STATE OF CALIFORNIA

ANNUAL CAPACITY DEVELOPMENT PROGRAM IMPLEMENTATION REPORT

FY 2020-2021

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

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ANNUAL CAPACITY DEVELOPMENT PROGRAM IMPLEMENTATION REPORT

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

STATE FISCAL YEAR 2020-2021

(for the period of July 1, 2020 to June 30, 2021)

1 CAPACITY DEVELOPMENT PROGRAM OVERVIEW

1.1 LEGAL AUTHORITY

The State Water Resources Control Board (State Water Board) is designated as a primacy agency by the U.S. Environmental Protection Agency (USEPA) and is granted the regulatory and enforcement authority over drinking water standards and public water systems (PWS) in California. Within the State Water Board, the Division of Drinking Water (DDW) oversees enforcement of drinking water standards and requirements over PWSs in California, under the authority of the California Safe Drinking Water Act.

The federal Safe Drinking Water Act (SDWA) required states to incorporate technical, managerial, and financial (TMF) capacity into PWS operations. This requirement helps ensure that PWSs with TMF capacity have long-term sustainability and can maintain compliance with all applicable drinking water laws and regulations.

The federal SDWA Amendments of 1996 were signed into law in part because of the significant problems that small public water systems (SWS) had in providing safe, reliable drinking water to their customers. It included mandates to the states to prevent new non-viable systems. It also mandated the development and implementation of a comprehensive capacity development strategy to assist PWSs in obtaining adequate capacity.

In 1997 Senate Bill (SB) 1307 became law, enabling California to implement the provisions of the federal SDWA. This statute established a financial assistance program, entitled the Drinking Water State Revolving Fund (DWSRF), which included a comprehensive technical assistance program for small systems. In order to help ensure the provision of safe, reliable drinking water to customers on a long-term basis, this legislation was designed to prevent the formation of a new PWS or the approval of a PWS change of ownership unless that system is determined by the State to have adequate TMF capacity.

Section 116540 of the California Health and Safety Code states:

"A public water system that was not in existence on January 1, 1998, shall not be granted a permit unless the public water system demonstrates to the state board that the water supplier possesses adequate financial, managerial, and technical capability to ensure the delivery of pure, wholesome, and potable drinking water. This section shall also apply to any change of ownership of a public water system."

It should be noted that the California SDWA goes beyond the federal requirements by applying the TMF criteria to transient noncommunity water systems and to water systems changing ownership.

1.2 LEGISLATIVE MANDATES

On September 12, 2012, Governor Edmund G. Brown Jr. signed Assembly Bill (AB) 685, making California the first state in the nation to legislatively recognize the human right to water. Now in the Water Code as Section 106.3, the State statutorily recognizes that:

"…. every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes."

The human right to water extends to all Californians, including disadvantaged individuals and groups and communities in rural and urban areas. Further, the bill required state agencies to consider this policy "when revising, adopting, or establishing policies, regulations, and grant criteria".

Under SB 200 (2019), the State Water Board has begun an evaluation of the cost of drinking water and the ability of customers to pay for water system's maintenance and operation to meet federal and state primary drinking water standards. SB-200 also amended Health and Safety Section 116530 to allow for additional technical reports as part of the permit application or "as required by the state board". This new legislative mandate allowed for collecting additional information "related to technical, managerial, and financial capacity and sustainability".

Under AB 401 (2015), the State Water Board has developed a plan for a statewide low-income water rate assistance program (W-LIRA). The plan is known as "*Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program*" and it was submitted to the California State Legislature on February 25, 2020. It includes a 3-dimensional-model-approach on how to best deliver assistance with the capacity to support one-third of the state's qualifying low-income population. Furthermore, the plan also built-in an emergency assistance component to those who find themselves needing immediate relief. The program totals $606 million dollars annually to ensure that this fundamental basic human right is met. Currently, a dedicated funding source has not been secured to implement the plan.

Additionally, pursuant to SB 998 (2018), effective on April 1, 2020, community water systems with greater than 200 service connections are required to offer customers with delinquent bills recourse through alternative payment schedules and other options to avoid shutting off water service. The purpose of the Act is to increase protections to residents associated with discontinuation of water service due to nonpayment. Where a growing number of Californians face challenges in meeting basic expenses such as tap water when faced with balancing tradeoffs. The Act supports the policy goal that all Californians, regardless of whether they pay a water bill directly, should be treated fairly when faced with a delinquent water bill, and fair treatment should include the ability to contest a bill, seek alternative payment schedules, and demonstrate medical needs.

In 2015, the "Resilient, Affordable, Safe Drinking Water for Disadvantaged Communities Framework" was created, which identified a series of measures necessary to ensure that all communities have access to safe and affordable water. Over the past three years, the State Legislature and Governor have taken important steps toward implementing the actions specified in the framework.

Those steps include:

- Senate Bill 88 (2015), authorizes the State Water Board to require certain water systems that consistently fail to provide safe drinking water to consolidate with, or receive an extension of service from, another PWS.
- Senate Bill 552 (2016) authorizes the State Water Board to require PWSs that serve disadvantaged communities and that consistently fail to provide an adequate and affordable source of safe drinking water to obtain administrative and managerial services from an administrator selected by the State Water Board.
- Senate Bill 1263 (2016) will help to prevent the establishment of new, unsustainable PWSs.

On February 16, 2016, the State Water Board adopted a resolution identifying the Human Right to Water statute as a top priority and core value of the State Water Board and Regional Water Quality Control Boards (collectively the 'Water Boards'). The resolution stated the Water Boards will work "to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

The resolution cements the Water Boards commitment to considering how its activities impact and advance the human right to safe, clean, affordable, and accessible water to support basic human needs. The Human Right to Water statute will be considered in actions taken by the Water Boards that pertain to the sustainability of drinking water.

These actions may include revising or establishing water quality control plans, policies, and grant criteria; permitting; site remediation and monitoring; and water right administration.

Under the resolution, State Water Boards staff will work with relevant stakeholders, as resources allow, to develop new systems or enhance existing systems to collect data and identify and track communities that do not have, or are at risk of not having, safe, clean, affordable, and accessible water for drinking, cooking, and sanitary purposes. State Water Boards staff will also work with relevant groups to develop performance measures to evaluate the Water Boards' progress toward making the human right to water a reality, and such information will be made available to the public.

The State Water Board has developed an interactive violation tool that provides information on drinking water systems with violations. The Users can search water systems by county, category and water system name, and the tool populates information for the system of interest such as: type of violation, system population and service connections, median household income, amount and type of financial assistance a system is receiving from the state, and more. The tool can be found on the following website:

https://www.waterboards.ca.gov/safer/dw_systems_violations_tool.html.

On September 29, 2016, Senate Bill No. 1263 (SB-1263) was signed into law, effective January 1, 2017. It added Section 116527 and amended Section 116540 of the California Health and Safety Code. It also added Section 106.4 to the California Water Code.

SB-1263 makes three significant changes to California's legal authority: (1) it requires a preliminary technical report from water supply permit applicants, (2) it prohibits local primacy agencies from issuing a permit to operate a PWS without the concurrence of the State Water Board, and (3) it prohibits the issuing of a building permit for residential development where the source of water supply is provided by a water hauler, bottled water, water vending machines, or retail water facility.

SB 1263 PRELIMINARY TECHNICAL REPORT

A preliminary technical report (PTR) is required to be completed by a domestic water supply applicant at least 6-months prior to construction of any water related infrastructure. The PTR must include an evaluation of physical and managerial consolidation potential with any other existing PWS within a 3-mile radius surrounding the location of the proposed water system. The PTR is to include the estimated costs to operate the proposed water system, and a comparison with the cost of consolidation if there is a PWS within the 3-mile radius. It must also include a source capacity evaluation for a 20-year period including multi-year droughts. Exemptions from the requirement for a PTR include water systems that are undergoing consolidations, extension of services and water systems that propose providing piped water service to replace individual private domestic wells.

1.3 CALIFORNIA'S TMF CAPACITY CRITERIA

The State Water Board has developed written criteria to evaluate the TMF capacity of PWSs. Thirteen elements are defined in the TMF Criteria that, when demonstrated by the PWS, would be an indication that it possesses adequate TMF capacity. Each of the thirteen TMF elements defined in this Criteria has three components: 1) a description of the importance of that element as it relates to the water system's capacity; 2) documentation requirements, which identifies the documents for each TMF element that need to be submitted to DDW or the Local Primacy Agency (LPA)[1]; and 3) the criteria that DDW or the LPA will use to evaluate the water system's capacity for that TMF element. The specific elements of the TMF Criteria are provided in the following table.

