Otay 2nd PL with a 16" PVC from the intersection of Wightman Street and Swift Avenue to University Heights Reservoirs. Replace Interstate 805 crossing with a 36" pipeline. The length of Otay 2nd PL with a 16" PVC from the intersection of Wightman Street and Swift Avenue to University Heights Reservoirs. Replace Interstate 805 crossing with a 36" pipeline. The length of Otay 2nd PL Wightma</li></ol>	0	c	The City's continuing effort to replace all the cast iron (Cl) pipelines within the City is in accordance with CDPH's compliance order 04-14-96CO-022. This project was driven by the need to replace a facility reaching the end of its life cycle & has become a liability. The condition of the Otay 1st Pipeline & Otay 2nd Pipeline are known to be deteriorated. A failure could cause damage to private property and closer of streets. This project is comprised of the Otay 1st Pipeline (Otay 1st PL) & Otay 2nd Pipeline (Otay 2nd PL). Both the Otay 1st/2nd PL were originally used to supply raw water from the Lower Otay Reservoir to the old University Heights Water Treatment Plant (WTP). The University Heights WTP was decommissioned in 1950 & both pipelines roughly 20 psi. The entire Otay 1st PL runs from the 54th Street Pipeline (PL) connection in Easy Street to University PL in Oregon Street. It was built around 1915 using Cl & Reinforced Concrete Steel Cylinder PL (RCSC). In 1969, the Cl segments were lined with cement. In 1996, the segment crossing Interstate 15 was replaced with a 30" Streel Cylinder Rod Wrapped Pipeline (SCRW). The spieline sizes vary from 24" to 36" and the pipeline material includes are	30,700,000	273,015 1,266,731 14	San Diego	v	2012		

4767 0110005	0110005-038	East Bay MUD	Large Diameter Pipeline Replacement	High-priority backbone pipes to be replaced to ensure reliable water service include: Keith Avenue and Euclid Avenue (100 feet of 16-inch diameter pipe; Berkeley, CA): The existing pipe was installed in 1983 and has been susceptible to earth movement. The project would install flexible couplings and replace a 100-foot segment of this pipe. Webster Street Pipeline Replacement (5,800 feet of 24-inch pipe; Webster Street, Alameda, to 9th Street, Oakland, CA): The existing pipe, installed in 1946, is at the end of its useful life. • Sequoia, Wildcat, 59th Street Aqueduct Pipeline Replacements (2,400 feet of 54-inch pipe; Claremont Center, Oakland CA): These pipes, which were installed in 1927, are critical in providing water to the majority of customers in the west-of-hills area and are near the end of their useful life. • Lincoln Avenue Pipeline Replacement (11,000 feet of 20-inch pip; between Webster Street and Park Street, Alameda, CA): The existing pipe, which was installed in 1924, is reaching the end of its useful life.• MacArthur/Davenport Pipeline Replacement (11,200 of 20-inch pipe; Alameda, CA): This existing pipeline, which was originally installed in 1927, is also reaching the end of its useful life and needs to be replaced.• Dingee Inlet/Outlet Pipeline (10,000 feet of 24-inch pipe; Oakland, CA): This existing pipeline, which was originally installed in 1927, is also reaching the end of its useful life and needs to be replaced.• Dingee Inlet/Outlet Pipeline (10,000 feet of 24-inch pipe; Oakland, CA): This existing pipeline, which was originally installed in 1931, is reaching the end of its useful life and needs to be to	O I I f d	0	C	EBMUD's distribution system includes over 4,100 miles of pipelines. Many of these pipelines are critical and form the "backbone" of the system that conveys water to over 1.3 million customers. Some of these pipelines have reached the end of their useful life and in need of replacement to ensure reliable water service. The replacement of these critical backbone facilities are needed to maintain infrastructure reliability. These large pipelines, by necessity, convey large volumes of water and many distribution pipelines branch off from them. These pipelines are difficult to remove from service and when they fail, there is a potential for collateral damage.	20,000,000	386,065 1,300,000 04	Alameda	Ι	2009
4768 0110005	0110005-037	East Bay MUD	Danville Pumping Plant No.1 Rehabilitation	This project includes replacement of electrical systems, including switchgear and motor control center.	o	0	с	Danville Pumping Plant No. 1 is a 60 MGD pumping plant located in Alamo, California. This pumping plant is critical to the water supply to the San Ramon Valley area. Danville Pumping Plant No. 1 has aging electrical switchgear and motor control center. This project would replace these and other components of the electrical system in order to provide more reliable operations.Electrical equipment inside the plant is approximately 47 years old. Repair parts are increasingly difficult to acquire for these facilities.	6,000,000	386,065 1,300,000 04	Alameda	II	2009
4769 0110005	0110005-016	East Bay MUD		Replace Redwood tanks which have historically been sources of high bacterial concentrations with steel tanks. Install reservoir sampling and on-site treatment/disinfection facilities. Install chlorine residual and conductivity monitoring system.	0	0	С	Distribution system has sources of bacterial concentrations - jeopardize compliance to the TCR.	8,800,000	386,065 1,300,000 04	Alameda	Π	1998
4770 0110005	0110005-039	East Bay MUD	Walnut Creek Water Treatment Plant - Photovoltaic	The project consists of a renewable energy project to install a photovoltaic (PV) energy generation system on the roofs of the chlorine contact chamber and clearwell at Walnut Creek WTP. The project includes a 75,000 square foot PV system. The PV system will be capable of generating nearly 1 MWh annually, or about one- third of the total annual electric use at the WTP.	0	0	с	A goal of EBMUD and the State of California is to reduce greenhouse gas emissions and to promote sustainability. Power costs can be mitigated by reducing demand on the power grid during peak times and increasing on-site power production. This project is needed to reduce EBMUD's reliance on outside energy purchases and reduce the emissions of green-house gases. The project will offset roughly one-third of the treatment plant's annual electrical use.	5,000,000	386,065 1,300,000 04	Alameda	Ι	2009
4771 0110005	0110005-003	East Bay MUD		Replace deteriorating distribution pipelines.	0	0	С	Distribution system pipeline network is deteriorating. System has a history of leaks which needs to be evaluated and repaired.	31,600,000	386,065 1,300,000 04	Alameda	II	1998

