Lahontan Regional Water Quality Control Board

EXECUTIVE OFFICER'S REPORT

June 2013

STATE AND REGIONAL

1. **Caltrans Storm Water Program** – *Bud Amorfini*

Caltrans Statewide Permit

The Caltrans Statewide NPDES Permit becomes effective July 1, 2013. The Permit strengthens previous requirements related to water quality monitoring, TMDL implementation, facilities and waste management, and erosion-prone slopes. The Permit covers all Caltrans operations and maintenance activities except construction. All construction activities must be individually registered and managed using the State Board's Storm Water Multi-Application Reporting and Tracking System (SMARTS) starting July 1, 2013.

The Permit defers specific language on TMDL implementation requirements until July 1, 2014, when the State and Regional Board staff must develop requirements for all TMDLs affecting Caltrans, except for Lake Tahoe. Lake Tahoe TMDL implementation requirements were included as part of the adopted Permit. By September 15, 2013, Caltrans must submit its Pollutant Load Reduction Plan. The Truckee River TMDL must be addressed with the rest of the state-wide TMDLs.

Lake Tahoe Storm Water Control Projects

The status of Caltrans' stormwater control projects are as follows:

- **Completed**
  Highway 28: Tahoe City to Kings Beach; Highway 267: Stewart Way to Highway 28 junction; Highway 89: Tahoe City to Squaw Valley (part of TRPA jurisdiction – drains to Truckee River).
- **Starting or Continuing this Year**
  Highway 50: west of Ski Run to Wildwood, Airport to Y, Trout Creek to Ski Run (landscaping and electrical), Bijou Commercial Core Pump and Treat (funding partner with City of South Lake Tahoe); Highway 89: Tahoma to Tahoe City.
- **Next One to Five Years**
  Highway 50: Echo Summit to Meyers; Highway 89: Y to Cascade Road, Cascade Road to Emerald Bay, Emerald Bay to Meeks Bay, Meeks Bay to Tahoma

Sand Filter Treatment

Two Delaware Sand Filters (DSFs) were installed on the Highway 50 Trout Creek project and are being monitored to assess their effectiveness. Preliminary results indicate that effluent quality for turbidity is one to two orders of magnitude better than influent quality. Nutrient effluent levels also show significant reductions compared with influent quality.

Double-chambered vaults have been installed on Highway 28 and are being installed on other highway segments where connectivity to surface waters is greatest. The vaults are smaller than the DSFs, but are designed to accept filter media to enhance removal of fine sediment particles. Caltrans is implementing a monitoring program to evaluate the performance of the vaults, but has yet to install filter media in any double-chambered vault.

Truckee Area Implementation Activities

The following activities have been completed in response to issues identified by the Water Board during 2012:

- **Turbid Runoff Leaving the Caltrans Truckee Maintenance Station and entering Trout Creek.**
  Significant structural improvements were made to provide treatment for discharges leaving the site. The improvements include disconnecting wash basins from stormwater basins and treating runoff at three discharge points at the station with stormwater vault systems.

- **Erosion from Middle Martis Creek due to Flow Constraints Along Highway 267.**
  Caltrans staff is participating with activities coordinated by the Truckee River Watershed Council to assess, identify alternatives, and implement appropriate restoration or other erosion mitigation measures to address this issue. Caltrans has committed $12,000 toward design and environmental work on the project. The final outcome of this process is dependent on further analysis and available funding.

- **Floriston Sandhouse Sediment Discharges to Truckee River.**
  A plan to relocate the facility in the future has been initiated. Temporary best management practices have been installed to control run-on to the facility and mitigate sediment discharges to the Truckee River.

- **Boca Water Quality Improvement Projects.**
  Caltrans completed Natural Environment as Treatment (NEAT) mapping on Interstate 80 from Boca to the state line to identify locations where source control or treatment facilities would be most cost-effective. One source area has been stabilized and additional projects will be developed and funded based on the information derived from the NEAT mapping.

2. **New Statewide Report on Stream Pollution Trends** - *Thomas Suk*

   The State Water Board's Surface Water Ambient Monitoring Program (SWAMP) has released a report titled: *Initial Trends in Chemical Contamination, Toxicity and Land Use in California Watersheds*. The report, released on April 16, documents findings of SWAMP's Stream Pollution Trends (SPoT) project, which has three primary goals, to: 1) determine long-term statewide trends in stream contaminant concentrations and effects; 2) relate water quality indicators to land use characteristics and management effort; and 3) establish a network of sites throughout the state to serve as a backbone for collaboration with local, regional, and federal toxicity monitoring.