Table 1: Elements of TMF Criteria

Technical Capacity
Consolidation Feasibility
System Description
Certified Operators
Source Capacity
Operations Plan
Training
Managerial Capacity
Ownership
Water Rights
Organization
Emergency Response Plan
Policies
Financial Capacity
Budget/Capital Improvement Plan
Budget Control

TMF assessments must be completed by all new PWSs, PWSs applying for funding through the DWSRF, and PWSs that are undergoing a change of ownership. There are Mandatory, Necessary and Recommended TMF elements based on the action for that PWS – i.e., whether it is new, changing ownership or seeking DWSRF funding for a capital improvement project. Based upon the information provided via the water system's TMF assessment, DWSRF funding or the initial domestic water supply permit may be

[1] A Local Primacy Agency, or LPA, refers to a County Environmental Health Program that has received primacy from the State Water Board for small PWS regulatory oversight in California under a Primacy Delegation Agreement. Under this Primacy Delegation Agreement, the LPA will generally regulate systems serving less than 200 service connections. The State Water Board maintains a program to oversee these delegation agreements. There are currently 30 Counties in California that have been delegated primacy. For the remaining 28 Counties, DDW oversees the regulatory compliance for all PWSs, including small water systems.

denied. In other cases, conditions are placed in the initial domestic water supply permit requiring the PWS to take additional steps to maintain an acceptable level of capacity.

All the mandatory TMF elements must be completed prior to the issuance of a DWSRF funding agreement for a construction project or prior to obtaining a new system or change of ownership water supply permit. The Necessary TMF elements must be addressed satisfactorily within a timeframe determined by the regulatory agency which typically would be six months after funding project completion or permit issuance. A TMF elements chart is provided in Appendix A to illustrate the Mandatory and Necessary TMF elements needed for DWSRF funding projects, new water systems, and changes of ownership.

All of the current TMF assessment forms and guidance documents are posted on the State Water Board capacity development web page (URL provided below) for easy reference by PWS personnel, regulators, and other interested parties.

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml

2 NEW PUBLIC WATER SYSTEM TMF PROGRAM

2.1 CONTROL POINTS

The State Water Board uses the water supply permit as the control point for capacity development requirements for new PWSs. As part of the permit application package for a new PWS or change in ownership of a PWS, the State Water Board requires the applicant to prepare and submit documentation demonstrating that the legal owners of the water system possess adequate TMF. As previously discussed, SB-1263 adds an additional step for new water systems through the preliminary technical report process for new water supply permits.

2.2 NUMBER OF NEW PUBLIC WATER SYSTEMS DURING FY 20/21

The number of new PWS permitted during FY 20/21 is summarized in Table 2 by PWS classification. The complete list of new PWSs during FY 20/21 is provided in Appendix B. The TMF assessments for these new water systems are tracked at the State Water Board, DDW District Office and LPA level. Each permit for a new PWS must specify that adequate TMF capacity was demonstrated. During the annual LPA evaluation, DDW staff reviews the completed TMF assessments for new systems permitted by LPAs for the previous years. DDW District Engineers are responsible for reviewing District staff evaluations of TMF Assessments.

Table 2: Summary of Newly Created PWSs During FY 20/21

PWS Classification	No. New PWSs	Population Served By New PWSs	No. New Service Connections Created
Community	5	283	100
Transient Noncommunity	2	530	11
Non-transient Noncommunity	3	8,114	3
Total	**10**	**8,927**	**114**

Disclaimer: *These systems are identified as 'new" in the State Water Board's database of record, the Safe Drinking Water Information System (SDWIS) database. Water systems listed as "new" are based solely on the Date Created timestamp in SDWIS. The Activation Date of water systems may or may not be accurate as it depends exclusively on the date of entry in SDWIS. Water systems may not be listed if not entered into SDWIS during the timeframe of interest. To accurately obtain or verify a water system's service start date, please contact the appropriate regulating agency.*

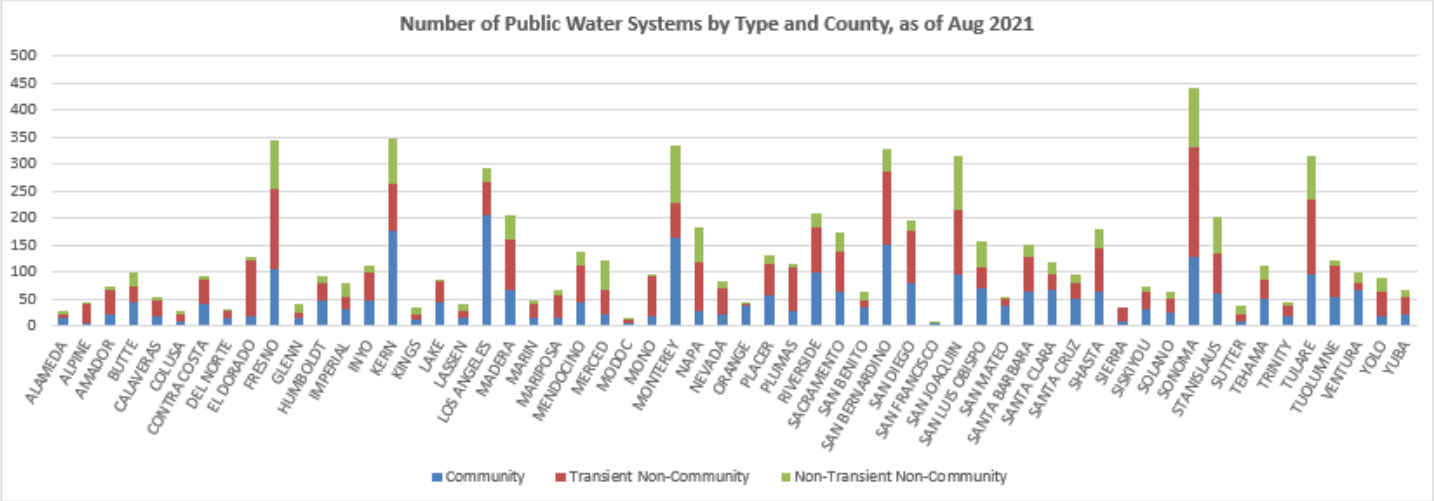
For comparison purposes, Table 3 shows the total number of PWSs regulated within California, based on classification. It also shows the percentage of new PWSs for each classification.

Table 3: Total Number of PWSs

PWS Classification	Total Number PWSs	Number New PWSs	% New of Total No. Systems
Community	2,888	5	0.17%
Nontransient Noncommunity	1,490	3	0.20%
Transient Noncommunity	2,993	2	0.07%
Total number of PWSs	**7,371**	**10**	**0.14%**

Additional information regarding the number of water systems per County can be found on the following website:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/dashboard.html



3 EXISTING PUBLIC WATER SYSTEM CAPACITY DEVELOPMENT PROGRAM

3.1 LEGAL AUTHORITY

The State Water Board has recognized that some PWS violations are partially a result of inadequate TMF capacity by the operator, the water system owner, or governing Board.

Pursuant to California Health and Safety Code Sections 116650 and 116655, regarding authority for the issuance of enforcement Citations and Orders, the State Water Board has the ability to include requirements in enforcement actions that the PWS demonstrate some aspect of TMF capacity that may be pertinent to the violation.

Additionally, the State Water Board has established in the DWSRF FY 19/20 Intended Use Plan that construction projects falling under categories (A-C)[2] may be funded even if the systems do not have adequate TMF capacity. However, for those systems a TMF capacity evaluation or improvement plan will be required as a condition for funding. For projects Categories (D-F)[3], adequate TMF capacity is a condition for receiving construction funding.

3.2 TMF REQUIREMENTS FOR STATE-FUNDED WATER SUPPLY PROJECTS

The State Water Board conducts TMF capacity evaluations of all DWSRF and Proposition 1 Drinking Water (Prop1[4]) construction project applicants to ensure sustainability, resilience, and responsible use of public funds. Where a state agency applicant acts on behalf of a disadvantaged community in applying for Prop 1 grant funding, the State Water Board will analyze the TMF capacity of the appropriate PWS. If a PWS does not have adequate TMF capacity, DWSRF technical assistance may only be provided if it is a small PWS (serving less than 10,000 persons) and the assistance will help the PWSs achieve TMF capacity.

Full TMF assessments are not required for planning project funding agreements. However, development of the TMF assessment and documentation required to make that project ready for construction funding is an eligible activity that can be funded in the planning project.

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[2] Category A - Immediate Health Risk, Category B - Untreated or At-Risk Sources, Category C - Compliance or Shortage Problems.

[3] Category D - Inadequate Reliability, Category E - Secondary Risks, Category F - Other Projects

[4] Proposition 1 (Prop 1) authorized $7.545 billion in general obligation bonds for water projects including surface and groundwater storage, ecosystem and watershed protection and restoration, and drinking water protection. Prop 1 requires the State Water Board to operate a multidisciplinary technical assistance program for small disadvantaged communities and allows for the State Water Board to fund technical assistance.

During the past fiscal year, and under DWSRF, State Water Board Division of Financial Assistance (DFA) financed 25 construction projects that required TMF documentation. All projects submitted the standard TMF Assessment Form and attachments. No Alternative TMF Assessment Forms were submitted.

Below is a summary of the expected TMF demonstrations required for a DWSRF funding applicant.

3.2.1 TECHNICAL CAPACITY

To demonstrate technical capacity, PWSs must show that their systems' drinking water sources are adequate; that the treatment, distribution, and storage infrastructure are adequate; and that system personnel have the technical knowledge to efficiently operate and maintain the system. As part of reviewing a funding application, the State Water Board will review the engineering reports, plans and specifications as well as the PWS's records to verify that the system is being properly operated and maintained.