4772 3710042	3710042-006	San Diego County Water Authority	SDCWA - Security Project Video Surveillance	Install video surveillance equipment at critical locations within the aqueduct system and install upgraded alarm response monitoring system at the Escondido Operations Center. Surveillance equipment will be installed at five key delivery system locations, two offici facilities, two water control facilities, and four pump stations. This project is rated in 4th position in Prop 50 Chapter 3 and is ready to go.	s O n ce	0	C	The need for improved surveillance security at San Diego County Water Authority critical infrastructure facilities was identified in the required Vulnerability Assessment submitted to USEPA. Significant progress has been made; however surveillance technology continues to change and new facilities were added to the aqueduct system.	430,000	102 3,	140,000 14	San Diego	V	2009
4773 1910067	1910067-028	LOS ANGELES-CITY, DEPT. OF WATER & POV	W Water System Security Upgrades Project: Fire Hydrants	LADWP is seeking funding support for planned security upgrades to its fire hydrant network. LADWP operates approximately 58,000 fire hydrants throughout the City Planned security upgrades include the purchase and installation of fire hydrant security devices for 300 critical locations throughout the City. Critical locations will be determined based on the level of risks, system requirements, and proximity to critical infrastructure oo sites. Several alternative devices are available commercially on the market. The security devices that will be employed will be hydrant check valves and/or security caps. Hydrant check valves provide backflow prevention and are installed inside of the fire hydrant. Hydrant security caps cover the outlet coupling; they are forged from high-strength alloy steel, are virtually impossible to penetrate; and require a security cap wrench for removal. The LADWP, with the assistance of district crews and the Los Angeles Fire Department (LAFD), is evaluating the effectiveness, operational ease, and installation and maintenance costs of each of the aforementioned technologies. LADWP expects to select 300 check valves and 160 pairs of hydrant caps; certain high risk fire hydrants will be outfitted with bot technologies. This combination will effectively prevent individuals from accessing the hydrants, but will allow ready access to firefighters who will have the equipment and keys to unlock the devices as needed City Trunk Line South Unit 3 (CTLS 3) is a segment of th	r O y, of f t t	0	c	As the financial center of the Western United States, the worldwide hub of the entertainment industry, a center of national and international tourism, and home to one of the world's largest airport and port complexes, the City of Los Angeles (City) and its water infrastructure are high visibility targets for potential acts of terrorism. The Los Angeles Department of Water and Power (LADWP) provides essential water services to thousands of business, residential, governmental, and cultural locations with an infrastructure system spread throughout Los Angeles, Inyo, and Mono Counties. The LADWP water distribution system, which serves roughly 4 million people, encompasses a service area of 464 square miles; over 250 pumping plants, wells, tanks, reservoirs, and treatment facilities; 300 pressure-regulating stations; a 400-mile-long Aqueduct system with associated watershed; over 7,100 miles of distribution piping; and over 58,000 fire hydrants. Following the terrorist attacks of September 11, 2001, the LADWP retained a private consultant to prepare an in-depth security valterability analysis on all aspects of its facilities and operations. The LADWP Report on Security & Terrorism Threat Assessment (S&TTA) identified security strengths and weaknesses, deficiencies, and possible security imporvements that could be made to better secure the City's water system. The City Trunk Line South-Unit 3 project is part of the	68,749,785	686,422 4	071,873 15	Los Angeles	IV	2009
			UNIT 3	pipeline that will provide inflow to the existing Franklin Reservoir. CTLS 3 consists of approximately 10,400 feet of 60-inch diameter welded steel pipeline and appurtenances. The project route is along Whitsett Avenue from approximately 135' South of Vanowen St. to Magnolia Avenue. It will connect to City Trunk Line South Unit 2 and City Trunk Line South Unit 4.	1 t			LADWP's aggressive Capital Improvement Program to replace the City's aging water infrastructure system. The existing City Trunk Line is 96 years old and is past its life expectancy. It has a history of leaks and breaks. The new trunk line will provide a more reliable supply of water to the area and will allow greater operational flexibility of the water distribution system in the City of Los Angeles.						
4775 4000692	4000692-001	PETE JOHNSTON GM		Replace tanks, replace well liner and install ozone system	0	0	Р	Needs to improve source and storage facility.	10,000	1	25 06	San Luis Obispo	IV	1998
4776 3901354	3901354-001	PEARCE, JEFF H 39-40	Jeff Pearce New Well	Drill new well with deep grout seal, new distribution lines.	0	0	Р	Shallow well with high nitrates.	19,000	10	30 10	San Joaquin	Ш	2007
4777 1805001	1805001-001	Lassen County Service Area No. 2	Construct New Water Lines	Construct New Water Lines	0	0	Р	Construct New Water Lines	1,213,589	1	40 02	Lassen	I	2004
4778 1503209	1503209-001	SUPERIOR MUTUAL WATER COMPANY		Company needs to purchase a well & tank to tie in with current system as a backup well.	1 O	0	Р	Current system is in need of a backup well and tank.	300,000	25	44 19	Kern	Ш	2002
4779 1503350	1503350-001	TEHACHAPI VALLEY UNITED METHODIST CH	HI Tehachapi Valley Unified Methodist Church-New Well/intertie with GHCSD	As part of this project, Tehachapi Valley Methodist Church will either drill a second well or develop an intertie with Golden Hills CSD.	0	0	Ρ	Tehachapi Valley Unified Methodist Church water system has only well. Therefore, the water system is unreliable.	500,000	1	60 19	Kern	Ш	2008
4780 1502181	1502181-001	Turning Point Mother-Infant Program	Turning Point Mother Infant Program-Drilling of Second Well	As part of this project, Turning Point Mother Infant Program will drill a second well.	0	0	Ρ	Turning Point Mother/Infant Program Water System has only well. Therefore, the water system is unreliable.	200,000	1	64 19	Kern	ш	2008
4781 1503558	1503558-001	El Camino Pines Lutheran Church	El Camino Pines Church- Second Well/Intertie with Lake of the Woods MWC	As part of this project, El Camino Pines Church will either drill a second well or develop an intertie with the neighboring Lake of the Woods MWC.	O e	0	Ρ	El Camino Pines Lutheran Church has only well. Therefore, the water system is unreliable.	250,000	1	70 19	Kern	ш	2008

4782 1502307	1502307-001	CAMP CONDOR		An old well and pump existed many years ago on the property. West Side Recreation and Parks District would like to update the pump, well, and run a new water line to the existing tank.	0	0	Ρ	The system uses spring box water. During dry years, water quits flowing. This water is more susceptible to bacteria.	85,000	21	75 19	Kern	ш	2002
4783 1300556	1300556-001	MULBERRY UNION SCHOOL		We propose to analyze the water, and design a system to filter and purify it to meet standards.	0	0	Ρ	Our well water cannot be used for anything involving student contact; we purchase expensive water for washing and drinking	100,000	4	85 14	Imperial	v	1998
4784 1500517	1500517-001	STOCO MUTUAL WATER COMPANY STO	OCO - Water System provements	Water Storage Tank - System does not meet the fire flow requirements set forth in the Kern County development standards - (System has pressure tank only)Booster Pumps (excluding cement pads)Well Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter (Inoperable)5/8" Water Meters (replace existing to properly quantify the amount of water being used with each connection)Back - up Generator/ATS (None)Instrumental/ControlsContingencies (15%)Engineering and Adminstrative Fees - Including Reports (10%)Permit and Legal Fees	0	0	Ρ	This system needs the following items according to Boyle Engineering's Report (March 2007)Water Storage TankBooster PumpsWell Pump RetrofitMiscellaneous Piping (6-inch)6-inch Resilient Seated Gate ValveMagnetic Flow Meter5/8" Water MetersBack - up Generator/ATSInstrumental/ControlsThe systems has seven connections with businesses that cannot afford such a substantial estimated cost to complete these repairs/upgrades.	525,000	6	85 19	Kern	Ш	2008
4785 2100545	2100545-006	WALKER CREEK RANCH EDUCATIONAL CENT Wa Prir Tar	alker Creek Ranch imary Water Storage nk Replacement	This project is to replace the primary water storage tank for the potable water system at Walker Creek Ranch, which serves over 5,500 elementary school students and about 6,000 guests per year. This will include the tear down of the current 100,000 gallon redwood tank which is over 50 years old and failed and dewatered in February of 2010. This tank has been lined since its failure, and operators are hopeful that the lining will extend the life of the tank until its replacement can be funded and implemented. It is anticipated that the pad for the new tank will need to be engineered and prepared according to the size and type of tank(s) identified as most cost effective to meet the needs of the system. It is anticipated that several of the water main valves and sections of the distribution system will also need to be replaced as a component of this project.	. 0	0	Ρ	The primary water storage tank for the potable water system at Walker Creek Ranch, which serves over 5,500 elementary school students plus over 6,000 guests per year is a 100,000 gallon redwood tank that is now over 50 years old. In February of 2010, this primary storage tank failed when one of the planks at the base of the tank snapped and released all of the stored water. We were very fortuate that students and guests were not on site during this failure, as school programs would have had to be cancelled. The tank has been lined as a temporary measure to ensure that the system can continue to deliver water in the short term. It is uncertain how long the liner will extend the useful life of the tank.	595,000	21	100 18	Marin	Π	2011
4786 1502163	1502163-001	LINNS VALLEY SCHOOL Lini We Cot	nns Valley School-New ell/Intertie with Linns ourt MWC	As part of this project, Linns Valley School will either drill a second well or develop intertie with Linns Court Mutual Water Company.	0	0	Ρ	Linns Valley School has only well. Therefore, the water system is unreliable.	500,000	4	100 19	Kern	Ш	2008
4787 1200684	1200684-002	Mattole Elementary School Ma Dis	attole (#1200684) stribution Repairs	Local workforce will install a flushing valve in the distribution system at the deadend of the supply line to the Multi-Purpose room and Principal's office.Local workforce will install new one and a half inch (1.5") Schedule 80 PVC supply line with one inch (1") Schedule 80 PVC service connections with isolation valves and one and a half inch (1.5") flush valve to the Site office and Accounts Payable Office. tie the supply lines together into a loop distrubution system with new isolation valves, any existing isolation valves in the system will be replaced with new valves.	0	0	Ρ	System is contaminated with material from the inside of the old concrete storage tanks.System also has 40+ year old galvanized pipe that is clogged and corroded that needs to be replaced.	15,000	1	100 01	Humboldt	1	2009
4788 2100545	2100545-001	WALKER CREEK RANCH EDUCATIONAL CENT WA Sys Off	alker Creek Ranch Wates stem, Marin County fice of Education	Monitor levels and flow rates of current sources (two wells), and be prepared to drill additional wells to suppliment and replace current sources, should they dry up.Also conduct tests and monitoring of distrubtion of storage system to identify sources of water loss in system. Replace and/or repair storage and distribution as required to minimize and eliminate water loss in system.	0	0	Ρ	To develop additional source capacity, should drought conditions threaten current sources. Also to identify problems / leaks in storage and distribution system and repair / repalce components as needed to minimize water loss in storage and distribution system.	250,000	21	100 18	Marin	II	2008