   The SPoT project collects fine sediment from stream bottoms and analyzes the sediment for metals, organic contaminants (such as pesticides), and toxicity. Most samples are collected from the lower reaches of large rivers, to "integrate" contaminant concentrations and effects at the large river-basin scale.

   Over the first four years of the project (2008-11), about 8% of the samples (statewide) have been identified as highly toxic, with 20-30% of samples (depending on the year) documented to have significant toxicity. Sixty-six % of sites have not had any toxic samples. Stream sediment toxicity is significantly correlated with urban land cover.

In 2011, SWAMP collected fish from numerous rivers & streams throughout California, and tested the fillet tissue for mercury, PCBs, and pesticides (see attached table for data).

In sum, 14 stream/river sites in our Region were tested. Criteria for mercury were exceeded at four of those locations (ie., East Walker River; Virginia, Big Pine, and Independence Creeks). PCBs and pesticides were detected in fish tissue from many of the 14 locations, but did not exceed advisory levels.

NORTH BASIN

3. **Snapshot Day 2013 – Tahoe and Truckee Watersheds** – *Richard Booth*

   Snapshot Day is a volunteer-based event to collect watershed information during one point in time (the "snapshot") each year. Volunteer "team leaders" are trained, and these leaders accompany teams of volunteers to various pre-determined sites to collect information relative to the health of our watersheds. Water Board staff are exploring options to promote similar efforts across the Region.

   Snapshot Day 2013 was held on May11. The teams analyzed water in select streams for dissolved oxygen, total dissolved solids, pH and temperature; collected water samples for laboratory analysis of nutrients, sediment and bacteria; and conducted visual habitat assessments of the sites.

   Snapshot Day started in 2000 in various locations throughout California, including the Lake Tahoe and the rest of the Truckee River watershed – from the headwaters of Lake Tahoe to the terminus at Pyramid Lake. Four different groups collected watershed data at Lake Tahoe south shore and north shore; in the Truckee/Reno area; and at Pyramid Lake. It is sponsored by the Tahoe Resource Conservation District, League to Save Lake Tahoe, Nevada Division of Environmental Protection, UC Cooperative Extension, Tahoe Regional Planning Agency, Incline Village General Improvement District, Tahoe Water Suppliers Association, UC Davis and the Truckee River Watershed Council.

   Water Board staff contributed to the south shore event by serving as team leaders, by presenting a brief explanation of water quality measurements, and by analyzing the fecal coliform bacteria water samples from the south shore.

   The goals of this effort were two-fold: 1) to promote environmental education and stewardship; and 2) to collect valuable water quality information. With proper training and quality assurance, community volunteers can provide valuable information for watershed management and pollution prevention. Citizen monitoring is designed to supplement existing agency monitoring efforts; all information is provided to the regulatory and resource management agencies.

4. **Approval of Forest Service's Operating Plans for South Shore Fuel Reduction Project** – *Douglas F. Smith*

   In late April 2013, the Water Board staff approved the U.S. Forest Service Lake Tahoe Basin Management Unit's (LTBMU) operating plan for fuel reduction and forest health work in South Lake Tahoe for the upcoming summer. The plan provides detailed, site-specific information on how the LTBMU will comply with its 2012 permit and protect water quality during the project.

   Water Board staff are provided technical assistance to LTBMU over the last several months to develop the plan, assuring that it was completed and approved well in advance of the Tahoe Basin construction/soil disturbance season. Attachment 1 is a joint press release that both agencies issued to signify agency collaboration.

   The 10,000 acre fuels reduction and healthy restoration project is expected to be completed in eight to 10 years. This is the second year of the project. The LTBMU treated about 700 acres last year and hopes to treat 1,300 acres this season.

This year's operating plan covers mechanical fuel reduction activities in nine distinct areas near residential neighborhoods in the wildland urban interface areas of South Lake Tahoe. The areas that may be treated this field season include summer cabins in the Spring Creek area, the east and west shores of Fallen Leaf Lake, the Gardner Mountain and South Tahoe High School areas, the North and South Upper Truckee neighborhoods, a large tract of forest between the Golden Bear and Sierra Tract neighborhoods, and the area near Trout Creek south of Pioneer Trail. The plan also includes hand-thinning of urban lots by chainsaw crews and burning of some biomass piles from previous years' fuel reduction actions.

More information on the South Shore project can be found at http://www.fs.usda.gov/goto/ltbmu/SouthShoreFuelReduction.

5. **Wonders of Water, MS Dixie Earth Day, and Bijou Park Earth Day 2013** – *Carly Nilson, Mary Fiore-Wagner*

Water Board staff participates in South Tahoe Environmental Education Coalition (STEEC) with partners from agencies and organizations around the Lake Tahoe Basin. Each spring, STEEC organizes multiple environmental outreach activities.