3.2.2 MANAGERIAL CAPACITY

To demonstrate managerial capacity, the PWS must have personnel with expertise to manage the operation of the entire water system. The State Water Board will review the PWS's managerial capacity to assure that management is (1) involved in the day-to-day supervision of the water system, (2) compliant with all required regulations, (3) available to respond to emergencies, and (4) capable of identifying and addressing all necessary capital improvements and assuring financial viability. The State Water Board will also review records to ensure that the PWS is staffed with a qualified water operator in accordance with the State's Operator Certification Program.

3.2.3 FINANCIAL CAPACITY

A PWS must demonstrate it has the financial capacity to own and operate its water system, including the proposed construction project, as a condition for the award of construction financing from the DWSRF or Prop 1. The PWS must show that the system has sufficient revenues to cover necessary operation and maintenance costs and demonstrate credit worthiness with adequate fiscal controls. The PWS must also demonstrate financial planning for future capital improvements, including providing any water rate studies to demonstrate overall financial capacity. The State Water Board will review the PWS's project budget, audited annual financial reports, and other financial information to determine if the PWS has adequate financial capacity to operate and maintain its system, including the proposed infrastructure project. DWSRF or Prop 1 planning funds may be used to assist a PWS in establishing its financial capacity to operate and maintain its system, including the proposed infrastructure project, preparation for eventual construction financing. Examples of tasks financed with DWSRF or Prop 1 planning funds may include water rate studies, budget development, Prop 218 technical assistance, and capital improvement planning.

3.3 CAPACITY DEVELOPMENT FOR EXISTING PUBLIC WATER SYSTEMS

Adequately trained and informed operators, water system owners and water utility boards are needed to ensure water systems within our State are fully in compliance with the California Safe Drinking Water Act. The State Water Board identifies PWSs in need of capacity development assistance through use of the methods and tools discussed below.

3.3.1 APPROACH FOR PROVIDING CAPACITY DEVELOPMENT ASSISTANCE

The State Water Board uses a number of approaches for identifying statewide PWS TMF capacity concerns and providing PWS capacity development assistance:

a. The State Water Board capacity development website provides tools for water systems to use to assist in developing TMF capacity. These tools include the current TMF Assessment forms, various budget templates, an equipment life expectancy chart, sample emergency notification letters, and operations plan and emergency response plan templates. In addition, links to the websites of organizations that provide services for small water systems are provided. The website for the tools is:

   http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml

b. The State Water Board's new Needs Analysis Unit (NAU) in the DDW is designated to develop and maintain the State Water Board's Drinking Water Capacity Development Strategy. The NAU is also leading the implementation of the annual Needs Assessment in coordination with the Division of Water Quality (DWQ) and DFA. The Needs Assessment consists of three core components: an Affordability Assessment, Risk Assessment, and Cost Assessment. (See Section 3.6 to learn more.)

c. The Program Liaison Unit (PLU), which resides within the DDW Quality Assurance Section currently provides support to the LPAs and DDW District Offices that regulate small water systems. The PLU staff provide ongoing consultation and oversight to assist the regulators in maintaining small water systems in compliance with all standards.

d. CalTAP is the stakeholder advisory committee that is comprised of all the organizations who have contracts with the State Water Board to provide technical assistance to PWS under the DWSRF program. The CalTAP organizations include California Rural Water Association, Rural Community Assistance Corporation, Self Help Enterprises, and University of California-Davis. The CalTAP Workgroup is a subcommittee that does not include the regulators. CalTAP affords these entities a forum to discuss drinking water issues and to work together toward solving

mutual concerns.

3.3.1.1 TMF Tune-Up

California's baseline capacity assessment tool is known as the TMF Tune-Up. Over 1,000 PWSs have the TMF Tune-Up since its inception. The State Water Board will use the information provided by water systems via the TMF Tune-Up for statistical purposes in order to plan for future types of assistance that could be provided to water systems by the DWSRF Capacity Development Program. The TMF Tune-Up is also intended to be a tool that individual water systems can use to identify areas where improvement is needed and to offer suggestions as to the resources that are available in order to enable the water system to make those improvements.

The State Water Board has in the past required water systems to complete a TMF Tune-Up prior to receiving technical assistance. Historically, systems that have low scores are assigned to technical assistance providers to improve the weak areas. The State Water Board will continue encouraging all water systems to complete the TMF Tune-Up in addition to the TMF assessments to improve the overall capacity of water systems in California.

Currently, DDW has delayed launching the TMF Tune-Up tool as a more comprehensive plan for addressing TMF capacity is put in place. During FY 20/21 At-Risk water systems, as determined by the State Water Board's Needs Assessment, were provided to technical assistance providers to perform strategic outreach (see Section 3.6). The consideration of the future role of the TMF Tune-Up will be discussed in the updated Capacity Development Strategy to be developed in consistent with directives and deadlines from U.S. EPA. The updated strategy will address if this remains part of California's long-term strategy, or if other tools will be developed.

WHAT IS THE TMF TUNE-UP?

The TMF Tune-Up is an online diagnostic tool that individual PWSs in California can use to determine their relative strengths and weaknesses with regard to the TMF elements. The development of the TMF Tune-Up was funded under the USEPA Capacity Development set-aside in the DWSRF funds. This program strives to show water systems how they can manage their systems as well as fund needed capital improvements over time in order to provide safe drinking water to their customers. Upon completion of the online TMF Tune-Up, a water system is provided with an Individualized Development Plan (IDP). This IDP includes a series of relative scores for the water system in each of the TMF categories as well as pertinent combined scores. In addition to the scores, the IDP provides a list of resources including free workshops, technical assistance, as well as links to various organizations and agencies that specialize in providing materials and services to drinking water systems.

3.3.1.2 Drinking Water Regulatory Program Staff (DDW & LPA)

During FY 20/21 the State Water Board DDW staff provided direct technical assistance to PWSs regulated by the State Water Board to support capacity development. The State Water Board's Daily Activity Records and Tracking System (DARTS), tracks the staff work hours that are categorized as Technical Assistance. In addition, State Water Board staff provided technical assistance to many PWSs regulated by the LPAs, in cooperation with the LPAs. The LPAs also provide technical assistance to PWSs that they regulate. The following are some of the typical elements of the technical assistance and capacity development categories within the State Water Board Time Accounting System:

- Recommendations to water system staff during inspections and sanitary surveys
- Education about the regulatory requirements specific to individual water systems
- Consultation regarding water system upgrades and potential funding projects
- Evaluation of TMF assessments
- Issuance of permit amendments following construction projects
- Assistance in leak detection and water conservation
- Review and set up financial planning and Capital Improvement Plan
- Assistance in establishing operations plans, strategic planning, emergency response plans and other policies
- Activities related to technical support of funding projects (DWSRF & Prop1)

Table 4: Actual DDW Hours Spent on Technical Assistance Related Activities FY 20/21

Fee Category	LWS	SWS	Other	Total	Equivalent PY
Assistance/Consultation	10,732	9,824		20,556	10
Information or Corrective Letters	758	1,725		2,483	1
Sanitary Surveys	16,987	21,379	1,571	39,937	19
Emergency Response	19		25	44	0
TMF			165	165	0
General Consolidation Work	2,377			2,377	1
Consolidation LWS work	161	969		1,130	0
LPA Oversight & Support		7,541		7,541	4
Drinking Water State Revolving fund - PWSS Set-aside			1492	1,492	1
			Total Hours:	**75,725**	**36**

It is important to note that hours performed by DDW's SAFER Team, including Needs Analysis Unit staff and Engagement Units are no longer tracking hours by task and this may result in an artificial decrease hour worked on capacity development. The overall efforts of these three units represent 18 Equivalent PY.

Table 5: DDW Hours Spent on Other Water System's Assistance Activities FY 20/21

Fee Category	LWS	SWS	Other	Total	Equivalent PY
Letters and other communications (Compliance) – LTR	854	1030		1884	1
Enforcement/Citations - ENF	315	974		1,289	~1
Permit related activities – PER	12,560	13,914		26,474	13
Inspections – INS	3,806	3,756	745	8,307	4
			Total	**37,974**	**19**

The technical assistance hours in Table 4 and Table 5 represent work performed only by DDW and do not include similar work performed by LPAs. Additionally, DDW tracks the numbers of sanitary surveys completed in a time period, based on information derived from SDWIS. Table 6 shows the number of sanitary surveys completed during FY 20/21, and the numbers completed during the required time frame of 3 years for community water systems and 5 years for noncommunity water systems.