4789 1500518	1500518-001	AGBAYANI VILLAGE WATER SYSTEM	Agbayani Village-New Well/Intertie with City of	As part of this project, Agbayani Village would either develop a second source of supply or develop intertie with City of Delage	0	0	Р	Agbayani Village Water System only has one well. Therefore, the water system is unreliable.	500,000	6	100 19	Kern	ш	2008
4790 1502753	1502753-002	TEHACHAPI CHURCH OF THE NAZARENE	Tehachapi Church of the Nazarine-New Well/Intertie with City of Tehachapi	As part of the project, the Tehachapi Church the Nazarene will drill a new well or develop intertie with City of Tehachapi.	0	0	Ρ	Tehachapi Church of the Nazarene has only well. Therefore, the water system is unreliable.	500,000	1	119 19	Kern	ш	2008
4791 1502691	1502691-001	TUSD - MONROE HIGH SCHOOL	TUSD Monroe High School	- As part of this project, the school will drill a new well.	0	0	Р	TUSD-Monroe High School has only well. Therefore, the school water system is unreliable	200,000	1	130 19	Kern	Ш	2008
4792 2300785	2300785-002	Leggett Valley School		Rehab well, new well pump, new Fe & Mn treatment system	0	0	Р	Old well and Mn & Fe treatment system in poor condition	25,000	5	175 03	Mendocino	Ш	2000
4793 4900705	4900705-001	Geyserville Educational Park	Chlorination System Upgrade	Replace chlorinator	0	0	Р	Delapidated chlorination system	60,000	1	200 18	Sonoma	Ш	2002
4794 5100143	5100143-001	Pleasant Grove Elem. School		Repair and replace in-ground drinking water lines.	0	0	Ρ	Current drinking water system pipes are over 40 years old and need in-ground replacement. We are currently experiencing leaky and damaged pipes.	10,000	1	200 21	Sutter	I	1998
4795 4300986	4300986-001	Cinnabar Hills Golf Club	Cinnabar Hills TTHM	Our current GAC system is very costly to replace (7500) 4 times per year. What we would like to do is modify the GAC system to 14 smaller vessels that could be replaced on site by current staff. The appropriate GAC has been determined by Water Works Engineering in a pilot test that was carried out in 2008/2009. The water treatment plant would need to be replumbed and mor appropriate pumps installed.	0 e	0	Ρ	The problems with our detention time and current GAC system make it very difficult to control TTHM's throughout the year.	55,000	3	225 17	Santa Clara	Π	2009
4796 2100538	2100538-001	TOMALES HIGH SCHOOL	Tank and Treatment Design	Replace tank and treatment system	0	0	Ρ	Old tanks and poor treatment system	250,000	1	227 18	Marin	Ш	2003
4797 1502068	1502068-002	DI GIORGIO SCHOOL WATER SYSTEM	Di Giorgio School-New Well/Intertie with Arvin CSD	As part of this project, the Di Giorgio School will either drill a second well or develop intertie with Arvin CSD.	0	0	Ρ	Di Giorgio School has only one well. Therefore, the water system is unreliable.	500,000	1	230 19	Kern	Ш	2008
4798 1502068	1502068-001	DI GIORGIO SCHOOL WATER SYSTEM		No water for public school. Must drill new well.	0	0	Ρ	Existing well is not producing probably because perforations have been closed off. well originally drilled in 1949.	150,000	1	230 19	Kern	III	2002
4799 4300937	4300937-001	Field Sports Park/Mariposa Lodge/Coyote		Construct structure at well site and install meters to FSI and Mariposa.	ΡO	0	Р	Source protection needed. Also, meters need to be installed.	10,000	6	250 17	Santa Clara	Ш	1998
4800 4400751	4400751-001	BONNY DOON SCHOOL	Bonny Doon Union Elementary School Water System Upgrade	The Project is to upgrade the Bonny Doon Union Elementary School water system by replacing leaking underground supply and distribution piping and installing dedicated sample taps at each connection (building) for routine bacteriological monitoring. The scope of work for this project includes re-piping the connections between well W-2 and the storage tank to eliminate any leaking pipes and illogical plumbing cobbled together over the past 50 years, locating and replacing any leaky underground distribution piping, valves, or fittings, installing dedicated down-turned sample taps at each building/service connection, and preparing accurate as-built drawings of the upgraded water system for future operations, monitoring and repairs.	0	0	Ρ	The Bonny Doon Elementary School is located in the town of Bonny Doon, at 1492 Pine Flat Road, in the Santa Cruz Mountains, in the unicorporated area of Santa Cruz County, approximately eight miles northwest of the City of Santa Cruz. Bonny Doon Elementary School has operated at this site since approximately 1947. Water for potable supply for students and staff at the School has been sourced from two on-site wells, W- 1 and W-2. These well are NOT under the direct influence of surface water. Currently, water is supplied by well W-2 only. Well W-1 was disconnected from the water system in 2008 due to reported taste and odor problems. Well W-1 is now designated as a back-up well. Potable water for the School is currently supplied by well W-2. Water from well W-2 is stored in a 10,000- gallon concrete tank and a 5,000-gallon plastic tank. These two tanks are connected so that they act as a single tank. Underground piping distributes water from the storage tanks to the various buildings throughout the school grounds.Methyl-tert Butyl Ethrer (MTBE) has been detected in the water from well W-2. The MTBE appears to be form an underground storage tank (UST) that was removed from the site in 1998. The release of MTBE from the UST is being investigated and cleaned up with funds from the State Water Resources Control Board, and is NOT the subject of this Pre-Application. Piping between the wells and the storage tanks, and	25,000	1	300 05	Santa Cruz	U	2012
4801 2900563	2900563-001	BITNEY SPRINGS LLC WATER SYSTEM		Replace two 10,000 gallon poly tanks, or construct new steel tank on site	0	0	Р	Failing water storage tanks, poly tanks are cracking and may fail at any time	50,000	14	400 21	Nevada	I	2001

4802 3400104	3400104-002	CAVANAUGH GOLF COURSE	Cavanaugh Water Supply Well	Install new well with increased holding tank capacity (10,000 gal) and associated reconnection infrastructure (including backflow device). The new well would be located approximately 1,000 feet away from the existing well. Other wells within the area have significantly lower level of contaminants and the proposed location has a high probability of success. Increasing the storage capacity has two benefits: (1) less risk exposure should the system fail and repairs take longer than a few days, and, (2) existing tank is aging and the potential for a catastrophic failure increases each day.	0	0	p	Existing single source water supply has contaminants exceeding MCL secondary drinking water standards for color, manganese and odor as per the 2009 Consumer Confidence Report. Current yearly costs for filters to remove contaminants average between \$10,000 - \$12,000 p/year. Water quality is still subprime even with these efforts. Additional storage capacity is needed to reduce probable adverse impacts should system suffer a failure requiring more than two days for repairs. Current well output has been averaging 1500 – 1700 gal/day.	159,000	3	500 09	Sacramento	I	2011
4803 1502074	1502074-001	EL TEJON ELEMENTARY SCHOOL	El Tejon Elementary Schoo New Well/Intertie with Lebec CWD	bl- As part of this project, El Tejon School will either drill a second well or develop intertie with Lebec County Water District	0	0	Ρ	EI-Tejon Elementary School has only well. So, the water system is unreliable.	500,000	1	550 19	Kern	ш	2008
4804 2300584	2300584-001	Mendocino School District- Mendocino	Mendocino Unified Schoo District Universal Pre-App	<ul> <li>Proposed new System</li> <li>The current water system must be abandoned and replaced with a new system. The new system provides over a mile of new piping including new 12 inch, and then reduced to 10 inch, piping from the well site to the schools. The new line will be placed in new trenches along the public streets - mostly Little Lake Road. Additionally the new line will use a boar jack to cross under State Highway One. The existing four inch line will be abandoned in place.</li> <li>The civil engineer has coordinated the deisgn with CalTrans and the County of Mendocino Public Works. Schematic Design and Design Development is complete and Construction Documents is under way. It is hoped that constructon can commence in October or November 2007.</li> </ul>	0	0	Ρ	Project Description Replace an aging and inadequately sized domestic water system for the Mendocino Unified School District. The current system is not reliable and does not meet requirements for water pressure. Existing Water System Many of the schools for the Mendocino Unified School District are located in the coastal community of Mendocino, California on the Mendocino County coast. Installed in the early 1970's, the four inch diameter water line serving the schools originates just over a mile to the east from District owned tanks and well on District owned property. The water line runs from this tank/ well site under public streets (mostly Little Lake Road) to serve the District's schools.	1,889,750	15	750 03	Mendocino	Ι	2007
								This four inch diameter line is over a mile in length, is in poor condition and is woefully inadequate to provide required flows. For example for public schools, code						
4805 1502229	1502229-001	RIO BRAVO GREELY SCHOOL WATER SYST	EM Rio Bravo Greely School- New Well/Intertie with Vaughn Water Company	As part of this project, Rio bravo Greely School will drill a second well or devlop an intertie with vaughn Water Company.	0	0	Ρ	Rio Bravo Greely School has only one well. Therefore, the water system is unreliable.	500,000	7	887 19	Kern	Ш	2008

4806 2910300	2910300-002	Malakoff Diggins SHP	Malakoff Main Water Line Replacement	We would like to replace the waterline running through Malakoff Diggins State Historic Park to stop water loss from the pipe. We propose to run the pipe in the same location as it is right now from the upper park water storage tank to the lower town tanks. The total distance of the waterline is approxinatly 2 miles. We would like to increase the size of the waterline to 4" from the 2". We would also install new pressure reducers in the system to compensate for the elevation drop in the system. Also we would like to install new isolation valves and blowoffs so we may maintain the line and also chlorinate it as needed. As it stands right now, when we have a break and we need to disinfect the section. When we install the new line, we would bed the line in the correct material and then sift all dirt placed on the top of the line.	n O 2	0	Ν	Currently the Malakoff State Historic Park main water line runs from the Derbec Well storage tank to the town of North Bloomfield. The line has numerious leaks and cracks in it. We are repairing it on a weekly basis and it will soon have more patches on it than immaginable. We would be replacing the pipe as we get these problems but when the pipe was installed, their were never any isolation valves installed in the saytem. The pipe is currently only a 2" pipe serving the town. The reason we have high flow is because of the elevation drop between the storage tanks and the town it serves. The pipe varies in depth from several inches below the surface to 5 feet below the surface. When it was installed, it was not bedded correctly and now with the settling of the ground, rocks that were dropped onto the line are forcing down on the line and breaking it. Also the correct pipe and joint material was not used. The current pipe is schedule 40 PVC and alot of the joints are failing. The pressure reducers that are on the system do not keep the pressure at a constant also creating surges on the system. Even when we replace them, their is not enough of them in the system so when we get a surge, it blows them out. When leaks do occur, it takes a while to find them because the ground is so absorbant, the water just soaks into the ground and disapears. To find them, we spend days exposing the pipe and then listening to the pipe fittings for flow.	350,000	1	25 21	Nevada	I	2007
4807 4200626	4200626-001	FREMONT/SY IMPROVEMENT ASSN.	Fremont-Santa Ynez Improvement Association Account #4200626	1. In order to replace the 50 year old tank, it must be first disconnected and removed with a helicopter, the tank-bed must be leveled and a new water-tank flown in. After new tank is leveled, all fittings, hoses and connectors must be replaced &/or reconnected.2. Man of the water lines on the system are over 80 years old and extremely corroded and rusty. To replace the old water-lines they must be found, dug up and replaced with new connectors and valves.3. Permits from the US Forest Service and the Santa Barbara County, must be recieved before any of these projects can started.Also, an archeologist's survey is required by the Forest Service before they will issue permits	O IV	0	Ν	replace existing 50 year old water tank (approximately \$12,000) and 60 year old water lines (approx \$20,000)	20,000	46	25 06	Santa Barbara	IV	2009
4808 4300612	4300612-001	Mt. Madonna County Park		Install two water meters at wells.	0	0	Ν	Unable to monitor water usage, implement water	10,000	12	25 17	Santa Clara	Ш	1998
4809 3104457	3104457-001	SKY MOUNTAIN CHRISTIAN CAMP	Sky Mtn. Well Construction	To furnish the labor, equipment , and material necessary for the construction of a 6" steel cased commercial water well to the estimated depth of 850'. Step #1: Bore hole drilled to 50'Step #2: Bore hole drilled to 850'Step #3: Submit 6" stell casing to a depth of 850'Step #4: Sanitary Well seal will be pumped between the 10" bore hole and the 6" casing from a depth oof 50' up to ground level.5hp, 3ph pump and all wiring associated with project.Constuction of pumphouse and all electrical connections required.	o	0	Ν	Current water treatment plant is nearly 15 years old. Treatment plant is producing less than 50% of total production that plant was designed for. Due to new regulations (LT2ESWTR) current plant may not be able to meet new regulation requirments for risk of disease caused by Cryprosporidium and other microorganisms. Instead of spending funds to update current treatment plant which treats surface water, we feel that a well will improve the water quality at a lower cost as well as meeting all new regulations (LT2ESWTR). Placer County Health Department agrees that a well will be a better solution to meet current and future heatth and saftey standards required by law.	85,000	14	25 02	Placer	I	2009
4810 4300616	4300616-002	Uvas Canyon County Park		Install water meters in system.	0	0	Ν	Unable to monitor water usage & demand, detect leaks, implement conservation program, etc.	10,000	12	25 17	Santa Clara	П	1998