Table 6: Number of Sanitary Surveys Completed FY 20/21

Community Water Systems				
Regulatory Agency	No. Community Water Systems	Inspections completed FY 20/21	No. Water Systems Inspected Within the Last 3 FYs	Percentage of Water Systems Inspected Within the Last 3 FYs
DDW	2006	380	1,451	72%
LPAs	882	329	807	91%
Total	**2,888**	**709**	**2,257**	**78%**
Noncommunity Water Systems				
Regulatory Agency	No. Non-Community Water Systems	Inspections completed FY 20/21	No. Water Systems Inspected Within the Last 5 FYs	Percentage of Water Systems Inspected Within the Last 5 FYs
DDW	2,086	238	1,612	77%
LPAs	2,397	510	2,216	92%
Total	**4,483**	**748**	**3,828**	**85%**

On March 4, 2020, Governor Newsom declared a State of Emergency in California as a result of the threat of COVID-19. Shortly after, State Water Board staff transitioned to telework to protect staff and decrease the potential spread of the disease. Protective measures were implemented, and some sanitary surveys were delayed to ensure the continuity of water supplies by decreasing potential COVID-19 exposure of water treatment operators and State Water Board staff. In FY 20/21, State Water Board staff were also impacted by drought response, emergency fire response, and the arrearage program.

3.3.2 CONTRACTED TECHNICAL ASSISTANCE PROVIDERS

Technical assistance is provided to PWSs under the DWSRF Technical Assistance Set-Aside Program, currently managed by the State Water Board's DFA, by third party providers that include Rural Community Assistance Corporation (RCAC), the California Rural Water Association (CRWA), and Self-Help Enterprises (SHE) under contract with the State Water Board.

The State Water Board's Office of Sustainable Water Solutions (OSWS), housed within DFA, continues to administer technical assistance resources to support drinking water, wastewater, stormwater, and groundwater quality needs. OSWS uses the Universal technical assistance Request Form (Appendix C) that can be submitted by the system or by others on their behalf.

As a result of the Prop 1 technical assistance and SAFER Funding Program, services such as legal and engineering support may be available for small disadvantaged communities pursuing funding. Technical assistance can also be provided to help with more general capacity development needs, such as compliance audits, rate studies, board or operator training, TMF assessments, etc.

Demand for technical assistance is extremely high. Moving forward, requests relating to one or more of the following will generally be given higher priority: systems that are out of compliance or experiencing insufficient water delivery capabilities, extension of service for drought/contamination impacted communities, consolidation projects, At-Risk water systems, systems serving less than 200 connections (including public schools), and applicants with small or relatively low cost needs that will enable an otherwise complete funding application to move forward (for example: income survey, rate study, federal crosscutters for environmental clearance, etc.). Leak detection requests are also approved as resources allow.

3.3.2.1 Universal Technical Assistance Request Process

The Assistance Request (AR) database managed by DFA is the primary system that the State Water Board uses to address the need for capacity development in existing

PWSs. Technical assistance assignments to contracted technical assistance providers are derived from this list. The AR is generated with input from DDW and LPA staff and identifies five main concerns:

- Serious health deficiencies
- Noncompliance with drinking water standards
- Funding applications
- TMF deficiencies
- Waterworks standards issues

The AR form is provided in Appendix C and available at:

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1/docs/ta_request_form.pdf

3.3.2.2 California Rural Water Association (CRWA)

During FY 20/21, CRWA staff provided technical assistance to 96 SWSs with a total of 132 discrete projects completed. The total time spent on these projects was 8,209 hours, averaging 62 hours per project. The projects included the preparation of planning or construction funding applications for 39 SWSs. The assigned tasks to CRWA included but were not limited to:

- SRF Planning applications
- SRF Construction applications
- Cleanup & Abatement Account (CAA) application
- Compliance Order Resolution
- TMF Assessments & TMF Tune Up
- Emergency Response Plans
- Operations Plans
- Consumer Confidence Reports
- Watershed Surveys
- Cross Connection Control Surveys
- Source Water Assessments
- Operator Training

CALIFORNIA RURAL WATER ASSOC.

Incorporated in 1990, the California Rural Water Association (CRWA) is a multi-dimensional organization with a proven history of providing high quality training and technical assistance that is tailored to rural water and wastewater systems, targeting operators, managers and decision makers, throughout the State of California. CRWA uses professionals with experience in these utility services.

3.3.2.3 Rural Community Assistance Corporation (RCAC)

During FY 20/21, RCAC provided assistance to 963 SWSs, and a total of 36 discrete Technical Assistance projects. Technical Assistance projects included performing Median Household Income (MHI) surveys, financial analyses, assistance with compliance issues and assistance with securing funding.

RURAL COMMUNITY ASSISTANCE CORP.

RCAC works with low-income rural communities, where unemployment rates are high, housing is often sub- standard, and poverty is commonplace. Many of these communities also face daunting challenges to access affordable, safe drinking water and other vital infrastructure. Rural communities are often overlooked in the policy arena because they lack the resources, training or social network that larger communities have in place. RCAC includes Tribes and Native communities in all program areas. RCAC provides training, technical and financial resources and advocacy so rural communities can achieve their goals and visions.

In addition to the individual SWS technical assistance, RCAC is contracted to provide training related to TMF and capacity building. During FY 20/21 this training was provided online as summarized below. Staff and operators from 963 individual water systems participated in these events during FY 20/21.

RCAC Training Workshops

RCAC develops and conducts statewide classroom and online training workshops that focus on building the TMF capacity of PWSs. In addition, RCAC develops and presents at California Technical Assistance Providers (CalTAP) Fairs that showcase the free services and materials of organizations having agreements or contracts through the SRF Program and water fairs that present information on various current issues.

The following is a summary of sessions provided in FY 20/21:

- 109 online workshops, with an average of 61 participants per workshop
- 2 water symposia, with 137 participants from 55 systems.
- 2 CalTAP Fairs, with an average of 210 participants from 77 systems.
- Overall, staff and operators from 963 water systems participated in these events.

3.3.2.4 Self Help Enterprises (SHE)

SHE provided technical assistance to water systems that have specific TMF needs or that have applied for State Water Board funding in the counties of Stanislaus, Merced, Mariposa, Madera, Fresno, Kings, Tulare, and Kern. Often this assistance consisted of community outreach in which SHE works closely with water system decision makers and constituents to facilitate the acquisition of funding. SHE also provided assistance in completing the required TMF assessments and other documents for funding.

During FY 20/21, SHE provided assistance to 179 PWSs, totaling 21,600 hours of direct assistance provided. This total included was funded by the DWSRF, Proposition 1 and the SAFER program. Examples of technical assistance provided by SHE are listed below:

- Rate studies;
- Income surveys;
- TMF Assessments;
- Community outreach; and
- Assistance with submitting funding applications.

SELF HELP ENTERPRISES

SHE was formed in 1964 to help three low-income families build their own homes in Goshen, CA. SHE has provided technical assistance for reliable access to safe drinking water and sanitary sewer infrastructures to small communities; provides resources and training for individuals to build capacity to be highly effective leaders in communities; and promotes collaborative solutions for improving communities. SHE serves the eight counties in the San Joaquin Valley – Fresno County, Kern County, Kings County, Madera County, Mariposa County, Merced County, Stanislaus County, and Tulare County.

3.3.3 VOLUNTARY AND MANDATORY CONSOLIDATION

The State Water Board makes extensive efforts to support water systems through their internal capacity development, as discussed in the previous sections. However, the State Water Board also recognizes that the significant responsibility and costs to operate a PWS are often overwhelming for small water systems with poor economies of scale, particularly in financially disadvantaged communities. As a result, the State Water Board encourages voluntary consolidation whenever feasible, as a method of capacity development.

Beginning in 2017, the State Water Board had had two staff dedicated to facilitating consolidations. These staff also updated webpages to assist water systems that may be interested in water partnerships and consolidation.

The link to the webpages is located below:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/waterpartnership.shtml

During the first part of fiscal year 2020, the State Water Board expanded this effort and hired and began training 14 additional staff, in its "Engagement Units", to support water partnership and consolidation work and assist in dealing with out-of-compliance water systems state-wide. Although the staff is organizationally located in a new branch within the DDW, these positions are located in District Offices to facilitate direct outreach to water systems. Additional website information on the Engagement Units, including maps of successful consolidations across the state since 2016, can be found on the following website:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/engagement_unit.html

A summary of the water systems that voluntarily consolidated in FY 20/21 is provided in Table 7.

Table 7: List of Voluntary Consolidated Systems FY 20/21

Voluntary Physical Consolidation					
PWS Number	**PWS Name**	**PWS Class**	**Conn**	**Pop**	**County**
CA5800807	AEROPINES	C	21	45	Yuba
CA5000077	CERES WEST MHP	NP	46	161	Stanislaus
CA4000726	TANK FARM INDUSTRIAL PLAZA	NTNC	1	35	San Luis Obispo
CA4000728	WHITSON INDUSTRIAL PARK	NTNC	1	75	San Luis Obispo
CA5105009	SIKH TEMPLE GURDWARA	NC	1	250	Sutter
CA0900646	AL TAHOE ELEM/STMS (WATER SYS)	NTNC	6	1300	El Dorado
CA0900579	MIDWAY INN	NC	2	40	El Dorado
CA1700544	COBB AREA CWD - BONANZA SPRINGS	C	180	594	Lake
CA1700542	COBB AREA CWD - BRANDING IRON	C	28	90	Lake
CA1700552	COBB AREA CWD - HILL NINE AND TEN	C	18	60	Lake
CA1700563	COBB AREA CWD - MT. HANNAH	C	39	129	Lake
CA1700574	COBB AREA CWD - STARVIEW	C	75	247	Lake

Voluntary Physical Consolidation					
PWS Number	**PWS Name**	**PWS Class**	**Conn**	**Pop**	**County**
CA1900912	GORMAN ELEMENTARY SCHOOL	NTNC	4	98	Los Angeles
CA5400651	BEVERLY GRAND MUTUAL WATER	C	28	92	Tulare
CA3400249	JOSEPH KERR MIDDLE SCHOOL	NTNC	12	1321	SACRAMENTO
CA4901387	SONOMA CUTRER	NC	4	40	SONOMA
CA2400346	LIVINGSTON FARMERS ASSOCIATION WATER SYS	NP	2	0	MERCED
CA3400412	SACRAMENTO SIKH SOCIETY	NC	2	300	SACRAMENTO
CA3301153	CVUSD, WESTSIDE SCHOOL	NTNC	11	975	RIVERSIDE
CA3301276	THERMAL MUTUAL WATER COMPANY	C	36	100	RIVERSIDE
CA1310011	COACHELLA VWD: I.D. NO. 11	C	2776	7500	IMPERIAL
CA3303100	OASIS GARDENS WATER CO.	NC	160	314	RIVERSIDE
CA5200516	LAZY CORRAL MOBILE HOME PARK	C	37	103	TEHAMA
CA5201137	MILLSTREAM MOBILE HOME PARK	C	53	80	TEHAMA
CA5402043	MONSON MARKET	NC	2	30	TULARE
CA1600008	CENTRAL UNION ELEMENTARY	NTNC	10	320	KINGS
CA2800548	SILVERADO PINES MOBILE HOME	C	1	255	NAPA
CA5000570	INTERSTATE TRUCK CENTER VALLEY PETERBILT	NP	2	23	STANISLAUS
CA4000711	SAN LUIS BUSINESS PARK	NTNC	1	500	SAN LUIS OBISPO
CA4500136	KLUB KLONDIKE	NC	2	35	SHASTA

Voluntary Physical Consolidation					
PWS Number	**PWS Name**	**PWS Class**	**Conn**	**Pop**	**County**
CA3400468	SACRAMENTO SOFTBALL COMPLEX (SWS)	NC	4	500	SACRAMENTO
Voluntary Managerial Consolidation					
CA1910241	MESA CREST WATER COMPANY	C	704	2,323	LOS ANGELES
CA2010007	HILLVIEW WC-OAKHURST/SIERRA LAKES	C	1032	3,403	MADERA
CA2010012	HILLVIEW WATER CO-RAYMOND	C	96	317	MADERA
CA2010013	HILLVIEW WATER CO- COARSEGOLD	C	25	83	MADERA
CA2010014	HILLVIEW WATER CO-GOLDSIDE	C	309	1,020	MADERA

Additionally, on September 28, 2016, Senate Bill No. 552 was passed clarifying previously enacted legislation regarding mandatory consolidation, amending Section 116681 of the Health and Safety Code. Under Section 116681, the State Water Board has authority to order physical or operational consolidation for disadvantaged community water systems that have water quality or quantity failures and have nearby functioning water systems, for which consolidation is the most cost-effective solution.

Additional information regarding these mandatory consolidations can be found on our website:

http://www.waterboards.ca.gov/drinking_water/programs/compliance/index.shtml

Table 8: List of Mandatory Consolidation Orders Between FY 20/21

PWS Number	PWS Name	PWS Class	Conn	Pop	County	Status
CA5401003	East Orosi CSD with Orosi PUD	C	103	932	Tulare	Consolidation order issued on October 2, 2020

3.4 WATER SYSTEM ADMINISTRATOR

In September 2018, the California Health and Safety Code Section 116686 was adopted. This section provided new authority to the State Water Board to assign Administrators to PWSs that consistently fail to provide an adequate supply of safe and affordable drinking water for communities; with the cost of the administrator fully funded by the State Water

Board.

An Administrator can be an individual, another water system, or technical provider capable of carrying out the responsibilities required for a specific designated water system. The Administrator's role is relatively flexible and varies depending on the needs of the water system. Administrators can be either:

- **Full-scope Administrator**: is defined as an administrator who is appointed and/or authorized to exercise total and complete managerial control over a designated water system.
- **Limited-scope Administrator**: is defined as an administrator who is not appointed and/or authorized to exercise total and complete managerial control over all aspects of the designated water system, but rather is appointed for the specific purposes and only with the authorities granted in the appointing order.

Administrators must comply with certain public meeting and reporting requirements to keep water system customers and property owners informed of any actions.

A complete description of the Administrator authority and the petition rights for any ratepayer, renter, or property owner who receives water from a designated water system for the reversal or modification of an Administrator decision or replacement of an Administrator is contained in section 116686 of the Health and Safety Code and in the Administrator Policy Handbook the State Water Board adopted in September 2019.

Additional information regarding water system administrators can be found on the State Water Board website, including a current list of all water systems where the State Water Board is in the public process of designating an administrator:

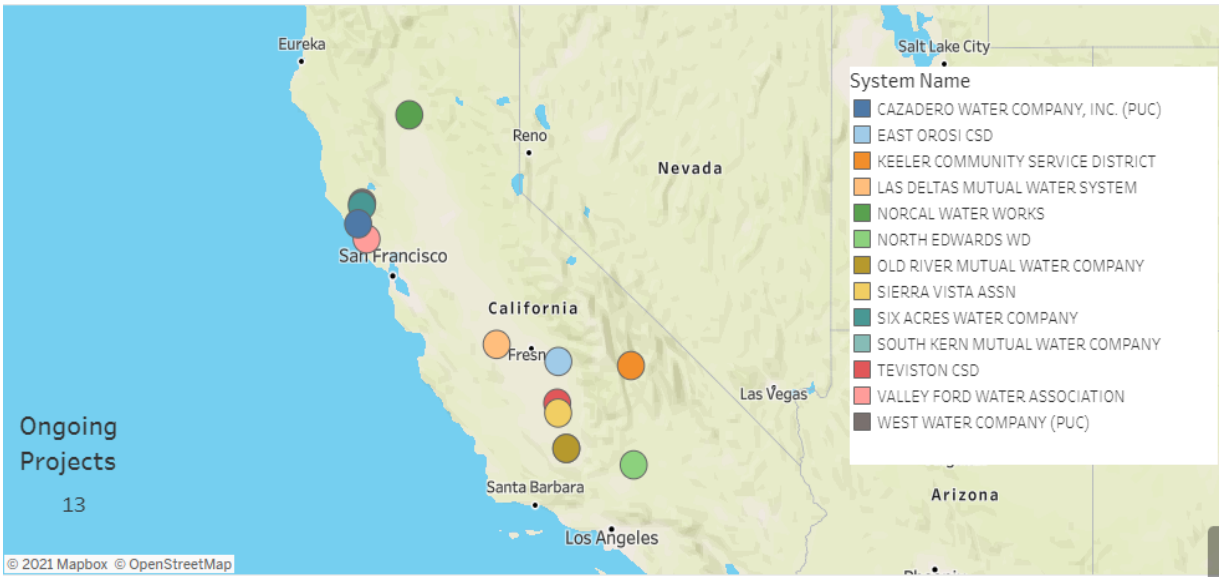
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/administrator.html

Table 9 and the associated visualization below shows water systems that are in the process of designating the need for an administrator during FY 20/21.

Table 9: Water Systems Designated as Needing an Administrator FY 20/21

	Public Water System Name
1	Cazadero Water Company
2	North Edwards WD (EPA jurisdiction)
3	Teviston Community Service District
4	Six Acres Water Company
5	Keeler Community Service District

	Public Water System Name
6	Las Deltas Mutual Water System
7	East Orosi CSD
8	Old River Mutual Water Company
9	South Kern Mutual Water Company
10	Sierra Vista Water Association
11	Valley Ford Water Association
12	NorCal Water Works
13	North Edwards Water District
14	West Water Company



3.5 TMF WORKGROUP

In FY 17/18, the State Water Board created a workgroup of DDW and DFA staff to strengthen methods for evaluating an existing water system's financial capacity. The workgroup created a draft form with questions to help analyze a water system's financial documents and activities including their asset and capital improvements plans, reserve management, and financial planning and reporting.

During FY 18/19, the workgroup piloted the first version of their financial capacity assessment template at ten water systems state-wide, including various governance types, economic statuses, and sizes. After piloting the questions, the template was reviewed for effectiveness and revised. Separate templates began to be developed in

order to better tailor questions to the water system type.

In FY 19/20, the workgroup developed two separate templates to better identify appropriate financial capacity questions based on system type. Templates were created for small water systems and large disadvantaged water systems, in order to better focus the questionnaires. These templates were piloted with both District Offices and LPAs, and results were reviewed. With the creation of the Needs Analysis Unit, the focus of the workgroup has changed, with the Needs Analysis Unit beginning to take on many of the workgroup's tasks. The workgroup will continue to share forms and guidance created, as well as facilitate staff training.