4811 3200139	3200139-002	Almanor Heights MWC	Water line replacement or upper Scott and lower Terrace	Installation of 1347' of 8" PVC pipe, retirement of 1347' C of 4" steel pipe plus installation of one 6" dry barrel fire hydrant. This project will also include six 8" gate values and three 6" hydrant controls plus pavement cutting and replacement. This project will be from the tank down Scott Drive to the second fire hydrant with additional 160 feet being replaced on Terrace Drive. This is approximately 45% of existing water supply lines in the Almanor Heights Mutual Water Company.	0	0	Ν	Fifty year old 4" steel pipe watermain and one-4" fire hydrant are aged and need to be updated for improved domestic water supply and provide required fire protection.	162,751	37	25 02	Plumas	I	2007
4812 2700558	2700558-001	PENTECOSTAL CHURCH WS	Pentecostal Water System Consolidation	Please contact us with questions or comments. The properties on this system are located on U.S. Highway 101. Salinas city water is located on neighboring property to the south. Completion of this project will move city water hookups north along Highway 101, allowing further hookups north along Highway 101, allowing further hookups north along Highway 101, allowing further hookups in the future. The owners on this system have been researching easements, and options on this system for years. Numerous violations with the Health Department have happened during that time. This section of U.S. Hwy. 101 is slated to begin construction in July, 2010. The plan is to move the highway a short distance to the east. During that construction, there is an option for us to get a hookup from California Water Service. The large cost requested is due to the necessity of going under both the existing highway and the new highway by Cal Water that they may have found a way to hookup on the same side of the existing highway as the water system, significantly reducing the cost of the project. They will be notifying us in the next few days of their findings on that option. The owners on this system would not be able to afford low-cost loans for this project. It will only be a feasible project if a significant grant could be applied toward it.	0	0	Ν	This is a small water system that has had numerous violations over the years due to high nitrates and coliform issues. There are businesses as well as residential hookups on the system. Even with Nitrate and Chlorination treatment systems we continue to get occasional test failures. The last coliform failure was on January 30, 2009. In 2008 there were failures in May and June.	955,000	1	25 05	Monterey	Π	2009
4813 4901077	4901077-001	Sonoma Mountain Zen Center	Distribution upgrade and chlorination treatment addition	The project that we are planning to undertake is: C Replacing the existing concrete storage tank with a new 10,000 gallon poly tank (or possibly two 5,000 gallon tanks)Replacing the existing lines, valves junctions etc. Installing an in-line chlorination system for disinfection.	0	0	Ν	We have had repeated violations of total coliform exceeding the MCL during the past 24 months/ 4 citations from the CDPHAlso in October of 2009 we had a positive test fore-coli. We have been on boil water notice twice in the last yearNovember 2009- January 2010 and alsoApril 2010- May 2010. These violations have been traced to our storage tank (very old cement tank) and to our distribution system which currently has no treatment. Our well has been thoroughly tested (microscopic particulate analysis and a full battery of wet season samples) and proves to be quite pure/not the issue. Being a small non-profit organization, we simply have not been able to financially support the needed upgrades to our system especially due to the amount of fines, extra samples, and specialized tests that we have been subjected to because of these violations.	10,000	4	25 18	Sonoma	Ι	2011
4814 2800683	2800683-001	COUNTRY INN, THE		Install back well or additional storage and treatment for C	0	0	N	Need back-up well or additional storage and treatment	40,000	1	29 03	Napa	Ш	1998
4815 3103279	3103279-001	APPLEGATE INN	Expansion for Existing Users	hard water. Expand water system C	0	0	Ν	tor nard water. Low capacity for existing users. Expansion NOT covered by SRF	50,000	16	34 02	Placer	I	2006

4816 0202517	0202517-001	LAKE ALPINE REC. AREA	Lake Alpine Distribution System Replacement	We seek funds to hire a contractor/s to complete the following:Replace the existing water distribution system that is prone to leaks and breaks. This will require removal and replacement of the water line/s that circle the lake and service several campgrounds. Replace fixtures, faucets and connections with newer, low-flow types. This will greatly reduce water volume demands aiding us in decommissioning the spring and treatment plant. Most of the toilets in the area are flush toilets. They are badly outdated and parts are not even available for repairs. They break and leak regularly. Replacement with Low-Flow types would solve both volume and aging issues. Reduced volume demands are critical in allowing conversion to the new well to be successful and prompt. Decommission and cap the present surface water intake and treatment plantonce given the go-ahead by County Health Department. (It was noted by Alpine County that while inspecting our facilities the inspector witnessed a dog swimming next to the lake intake pipe). The treatment plant alone is a major cost to the agency and it's decommissioning would save electric costs, chemical costs and the need for a Water Treatment II Operatment officials. Decommission the east-end spring/horizontal well. This is a supplemental supply source and has been noted to	0 m e e	0	Ν	The Lake Alpine water system is presently a surface water fed system. Both Alpine C.D.H. (Dennis Lampson) and California State D.H.S. (Richard Blood) have advised me that our surface water intake is subject to contamination. The Stanislaus N.F. has received advisory letters notifying us of numerous compliance issues. We have sought to address them, however problems remain. The water is treated in a treatment plant and contact tank and sent to a 30,000 gallon storage tank, then on to the distribution system. Because of a lack of water volume during peak days, the system is also fed by a horizontal well/spring on the other side of the lake. This has also been pointed out by the above officials as being prone to contaminants. In response to these issues the U.S.F.S. initiated an assessment of the system to find viable solutions. This resulted in our drilling a deep-water well and we are currently planning on tieing this well into the existing distribution system by the end of the season. Alpine C.D.H. has notified us that we must remain on (or have it remain active) the surface water system until they are satisfied that the new well can meet needs. Other findings mentioned in the assessment were recommendations to address the volume issue by changing the aging flush toilets to low flow fixtures. We thus far lack the funds to accomplish this portion of the recommendation. We are also dealing with an aging	500,000	45	50 09	Alpine	1	2011
4817 3301097	3301097-001	CAMP JOE SCHERMAN	Camp Scherman Water System Upgrade	The water provides drinking, living, and irrigation water for Girl Scotts who reside on the property throughout the year and the maintenance staff (two live on site) who work there. Approximately 4500 Girl Scouts and others stay on the property over the year and up to 55C at one time. The system resides in a half square mile of the 700 acres of property and is a positive feed type water system with 4" to 6" piping and Mueller valves at strategic points in a looping system. Tank one and tank two would need to be retrofitted with 6" electric butterfly valves, electronic depth measuring, flow meters along with the necessary wireless sending units to the maintenance center for information gathering, control, and alarms. The maintenance center would need a control center system with auto and manual capabilities. Wells, one, two, and three would be retrofitted with electronic depth measuring capabilities and auto-run/manual switching, wireless communication with tanks and maintenance center for filling and monitoring. Tank two needs fencing and a ladder cage to complete it's security, wells one through three need more secure accessible well houses. All area need further fire abatement to insure protection in the event of forest fire.	r O 0 5 5, 5, 1 1 1 5 2	0	Ν	The water system is in need of proper level monitoring equipment for two tanks and three wells that feed the system. A monitoring would greatly assist in water conservation through observing aquifer levels and usage. The system would greatly benefit from auto warning systems in place for monitoring breaks in the system via flow rate as we have had water loss due to breakage without warning of loss until tanks may empty. The system would be wireless with computer and manual alarm capabilities in case of water and/or power loss. The system also in need of better security/source protection in regards to vegetation clearance and perimeter fencing plus structures as there are issues with possible un-authorized entry safety and lockout capabilities.	85,000	50	100 20	Riverside	v	2008
4818 4700517	4700517-002	Sawyers Bar County Water District	Emergency Well Rehabilitation	Rehabilitate existing well next to Salmon River and make emergency backup source.	0	0	Ν	Jessup Gulch is only source during summer and is in forested area. If forest fire occurred, it would make Jessup Gulch unuseable.	19,340	1	100 01	Siskiyou	I	2006
4819 4300737	4300737-001	Joseph Grant County Park		Install water meters in system.	0	0	N	Unable to monitor water usage & demand, detect leaks, implement water conservation measures, etc.	10,000	1	100 17	Santa Clara	Ш	1998