In FY 20/21, rather than continue to require field staff to collect financial data at individual water systems, the State Water Board collected information as part of its electronic annual report (EAR). The State Water Board required (for the first time) that PWSs provide extensive financial information in the categories of:

- Customer Charges & Rate Structure
- Date of their Most Recent Rate Structure Update
- Total Revenue Generated from Various Sources
- Total Expenses, including
    - O&M;
    - Total Investment Expenses; and
    - Financing Expenses
- Affordability Information

The tracking and use of this information will provide a valuable new tool for TMF evaluations. This comprehensive collection of financial data will likely be used to further develop TMF criteria in the Needs Assessment. Simply collecting this data also results in water systems being more aware of the importance of financial capacity. To date, this financial information has been utilized in the arrearage program development.

3.6 NEEDS ASSESSMENT

On April 9, 2021, the State Water Board published the first ever Needs Assessment as required by Senate Bill 200 (SB200) in 2019. SB 200 also established the Safe and Affordable Funding for Equity and Resilience (SAFER) Program. SB 200 established a set of tools, funding sources, and regulatory authorities the State Water Board can harness through the SAFER Program to help struggling water systems sustainably and affordably provide safe drinking water to their customers. SB 200 includes the Safe and Affordable Drinking Water Fund. The Fund provides up to $130 million per year through 2030 to enable the State Water Board to develop and implement sustainable solutions for underperforming drinking water systems. The annual Fund Expenditure Plan prioritizes projects for funding and documents fund expenditures for the prior fiscal year

and planned expenditures for the current fiscal year. Pursuant to Health and Safety Code §116769, the annual Fund Expenditure Plan (FEP) is required to be "based on data and analysis drawn from the drinking water Needs Assessment".

The State Water Board's new Needs Assessment consists of three core components:

- **Risk Assessment**: Identifying PWSs, tribal water systems, state small water systems, and regions where domestic wells consistently fail or are at-risk of failing to provide adequate safe drinking water.
- **Cost Assessment**: Determining the costs related to the implementation of interim and/or emergency measures and longer-term solutions for failing systems and at-risk systems. Solutions may include, but are not limited to, water partnerships, physical and managerial consolidations, administrators, treatment facility additions or upgrades, distribution system repairs or replacement, and/or point of use/point of entry treatment. The cost assessment also includes the identification of available funding sources and the funding gaps that may exist to support interim and long-term solutions.
- **Affordability Assessment**: Identifying community water systems that serve disadvantaged communities that must charge their customers' fees which exceed the affordability threshold established by the State Water Board in order to provide adequate safe drinking water.

The results of the Needs Assessment annually support the implementation of the SAFER Program and are used to prioritize PWSs, tribal water systems, state small water systems, and domestic wells for funding in the Safe and Affordable Drinking Water Fund Expenditure Plan[5]; direct State Water Board technical assistance; and to develop strategies for implementing interim and long-term solutions.

The State Water Board's Needs Analysis Unit in the DDW is leading the implementation of the Needs Assessment in coordination with the DWQ and DFA. The University of California, Los Angeles (UCLA) was contracted (agreement term: 09.01.2019 through 03.31.2021) to support the initial development of Needs Assessment methodologies for the Risk Assessment for the PWSs (with a focus on systems with 3,300 or less service connections) and Cost Assessment[6].

The Risk Assessment effort brings capacity development to the forefront by annually assessing and creating publicly accessible scores for each water system in four categories: Water Quality, Accessibility, Affordability and TMF Capacity. The detailed breakdown of scoring for these community water systems is provided as Attachment A1: Risk Assessment Results Spreadsheet at the following link:

[5] Fund Expenditure Plan 2020-21: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/sustainable_water_solutions/docs/sadwfep_2020_07_07.pdf

[6] Long Term Solutions Cost Methodology for Public Water Systems and Domestic Wells: https://www.waterboards.ca.gov/safer/docs/draft_whitepaper_lt_solutions_cost_meth_pws_dom_wells_updated.pdf

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/needs.html

Water Quality Category Weighted Score	Accessibility Category Weighted Score	Affordability Category Weighted Score	TMF Capacity Category Weighted Score

Pursuant to SB 200, the State Water Board developed a map identifying aquifers that are at high risk of containing contaminants exceeding safe drinking water standards that are potentially used as a drinking water source. During FY 20/21 the initial Aquifer Risk Map was published online. It will be updated annually based on new and relevant data. The tool is available at https://www.waterboards.ca.gov/safer/safer_data.html.

More information related to the State Water Board's Needs Assessment including event notices, presentations, webcast recordings, and other reference material can be found on the SAFER workshops and events webpage listed below.

https://www.waterboards.ca.gov/safer/calendar.html

Additionally, the Environmental Finance Center at UNC and The UCLA Luskin Center of Innovation conducted a rates survey in 2020 of nearly every water system in the State of California that serve between 500 and 3,300 connections. Survey data were used to develop an interactive dashboard "California Small Water Systems Rates Dashboard". The dashboard allows comparison and benchmarking of water rates, financial metrics, and other system performance measures with peers, according to important factors such as system size, ownership type, and customer demographics. The results of this work are available at the following link:

https://efc.sog.unc.edu/resource/california-small-water-systems-rates-dashboard

3.7 TMF AND THE RISK ASSESSMENT

TMF capacity empowers water systems to have the ability to plan for, achieve, and maintain long-term compliance with drinking water standards, thereby ensuring the quality and adequacy of the water supply. Therefore, it is essential to assess TMF capacity when conducting a Risk Assessment for a water system.

In FY 20/21 the State Water Board published the Risk Assessment as an element of the Needs Assessment. The methodology developed in this Risk Assessment will be used as the basis for updating the procedures used for evaluating and ensuring TMF capacity. The State Water Board Risk Assessment is available at

https://www.waterboards.ca.gov/safer/safer_data.html

Table 10: DDW Established TMF Capacity Risk Indicators by Sub-Category

Financial Capacity	
Risk Indicator	**Definition**
Number of Service Connections	This indicator measures the total number of customer service connections of the water system. Number of service connections may be used as a proxy to assess whether a water system has adequate financial capacity to support staff and budget.

Managerial Capacity	
Risk Indicator	**Definition**
Monitoring & Reporting Violations	This indicator measures the total number of monitoring and reporting violations for specific contaminants and treatment techniques during a 9-year compliance cycle.

Technical Capacity	
Risk Indicator	**Definition**
Operator Certification Violations	Failure to have an appropriately certified water treatment or distribution operator. A lack of adequately trained water treatment or distribution operators may be indicative of larger technical and managerial risks borne by the system. Research shows that poorly trained staff and managers working on water systems can result in avoidable waterborne disease outbreaks.
Significant Deficiencies	Significant Deficiencies are identified by State Water Board staff during a Sanitary Survey and include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that U.S.EPA determines to be causing or have the potential for causing the introduction of contamination into the water delivered to consumers.
Extensive Treatment Installed	The number of occurrences that meet one or more of the following conditions: • Groundwater source(s) necessitating any treatment other than chlorination • Surface water quality necessitating a surface water treatment plant. Water systems reliant on an impaired water source or sources may experience expensive treatment costs and operations and

Risk Indicator	Definition
	maintenance difficulties. Furthermore, the threat to customers if failure occurs is greater if the source water is significantly impaired and required extensive treatment.

3.8 REPORTING PERIOD AND SUBMITTAL DATES

The annual capacity development implementation reporting period reflects information covering the state fiscal year of July 1, 2020 to June 30, 2021 (referred to as FY 20/21 in this report). This report has been prepared for submission to the United States Environmental Protection Agency (U.S.EPA) Region IX, as a requirement set forth by the FY 20/21 Public Water System Supervision Grant Workplan between the State Water Board and USEPA.

4 CAPACITY DEVELOPMENT STRATEGY PLAN

The U.S.EPA has delegated State primacy to the State Water Board for enforcement of the provisions of the federal SDWA, which requires the State to develop a strategy and address the five elements identified in Table 11, on the following page. Within the State Water Board, the DDW oversees enforcement of drinking water standards and requirements of PWSs in California under the SDWA. Pursuant to recent guidance and directives from EPA, the State Water Board will be incorporating Asset Management into our Capacity Development strategy.

The Capacity Development Strategy will be updated in FY 21/22 to include a focus on Asset Management, as required in the 2018 America's Water Infrastructure Act.

Table 11: SDWA Elements List

SDWA Elements
1 – Methods or Criteria to Prioritize Water Systems
2 – Factors that Encourage or Impair Capacity Development
3 – How the State will use the Authority and Resources of the SDWA
4 – How the State will Establish the Baseline and Measure Improvements
5 – Procedures to Identify Interested Persons

California's Capacity Development Program strategy is comprised for 10 strategic goals and associated with the Safe Drinking Water Act elements. Significant process has been made on all Strategic Goals. The further implementation of these Strategic Goals will continue in FY 21/22 along with the development of updated implementation milestones.