4820 5601701	5601701-001	DENNISON PARK	Dennison Park Water Mair Replacement	This project consists of replacing the original water weld istribution system, approximately 2,300 l.f. of existing galvanized water distribution main line and fittings with the same amount of PVC Class 150 water distribution lines and fittings with a hydraulic safety factor of 4.1. All PVC pipes, valves and fittings shall be new and unused. Expenses would include the pre-construction costs environmental screening, permits, and design costs. The construction contract costs would include mobilization, clearing and grubbing, construction surveying, excavation, compaction and grading, and th installation of a new 2" PVC water main, misc. valves and fittings, hosebibs, and quick couplers. Project management fees and contract tech fees are included. A water montoring system was installed with the new water tanks and is currently in use.	II O g th ie	0	Ν	Dennison Park's water distribution system has been inplace since the early 1920's. In those days a natural spring provided the water. Later on a water well located on a property adjacent to the park's southwest corner became the source for the park. In the early 1950's the County installed a galvanized water distribution system from the well on the adjacent property that pumped water into a 1,500 gallon water storage tank and then distributed the water to the various facilities in the park. In 1971 at the request of the property owners the County entered into a year to year lease agreement for the use of the well. The lease was renewed for a 10 year term in 1983. At the end of the 10 year lease term the County decided not to renew the lease. The well was no longer producing the quantity or quality of water the County needed to support the park facility. The Ventura County Parks Department is an Enterpise system that operates by collecting revenue from the public use of the facilities within it's system. No tax dollars from the General Fund contribute to the operation and maintenance of Ventura County Parks. Fortunately the 2000 Park Bond was approved and the County appropriated \$190,000 to upgrade the old water system. The County used the funds to install a well on the park property. In addition to the well, three new 3,000 gallon galvanized steel	118,900	42	100 06	Ventura	IV	2008
4821 1900008	1900008-001	BIG ROCK CREEK CAMP		FUNDS WOULD BE USED TO MAKE SYSTEM	0	0	Ν	water storage tanks were constructed. A final FUNDING FOR EXPANSION	450,000	1	125 16	Los Angeles	IV	1998
4822 0910305	0910305-001	CA State Parks - Emerald Bay, Boat Campg	Replace/Repair 2 25,000 Gallon Water Storage Tank at Eagle Point Campground	OPERATIONAL. We plan on taking tark #1 a 25,000 gallon water tark < and having it bead blasted and then re epoxy coated. d The epoxy coating we will use will be NSF and AWWA certified the entire inside of the tank including all support beams, roof and roof beams will be re-coated to protee the exterior of the tank will also be re-coated to protee the exterior of the tank. Tank #2, is a 20,000 gallon hypolon lined redwood tank. we would have the hypolon lined redwood tank. we would have the used of the tank re adjusted. The exterior of the tar will also be re-treated with a boiled linseed oil finish to protect it. The existing roof of the tank will be remove and a new roof with vents will be installed. The entry hatch will also be rebuilt and reinforced to provide a more secure access to the tank. The new roof will have a steeper pitch on it to allow better shedding and runo of rain and snow and the vent at the top of the tank will also be replaced with a ladder which is OSHA approved Both tanks will have new tank fill valves and discharge valves will also be replaced with AWWA approved to California Department of Public Health regulations.	O d. ct ne nk o d d d d	0	Ν	The Eagle Point Campground Water System is located within Emerald Bay State Park on the shores of Lake Tahoe's Emerald Bay. The campground is open only during the summer months and is a popular camping location for thousands of campers from around the world. The park is currently supplied by water pumped out of Lake Tahoe and treated at the park treatment facility before being stored in 2 25,000 gallon water tanks. Storage tank #1 is a 25,000 gallon steel water tank located next to the treatment facility. The tank was installed back in 1980 and the epoxy sealer on the inside of the tank has failed and the tank is now rusting. If the tank is repaired now then it will place the tank back to another 25+ years of service. If the tank shoth would need to be replaced. The condition of the tank has been noted and written up by the California Department of Public Health and they are advising us to repair the tank before the tank begins to fail and they will have to issue us a notice of citation. Storage tank #2 is showing signs of failure. This tank is a redwood tank and was installed back in the mid 80s. The tank was lined with a hypolon liner and it appears to be leaking in several locations. The roof on the tank is a spa	125,000	5	125 09	El Dorado	I	2009

showing signs of fatigue and needs to be replaced prior to collapsing. The exterior ladder on the tank is also

4823 0910024	0910024-001	Glenridge Water Company	Glenridge Water Storage Facility	Install a new 120,000 gallon bolted steel water tank with a state on the art radio telemetry system. There is no power or telephone lines at the tank site, solar is the best available green technolgy to power the radio transmitter. The telemetry will monitor tank level continuosly sending a signal to the well site. There will be site preparation with underground pipe, valves and fittings. A new foundation will be needed to support the 120,000 gallon large tank. The budget for a new tank is \$1.00/gallon. The new pump controller telemetry unit and solar powered tank level monitor telemetry unit with remote access to pump control system today will cost \$32,505There are about 10 privately owned parcels within 1000 feet of the service area, that will eventually need to have fire protection. This proposed new tank would be an asset to enhance the entire region.	0	0	Ν	The existing water system has an aged, installed a used tank in the 1960's, 100,000 gallon bolted steel water tank. In 1994, I invested \$18,000 to have the tank rehabilitated; sand blasted,welded and interior epoxy coated. The tank is starting to fail. Just this summer a leak occurred on one section of the second tier of the tank wall. A redwood plug was used to stop water from leaking. A new radio telemetry system is also needed to start and stop the pump. A solar powered radio unit was installed in the late 1990's for \$8,000. That technology is old and has been problamatic. The source water well only produces 50 GPM. In April of 2009 we installed a new pump and more efficient motor. The water main sizes are six inch and fire hydrants are adequate. There is a need to have a reliable water tank in order to insure public health and safety which includes fire protection.There are only 45 customer connections in this small water system.	237,000	43	130 02	El Dorado	I	2011
4824 3400123	3400123-001	ELKHORN BOAT LAUNCH <sup>a</sup> SWS <sup>3</sup>		Replace existing chlorination system.	0	0	N	Well deficiencies need correction.	10.000	1	138 09	Sacramento	I	1998
4825 1000130	1000130-001	CAMP SEQUOIA/GAINES WATER SYS	Add source capacity	Drill new well and tie it in to existing system.	0	0	N	Experiencing low production from well - insufficient at times to supply adequate quantities of water.	20,000	8	160 23	Fresno		2002
4826 3700235	3700235-002	YOUNG LIFE OAKBRIDGE CAMP	Well 1 refurbish and filter system	Upgrade well to current standards and refurbish to meet increased water demand.	0	0	Ν	Well production has decreased and well head construction does not meet current health standards.	137,000	9	220 14	San Diego	V	2009
4827 3700235	3700235-003	YOUNG LIFE OAKBRIDGE CAMP	New Well Construction	Drilling of new well, install treatment system, connect electrical with transformer, construct access road, install transfer tank and pump, connect to current water system and construct pump house and protection fencine.	0	0	Ν	Current well system will not meet projected water demands.	239,908	9	220 14	San Diego	v	2009
4828 3700235	3700235-004	YOUNG LIFE OAKBRIDGE CAMP	Kitchen water purification	Installation of new NSF61 rated water filtration system.	0	0	Ν	Current water filtration has degraded and has difficulty meeting peak demand requirements.	10,000	9	220 14	San Diego	v	2009
4829 3700235	3700235-001	YOUNG LIFE OAKBRIDGE CAMP	Well 2 treatment plant upgrade	Remove and replace current filter and treatment system. Install new well and transfer pumps.	0	0	N	Current treatment/filter system has degraded and does not meet requirements at peak water demands.	134,360	9	220 14	San Diego	V	2009
4830 3600589	3600589-001	Holcomb Valley Scout Banch		Construct new reservoir	0	0	N	Old storage facility	150 000	6	250 13	San Bernardino	v	1998
4831 3600534	3600534-003	De Benneville Pines Inc	Drill a new well	Drill a replacement well	0	0 0	N	Existing well is inaccessible and unable to be upgraded	30.000	2	250 13	San Bernardino	v	2002
								or maintained						
4832 1000051	1000051-001	HUNTINGTON PINES MUTUAL		DRILL SECOND WELL FOR BACK-UP. DISCONNECT WELLS TO DISTRIBUTION SYSTEM AND CONNECT THEM TO THE STORAGE TANK	0	0	Ν	WE ONLY HAVE ONE WELL WHICH FEEDS INTO OUR DISTRIBUTION LOOP. HILLSIDE LOCATION WITH 100,000 GAL. STORAGE TANK AT TOP, WELL APPROX. 1/2 WAY DOWN HILLSIDE.	35,000	110	300 23	Fresno	Ш	1998

4833 3200019	3200019-001	Oakland Feather River Camp	Oakland Camp/Camps in Common Water System	The project is only in the conception stages at this point O since money is not currently available to do any of the work. If funded, the project requires study of all aspects of the system to install an adquate system to meet needs of the camp. Through study, a well sight must be located, treatement and storage systems designed and a distributuion	0	Ν	Oakland Camp faces numerous problems in delivering quality drinking water due to a low-performing well, a poorly retrofitted treatment plant and a deficient, decrepit distribution system which have foregone even routine maintenance for over a decade.	1,000,000	1	300 02	Plumas	I	2007
				system must meet needs.			When the Camp switched from surface to underground water few changes in the overall system were made. The well produces 12 gallons per minute. The system is severely overtaxed impacting revenues and limiting the ability to serve low-and moderate-income families.						
							The Camp has capacity for over 350 campers but cannot exceed approximately 60% without depleting the water system or imposing strict water-use limits. Food service alone can drastically diminish the capacity of the system.						
							The inadequate 15,000 gallon tank can store only enough water to last little more than one day of normal usage at 60% capacity. Downtime at production or treatment leaves the system depleted within hours. Surface treatment devices were not removed when the						
4834 3000940	3000940-001	Caspers Regional Wilderness Park	Storage tank replacement	This project will replace the current 25k gallon reservoir O with a new 50k gallon reservoir. Plans are to remove the current reservoir and replace with new piping, new controls a welded steel reservoir.	0	Ν	Source switched. These devices interfere with the The current water storage tank for Caspers Park is a 25,000 gallon reservoir. The demand in the park during the summer months has approached 75,000 to 80,000 gallons a week. The current yield from the well is much lower and cannot keep up with this demand. Plans are to replace the current 25k gallon tank with a 50k gallon tank to address water quantity problems. The additional storage allows more water to be available for a longer period to the visitors of the park and will also provide additional water if a fire was to develop in the park.	150,000	1	500 08	Orange	v	2009
4835 5601706	5601706-001	LAKE PIRU PARK - UWCD	Lake Piru Recreation Area Water Distribution System Improvements	Definition of the system improvement project will of replace approximately 5100 linear feet of undersized pipelines, isolation valves, fire hydrants, blow-offs and appurtenances. In addition, the District will also remove approximately 1500 feet of asbestos cement pipe from service. The project also includes separating the existing irrigation system from the domestic distribution system with the objective of supplying landscaped areas with a non-potable water source and installing low output irrigation heads for water conservation and efficiencies. Separating the irrigation system and eliminates the potential for cross connections. The District has initiated an improvement program to upgrade the recreation area's water system. The ongoing water system construction program includes a new 140,000 gallon storage tank, new pumping barge, new water treatment plant and various pipeline improvements. The District has invested approximately 51.7 million in the water system since 2007. The proposed improvement project to the recreation area's distribution system is the final component of the larger domistic water improvement project to the recreation area's distribution system is the final component of the larger domistic water improvement project to the recreation area's distribution system is the final component of the larger domistic water improvement project to the recreation area's distribution system is the final component of the larger domistic water improvement project to the recreation area's distribution system is the final component of the larger domistic water improvement project to 100,000 visitors annually and ensure adequate water supply and pressure for fire suppression needs.	0	Ν	United Water Conservation District (District) owns and operates Santa Felicia Dam, Lake Piru Reservoir and the Lake Piru Recreation Area under a license from the Federal Energy Regulatory commission (FERC). The district is required under the license to provide public access and certain recreation facilities. The Lake Piru Recreation Area has been in continuous use since 1956. The recreation facilities have been regulated by a Conditional Use Permit (CUP) from the County of Ventura since 1979. The recreation area includes over 400 campsites, several day use areas, boat launching facilities, marina, snack bar, dry storage yard and offices. The District also provides potable water service to campsites, restrooms, day-use areas, 8 on-site employee residences, administrative offices and facilities and a USFS Ranger Station (LPF #53), as well as to a landscaped irrigation system and fire suppression hydrants. Visitations to the Lake Piru Recreation Area average over 100,000 vistors annually. The Lake Piru Recreation Area infrastructure is more than 50 years old and is in need of major upgrades. The water distribution system within the recreation area was constructed in a piecemeal manner. The water system is undersized, requires constant repairs and, on occassion, is temporarily out of service. The system lacks isolation valves to isolate the line breaks, air valves and blow-offs to flush extended dead end pipes. The leaks and repairs	375,000	2	960 06	Ventura	IV	2011

4836 4800651	4800651-001	Lake Solano Park	Lake Solano well replacement and upgrade	The proposed project would fund the upgrading of current facilities that are in place. Youth Center consists of one well, a chlorinator and a 300 gallon pressure tank and a 500 gallon holding tank. The system services approximately 1500 visitors a year. Well sits approximately 50 feet from Lake Solano shoreline. There is a concern of cross contamination from the Lake's surface water affecting the Well itself. The monies would be used to relocate the Well approximately 200 feet south of the exitisting Well while updating to current codes. Recently, another abandoned Wellhead was discovered. Both Wells would be capped and the existing piping would be utilized. The 500 gallon galvanized holding tank would be replaced by a new 200 gallon tank. A cinderblock structure would replace the current chain link fence enclosure. Day Use Park consists of a 1200 gallon hydro pneumatic tank. The facilities are enclosed by a chain- linked fence. The water System serves approximately 200,000 visitors a year. The monies would be used to upgrade existing facilities, by replacing the fenced area with a cinderblock structure. Backflow devices would be placed on each hose bib in the Campground and Day Use Park. This would prevent contamination by RVs hooking up to the existing facilities. In the event of low pressure from the system, the tanks on the RV can backflow ito the System causing contamination back.	0	Ν	In October of 2008 Well number 1 in the Day Use Park test positive for both E coli and Coliform bacteria. Posting were placed throughout the Campground and Day Use Park. The problem was corrected with in a 20 day period. Youth Center consists of one well, a chlorinator and a 300 gallon pressure tank and a 500 gallon holding tank. The system services approximately 1500 visitors a year. Well sits approximately 50 feet from Lake Solano shoreline. There is a concern of cross contamination from the Lake's surface water affecting the Well itself.	200,000	105	1,000 04	Solano	Π	2009
4837 2610300	2610300-002	CSP - BODIE SHP	Repair/Replace Water Distribution System and Storage Facility within Historic Park	With this project, we would like to install new pipe or re-O line the existing pipes within the park to get them back to fully operational status. If we re-line all of the distribution lines, we would only have to pothole certain areas where the main line valves or fire hydrants are to be installed. Bodie is an area where Cultural resource's are throughout the soil so trenching could create problems. The new line would then be pulled through and the new isolation valves or hydrants with isolation valves installed where the pits were dug. All pipe, valves and hydrants would be approved by the American Waterworks Association, State and local codes. All valves and hydrants would be GPS ed and located on maps of the area so they would be easily identified at any time of the year and easily found if needed during snow and digitally filed for future use. We would also like to line the underground water storage tank. The reason we want to line the tank is	0	Ν	The current water distribution system at Bodie State Historic Park was installed in the early 70's. The system has numerous leaks and we are continually repairing them as found. Most of the leaks go undetected due to the fact that the soil is so porous and the lines are buried 4 to 8 feet deep to prevent from freezing. During the winter months, when leaks do occur, we are unable to detect them until spring time due to snow on the ground. The system also does not have an adequate amount of isolation valves installed within the system and ones that are installed either leak through or do not operate. Fortunately, the leaks that we have had in the past have been minor so we have been able to install band-aid clamps to fix the problems. Also, the fire hydrants that are on the system do not operate properly and do not have isolation valves on them. All of the hydrants are "dry barrel" and most of them do not drain when shut off. The Town of Bodie has been	350,000	8	2,500 13	Mono	v	2009