Table 12: Progress on Strategic Plan Goals

No.	Goal	SDWA Element(s)	Implementation
1	Reduce Water System Inventory through Consolidation	3	Ongoing
2	Increase Stakeholder Engagement and Understanding	5	Ongoing
3	Form a Capacity Development Coordination Team	3	1st Quarter 2020
4	Identify High-Risk Water Systems in Order to Proactively Support Sustainability and Resiliency	1, 3	2nd Quarter 2021
5	Develop a Tracking System for Prioritizing and Tracking Progress (SAFER Clearinghouse)	1, 4	2nd Quarter 2020, ongoing
6	Evaluate and Expand Efficiency of Technical Assistance Providers' Performance	2	2nd Quarter 2020, ongoing
7	Update DDW's Capacity Development Website	2	4th Quarter 2021
8	Enhance the Financial Review of Water Systems During Sanitary Surveys	2	2nd Quarter 2021, part of eAR
9	Develop a Financial Capacity Tool	2	1st Quarter 2021
10	Follow-Up on Newly Permitted Water Systems	2	Ongoing

APPENDIX A
DOCUMENTATION REQUIREMENTS FOR TMF ASSESSMENTS

TMF ELEMENTS		DWSRF FUNDING PROJECTS	NEW WATER SYSTEMS	CHANGES OF OWNERSHIP
TECHNICAL	1. Consolidation Feasibility	Mandatory	Mandatory	Mandatory
	2. System Description	Necessary	Mandatory	Mandatory
	3. Certified Operators	Necessary	Mandatory	Mandatory
	4. Source Capacity	Necessary	Mandatory	Necessary
	5. Operations Plan	Necessary	Mandatory	Necessary
	6. Training	Necessary	Necessary	Necessary
MANAGERIAL	7. Ownership	Mandatory	Mandatory	Mandatory
	8. Water Rights	Mandatory	Mandatory	Mandatory
	9. Organization	Necessary	Mandatory	Mandatory
	10. Emergency Response Plan	Necessary	Mandatory	Necessary
	11. Policies	Necessary	Necessary	Necessary
FINANCIAL	12. Budget Projection/ Capital Improvement Plan	Mandatory	Mandatory	Mandatory
	13. Budget Control	Necessary	Mandatory	Mandatory

APPENDIX B
NEW PUBLIC WATER SYSTEMS IN FY 20/21

System Number	System Name	Type	Service Connections	Population	County
CA0110701	LAWRENCE LIVERMORE NATIONAL LAB SITE 200	NTNC	2	8000	ALAMEDA
CA1000654	DOLLAR GENERAL #19853 - SQUAW VALLEY	NC	1	250	FRESNO
CA1503688	GRIMMWAY FARMS - DAVID ROAD	NTNC	1	114	KERN
CA4000834	ANZA VINEYARD ESTATES MUTUAL WATER CO	C	16	60	SAN LUIS OBISPO
CA4200814	JONATA HOMEOWNERS ASSOCIATION	C	16	45	SANTA BARBARA
CA4200867	RAY WATER COMPANY	C	13	40	SANTA BARBARA
CA4200885	CHALK HILL ESTATES HOA	C	15	38	SANTA BARBARA
CA4210028	CACHUMA PROJECT	C	40	100	SANTA BARBARA
CA4901465	LAMBERT BRIDGE WINERY	NC	2	30	SONOMA
CA4901474	BACCHUS LANDING CELLARS	NC	7	250	SONOMA

APPENDIX C
TECHNICAL ASSISTANCE REQUEST FORM

REQUEST FOR TECHNICAL ASSISTANCE

Instructions: If an item is not relevant or unknown, enter "N/A" or "unknown."
Please e-mail the completed form to: DFA-TArequest@waterboards.ca.gov

Date of Submittal:

A. Community, System, or School Name:

Public Water System ID No. (if applicable): County:

Number of Service Connections: Service Area Population:

Type of Organization: ☐ Municipal entity ☐ Private entity (Select one: ☐ nonprofit; ☐ for profit)

☐ Tribe ☐ School/School district/Local education agency ☐ Other:

Estimated Median Household Income (MHI): $ (Source:)

Estimated percentage of second or vacant homes: %

B. Type of TA Need: ☐ Drinking Water ☐ Wastewater ☐ Storm Water ☐ Groundwater

C. Problem: Briefly summarize the problem or the TA needs.

D. Request: Briefly describe the assistance being requested.

Is the regulatory agency (DDW, LPA, Regional Water Board, etc.) supportive of this project?

☐ Yes, name of contact person/agency: ☐ No

Is this request associated with a compliance order?

☐ Yes, Compliance Order No.: (attach a copy if available) ☐ No

E. Contact Information: Please provide a contact for correspondence regarding this request.

Name	Title/Organization
Mailing Address	City/State Zip Code
Phone Number	E-mail Address

TA Request Form, updated 11/25/2019

APPENDIX D
SUMMARY EVALUATION OF POTENTIAL TMF RISK INDICATORS

Potential Risk Indicator *Total: 42*	STEP 1	STEP 2			Potential Inclusion in Risk Ass.?
	Applicability	Data Coverage	Data Availability	Data Accuracy/ Quality	
Active Standing with California Secretary of State (SoS) Status Requirements	Good	Poor	Good	Poor	**No**[7]
Operator Certification Violations	Good	Good	Good	Good	**Yes**
Monitoring and Reporting Violations	Good	Good	Good	Good	**Yes**
Customers Metered	Fair	Good	Good	Good	**Maybe**
Absence of Customer-Level Meters	Fair	Good	Good	Good	**Maybe**
Updated Rate Structure	Good	Poor	Good	Fair	**Future**
Rate Structure: Type	Good	Fair	Fair	Fair	**Future**
Drought Preparedness Plan (Water Conservation Plan)	Fair	Poor	Fair	Fair	**No**
Operating Ratio with Depreciation	Good	Poor	Poor	Fair	**Future**
Adjusted Operating Ratio	Good	Poor	Poor	Fair	**Future**
Non-Capital (simple) Operating Ratio	Fair	Poor	Fair	Fair	**No**
Revenue Collection Per Connection	Good	Poor	Poor	Fair	**Future**
Operating and Maintenance (O&M) Expenditure Per Connection	Good	Poor	Poor	Fair	**Future**
Days Cash on Hand	Excellent	Poor	Poor	Fair	**Future**
Asset Depreciation Ratio	Good	Poor	Poor	Poor	**Future**

[7] A deviation from Step 3 criteria was made for this potential risk indicator, refer to Supplemental Appendix D.4 (https://www.waterboards.ca.gov/safer/docs/safer_supp_appxd4_101320.pdf) for the full evaluation.

Potential Risk Indicator *Total: 42*	STEP 1	STEP 2			Potential Inclusion in Risk Ass.?
	Applicability	Data Coverage	Data Availability	Data Accuracy/ Quality	
Debt to Equity Ratio	Good	Poor	Poor	Poor	**Future**
Outstanding Water Bill Amount	Good	Poor	Poor	Poor	**Future**
Dedicated Fund/Account for Revenues and Expenses	Good	Poor	Poor	Poor	**Future**
Line of Credit with Financial Institution	Good	Poor	Poor	Poor	**Future**
Current Ratio	Good	Poor	Fair	Fair	**Future**
Debt Service Coverage Ratio	Good	Poor	Fair	Fair	**Future**
Emergency Response Plan (ERP)	Excellent	Fair	Poor	Good	**Future**
Capital Improvement Plan (CIP)	Excellent	Poor	Poor	Fair	**Future**
Asset Management Plan (AMP)	Excellent	Poor	Poor	Fair	**Future**
Member of CalWARN or Alternative Mutual Aid Agreement	Good	Fair	Fair	Good	**Maybe**
Insurance Coverage	Good	Poor	Poor	Poor	**Future**
Full-Time Operator	Fair	Poor	Poor	Poor	**No**
Number of Staff Per Connection	Fair	Poor	Poor	Poor	**No**
Operator Training	Good	Poor	Poor	Poor	**Future**
Employee Turnover	Good	Poor	Poor	Poor	**Future**
Cross Connection Control/Backflow Prevention	Good	Fair	Fair	Fair	**Future**
Number of Service Connections	Good	Good	Good	Good	**Yes**
Maintaining a Full Board	Good	Poor	Poor	Poor	**Future**
Training of Board Members	Good	Poor	Fair	Poor	**Future**

Potential Risk Indicator *Total: 42*	STEP 1	STEP 2			Potential Inclusion in Risk Ass.?
	Applicability	Data Coverage	Data Availability	Data Accuracy/ Quality	
Age of Distribution System	Good	Fair	Poor	Fair	**Future**
Financial Audit	Good	Poor	Poor	Poor	**Future**
Historical Population Growth	Good	Good	Good	Fair	**Maybe**
Water System Size/ Socioeconomic Status of the Community	Good	Good	Good	Good	**Yes**
Baseline Monitoring	Good	Fair	Fair	Fair	**Maybe**
Data Availability	Good	Good	Good	Good	**Yes**
Significant Deficiencies	Good	Good	Fair	Good	**Maybe**
Extensive Treatment Installed	Good	Good	Good	Good	**Yes**

APPENDIX E
DRINKING WATER CAPACITY DEVELOPMENT STRATEGY

The U.S. Environmental Protection Agency (EPA) has delegated State primacy to the State Water Board for enforcement of the provisions of the federal Safe Drinking Water Act (SDWA), which requires the State to develop a strategy and address the five elements identified in the table below (*Handbook for Capacity Development, pg. 55).* Within the State Water Board, the Division of Drinking Water (DDW) oversees enforcement of drinking water standards and requirements of public water systems (PWSs) in California under the SDWA.

SDWA Elements
1 – Methods or Criteria to Prioritize Water Systems
2 – Factors that Encourage or Impair Capacity Development
3 – How the State will use the Authority and Resources of the SDWA
4 – How the State will Establish the Baseline and Measure Improvements
5 – Procedures to Identify Interested Persons

California's Capacity Development Program strategy is comprised of 10 strategic goals and associated SDWA elements. The following table summarizes the goals and associated elements

Table 1: Drinking Water Capacity Development Strategic Plan Goals for Fiscal Years 2019 – 2021

No.	Goal	SDWA Element(s)	Implementation
1	Reduce Water System Inventory through Consolidation	3	Ongoing
2	Increase Stakeholder Engagement and Understanding	5	Ongoing
3	Form a Capacity Development Coordination Team	3	2nd Quarter 2021
4	Identify At-Risk Water Systems in Order to Proactively Support Sustainability and Resiliency	1, 3	Ongoing/annual
5	SAFER Clearinghouse	1, 4	1st Quarter 2022
6	Evaluate and Expand Efficiency of Technical Assistance Providers' Performance	2	3rd Quarter 2020
7	Update DDW's Capacity Development Website	2	4th Quarter 2021

No.	Goal	SDWA Element(s)	Implementation
8	Enhance the Financial Review of Water Systems During Sanitary Surveys	2	3rd Quarter 2020
9	Develop a Financial Capacity Tool	2	1st Quarter 2021
10	Follow-Up on Newly Permitted Water Systems	2	1st Quarter 2021

Strategic Goal 1 – Reduce Water System Inventory through Consolidation

The State Water Board has identified water systems with under 1000 connections statewide that are candidates for consolidations. Work on these water systems will be prioritized based on several factors including, types and numbers of violations, community median household income, and proximity to larger water systems for consolidation. Work will also be done to engage public participation and assist them in understanding their options for a consolidation. DDW is increasing the number of water system partnership and consolidation coordinators to expand this important strategic effort.

Strategic Goal 2 – Increase Stakeholder Engagement and Understanding

One of the keys to a successful drinking water program is public and community acceptance and understanding of the program. Public engagement efforts will have components of both outreach and education to communities. DDW will also continue to collaborate with national stakeholders, who provide valuable insight and suggestions which DDW can utilize to greatly improve the capacity development strategy and program.

Strategic Goal 3 – Form a Capacity Development Coordination Team

In order to have an efficient capacity development program, a higher level of collaboration between State Water Board divisions and outside agencies is needed. The DDW coordination team will include members of DDW-Program Management Branch, DDW-Field Operations Branch, DFA-Technical Assistance, DFA-Operator Certification, and the LPAs. The team will collaborate regularly to discuss factors that either encourage or impair capacity development and methods of achieving performance goals. This may include planning necessary trainings, reevaluating certified operator requirements, creating criteria to identify and prioritize technical assistance of water systems in need of improving technical, managerial, financial (TMF) capacity, and establishing the best use of technical assistance revenues and resources of the SDWA to achieve performance goals.

Strategic Goal 4 – Identify At-Risk Water Systems in Order to Proactively Support Sustainability and Resiliency

The Needs Analysis Unit and UCLA collaborated to develop the Risk Assessment methodology for PWSs. The goals of the Risk Assessment component of the Needs Assessment are:

1) Identify PWSs, tribal water systems, state small water systems and domestic wells in need of potential assistance or intervention before they fail to provide adequate and safe drinking water.
2) Assist DFA in prioritizing those systems for targeted technical and financial assistance to advance long-term solutions in the Fund Expenditure Plan in order to prevent additional Californians from receiving unsafe or inadequate water supply in the future.

The Risk Assessment methodology for PWSs (with a focus on systems with 3,300 or less service connections) incorporates three critical components:

- **Risk Indicators**: quantifiable measurements of key data that allow the State Water Board to assess the probability of a water system's failure to deliver safe drinking water. Risk indicators that measure water quality, accessibility, affordability, and TMF capacity will be incorporated based on their criticality as it relates to a system's ability to remain in compliance with safe drinking water standards.

- **Risk Thresholds**: the levels, points, or values associated with a risk indicator that delineates when a water system is more at-risk of failing.

- **Weighting and/or Scoring**: the application of a value or weight to each risk indicator – as certain risk indicators may be deemed more critical than others. The application of weights to risk indicators allows the State Water Board to assess all the risk indicators together in a combined Risk Assessment score.

The Risk Assessment methodology will evolve over time to incorporate additional and better-quality data; evidence from targeted research to support existing/new risk indicators and thresholds; experience from implementing the SAFER Program[8]; and further input from the Board and public.

Strategic Goal 5 – SAFER Clearinghouse

DDW and the Division of Information Technology are working together to develop a database system, known as the SAFER Clearinghouse, that will be used to assist the implementation and tracking of the SAFER Program. The SAFER Clearinghouse will pull data from SDWIS, the electronic annual report (EAR), the DFA's databases, and other data sources to assist the State Water Board in analyzing water system performance, quickly assess need, track State Water Board engagement with water systems, facilitate consolidation projects, and Administrator projects, etc. Eventually the

[8] SAFER Program Calendar: https://www.waterboards.ca.gov/safer/calendar.html

SAFER Clearinghouse will be publicly available, allowing water systems and communities to explore water system performance and track State Water Board engagement and funding activities. The State Water Board began development of the SAFER Clearinghouse in the Spring of 2020. The State Water Board anticipates a multi-phase, multi-year development process. The public portal of the SAFER Clearinghouse is tentatively scheduled to be released by January 2022.

Strategic Goal 6 – Evaluate and Expand Efficiency of Technical Assistance Providers' Performance

DDW has taken action to more fully evaluate the performance of Technical Assistance (TA) providers. This action has included surveys of training participants and stakeholders to identify which activities are most valuable in developing capacity and improving compliance. DDW has increased communication with TA providers on where to improve their services, marketing and/or activities with an emphasis on increasing awareness and participation in the public water system community.

Strategic Goal 7 – Update DDW's Capacity Development Website

DDW's Capacity Development website will be updated and maintained so that it can be more effectively used by the public and regulators. Additional information regarding asset management will be uploaded to educate water systems and promote more effective asset management.

Strategic Goal 8 – Enhance the Financial Review of Water Systems During Sanitary Surveys

Technical and managerial capacity are simply not possible when the financial capacity is not present. Therefore, more focus will be placed on the financial aspect of TMF. Many small water systems do not realize the precarious nature of their financial position, nor how it impacts their eventual ability to achieve drinking water standards as their infrastructure ages.

DDW's sanitary survey format will be enhanced to include more financial review and data collection; a financial questionnaire is being developed and will be finalized after the end of a pilot project under development. Financial information can be used in financial analysis, which may help with identifying high-risk water systems. DDW can then work on re-evaluating their TMF criteria and assessment as well as update TMF guidance for water systems. Staff will be provided comprehensive training on how to incorporate financial review into their inspections.

Additionally, the 2019 EAR will include a question regarding asset management plans to obtain information regarding how many water systems are performing this work. It will also help DDW determine which water systems are lacking adequate asset management and could use further training or TA.

Strategic Goal 9 – Develop a Financial Capacity Tool

An initial financial capacity dashboard will be created by the University of North Carolina, Chapel Hill for community water systems between 500 to 3,300 connections as part of

the Needs Assessment. This work will be used as a model for potential future development of ways to evaluate financial capacity.

As currently conceived, the tool will include an easy to read visual component for:

- adjusted operating ratio (cost recovery);
- annual water bill (water rates), including an affordability metric;
- comparison of statewide water bills assuming a median usage of 6 hundred cubic feet (HCF) (water rate comparison);
- percentage of water loss (unaccounted for water); and
- compliance status in the HR2W List.

The State Water Board will expand this tool to include technical and managerial components in addition to the financial metrics. This expanded tool will be included in the SAFER Clearinghouse and be made to the public.

Strategic Goal 10 – Follow-Up on Newly Permitted Water Systems

DDW will review all water systems that were newly formed and permitted in Fiscal Year 2016-2017 and every fiscal year thereafter to ensure they adequately address all TMF elements that promote long-term sustainability. Each water system will be reviewed four and six years after permit issuance to identify any failures that are consistently occurring and whether these failures could have been prevented. This will allow DDW to modify its procedures as necessary to enhance permitting requirements for future water systems applicants. This will help identify which TMF elements are often overlooked and will identify any need for policy or regulatory change.