recorded to be one of the coldest locations in the

country experiencing temperature extremes year round so self draining fire hydrants are essential. It is not

uncommon during the winter months for temperatures

inoperable and has the potential to burst lines draining

the entire water system and storage tank. The water

system is kept charged during the winter months to

to drop to 45 below zero without a wind chill factor.

This freezes pipes instantly and renders hydrants

because of the location that it is in. Bodie State Historic

ground tank or the digging of a hole for the removal and installation of a new one could not be done due to

Park is a Historic Landmark and addition of an above

Cultural Artifacts within the area. The old tank would

be sealed and made water tight from infiltration and

then a hypolon liner installed. While doing this, we

inflow, outflow and drain valves accessible from ground

would also install a new valve assembly making all

## 4838 2610300 2610300-001 CSP - BODIE SHP

4839 0910301

## Fencing for Springs

Repair and Security

Bodie State Historic Park We plan on repairing the existing concrete structure at O Rough Creek to prevent it from further failure. The structure is currently in good condition and just needs minor repairs. The top and roof section of the box is in major need or repair and would be completely removed and an new one built. The pitch of the existing roof would be increased to increase snow and water shedding from it. The entry hatch would then be redesigned to prevent small rodents, birds and other unauthorized access to the box. The catch basin structure just outside of the Spring Box would be totally re-designed. The existing box would be removed and a new permanent one built and installed. This box would also be secured to prevent unauthorized access. We would then install an new fence completely around the area of the spring. The existing fence line is 3 strand barbed wire and approximately 300' X 300' with several access gates. We would install new fence poles and either a more secure barb wire fence or a cyclone fence to prohibit animal and human entry into the spring area. We would also do the same down at Spring 6. This fenced area is approximately 100' X 100' and would be the same design. We would then install monitoring equipment at each location and have it transmit the data collected back to the water plant located at Bodie.

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Project

0910301-001 CA State Parks - D.L. Bliss

D. L. Bliss State Park Main Due to the length of the water system, (approximately O Waterline Rehabilitation 20.000 feet) at D. L. Bliss State Park, we would like to line the existing waterline within the park instead of installing new. By doing this, we would be able to pothole down to the line where we would be installing isolation valves, fire hydrants or the pressure relief stations and then pulling/bursting the new line through the old line. This would reduce the amount of ground disturbance within the park. The new isolation valves, fire hydrants, pressure reducing valves and new line would be AWWA and NFPA approved and all installed to current code. Spacing of the fire hydrants and isolation valves would be to State and Local code. Depth of the line would be determined during project. Installation of the pressure reducing valves would be in the existing locations except for 1 new one which would be installed just above the Park Visitor Center. The new chlorine injection station would be located just below residence #3. This location has been sought because the water system in the winter is shut down from here to the lake. When we re-start the system, this would be the location to inject chlorine into the system for disinfection. This location is also good because we would need electricity to operate the station and their is a main power line which runs just behind the residence that we would be able to tap into. The proposed building would need to be approximately 5' X 8' and have a heater inside and

High Desert of the Eastern Sierras. The park is a Registered Historic Landmark in California and has a yearly park visitation of 250,000 people. The park receives its water supply from 2 locations within the area. The first is known as Rough Creek. It is a spring located approximately 7 miles from the park and was the original water supply to the park initially built in the late 1870s. The spring box improved to what it is today back in the 70s and has fallen apart and is in the need of repair. The enclosure that is their now is a concrete structure approximately 10 X 8 feet with a shingle roof on top. The concrete structure is in decent shape and needs only a few repairs but the roof is in a state of failure and if not repaired it may collapse resulting in spring box failure. The box also has many openings in it and small rodents and birds have been gaining access to the spring box posing a potential health hazard. The discharge pipe from the spring box runs down to the main line catch basin which is a wooden box lined with a stainless steel liner. We have not had problems with rodents entering into this box since we keep repairing the lid on the box so it is a tight fit and they are unable to enter. The entire area is surrounded by a 3 strand barb wire fence to keep the animals out. This fence is repaired on a yearly basis due to the fact that the winters are heavy and the wild animals of the area keep

Bodie State Historic Park is a ghost town located in the

35.000

The main water distribution system at D. L. Bliss State Park leaks almost as much water as we produce. During the winter months when the park is closed and we have only 2 employees living their, we have a water usage of over 10,000 gallons per day. This is because the pipes within the park are buried too shallow within the park and they will freeze if we do not allow water to continuously flow through then and also to keep the chlorine residuals in the pipe at required levels for disinfection. The existing pipe being so old has many holes and repairs in it and leaks dramatically. One can follow the path of the pipe by surface vegetation growing well. Also if we ever had a major line break within the park, their are insufficient valves within the park to isolate where the leak is and when the main lines drain, we are highly susceptible to contamination of the remainder of the system. We would like to install new isolation valves throughout the system to alleviate this problem. The park also has limited amount of fire hydrants. The hydrants that are their are either nonoperable or have limited access by the fire department due to incorrect thread style. We would like to install new ones approved by the AWWA and NFPA. The third problem we would like to repair is in the pressure reducing stations. The current stations are failing and have been repaired so many times that they are ready to be replaced. We currently have water pressures in

750,000 13 2,800 09 El Dorado 2009

2,500 13

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Mono

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2009

## 4840 0105010 0105010-001 EBRPD - Del Valle Regional Park

Plant

Del Valle Water Treatment The Del Valle Water Treatment Plant currently utilizes O conventional filtration to render potable water supply for a very popular park in Livermore. This project will install appropriate equipment utilizing membrane filtration technologies (either ultra or micro filtration) into existing treatment plant infrastructure to either replace or supplement existing treatment processes. This project will eliminate current concerns regarding turbidity and DBP production associated with the current water treatment system.

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The Del Valle Water Treatment Plant is very old, fragile and requires renovation. Recent and periodic turbidity spikes of the finished water have exceeded state water standards of 0.3 NTU's. The elevated turbidity levels result in concern over adequate disinfection performance of the water system. In addition, excessive algae growth within the system clarifier has required pre-treatment chlorination resulting in concern over disinfection by-products (DBP's). The last DBP results (THM's and HAA's) from the water system exceeded state water standards. This project involves the installation of equipment utilizing membrane filtration technology into this system's water treatment process that will address the aforementioned concerns associated with current treatment processes.

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