During the months of April and May, Water Board staff, Carly Nilson, Mary Fiore-Wagner, Cindy Wise, Raina Patrocinio, Bruce McIntosh, and Jorge Orozco participated in three STEEC-developed education efforts that reached over 1,000 students in the Lake Tahoe Unified School District and hundreds of South Lake Tahoe community members.

The Wonders of Water Environmental Education (WOWEE) program teaches kindergarten through fifth grade students the importance of water with activities that focus on water quality monitoring and conservation, and botany and macroinvertebrate identification. In South Lake Tahoe, four elementary schools participated: Bijou, Sierra House, Tahoe Valley, and Lake Tahoe Environmental Science Magnet.

In addition to the few weeks surrounded by the WOWEE, Water Board staff participated in the fourth grade Earth Day field trip on the MS Dixie. Over 300 students climbed aboard the boat and through hands-on activities learned about the geology of Lake Tahoe, the importance of conserving water, and understanding a watershed and preventing pollutants entering Lake Tahoe.

Each year, the community hosts an Earth Day event at Bijou Park. Water Board staff set up an interactive activity in the Children's Corner to demonstrate that water is central to life as it cycles through the atmosphere, the surface, and underground.

Water Board staff will continue to participate in environmental educational efforts that instill a sense of stewardship in children that will help in the long-term protection of our water and other environmental resources.

6. **Bridgeport Ranchers Organization Annual Spring Meeting** – *Douglas Cushman*

Water Board staff attended the annual spring meeting of the Bridgeport Ranchers Organization (BRO) on March 19. The BRO meets annually in the spring prior to bringing livestock into the Bridgeport Valley for the summer grazing season to discuss water quality monitoring and operational changes. Since the Water Board adopted a grazing waiver in 2007, the spring meeting is when the BRO submits the water quality monitoring summary from the previous grazing season. Water quality monitoring data collected by the BRO indicates that during the 2012 summer grazing season numerous monitoring sites in the Valley exceeded 200 fecal coliform colony forming

units per 100 mL of water. The 2012 Grazing Waiver does not require the BRO to conduct water quality monitoring during 2013; rather, it directs the Waiver enrollees to focus on management practice implementation that will address the sources of pathogen inputs to the surface waters in the Bridgeport Valley.

Staff also discussed the status of application packets for enrollment under the 2012 Grazing Waiver. All ranches submitted grazing waiver applications, however, most ranches had not submitted a Ranch Water Quality Management Plan (RWQMP) that fully complies with 2012 Grazing Waiver.

On May 15, staff met again with the BRO and provided hands-on assistance to complete the individual RWQMPs and provided information on the Proposition 84 grant. Seven ranches have submitted complete application packets and are fully enrolled in the 2012 Grazing Waiver. Two ranches have yet to submit complete RWQMPs.

SOUTH BASIN

7. **Water Quality Highlighted at Career Day** – *Brianna Bergen*

   Brianna Bergen, an Engineering Geologist from our Victorville office, served as a guest lecturer during a Career Day event hosted by Heritage School in Phelan on May 13. Ms. Bergen spoke to approximately 60 eighth-grade students and 2 teachers about the steps and skills needed to become a geologist working for a Water Board. The discussion stressed the importance of clean water and water quality, highlighted the role that Water Board staff have in keeping our water clean and suggestions that all of us may take to help keep water clean. Ms. Bergen also reviewed some of the problems that we encounter if our water is *not* kept clean.

   Ms. Bergen demonstrated various tools and equipment that we use in the course of our jobs, and also displayed some spectacular mineral samples that she has collected from various mines and mineral localities that abound in our Region. Immediate positive feedback was received from teachers and students alike, indicating that they now have a better understanding of water quality and what it means to work for a Water Board. Water Board staff at the Victorville office will continue to seek opportunities like this one to help facilitate increased community knowledge regarding water quality and the work that we do.

8. **Adelanto Public Utility Authority** – *John Morales*

   As a result of the Adelanto Public Utility Authority (Adelanto) violating waste discharge requirements due to insufficient treatment and disposal capacity at its wastewater treatment plant, the Board adopted Cease and Desist Order No. R6V-2007-0024 in August 2007 and R6V-2011-0015A1 in May 2011. These Orders established time schedules requiring Adelanto to implement actions to comply with waste discharge requirements. For the last two years, Adelanto has diverted flow in excess of 1.5 million gallons per day (MGD) to the Victor Valley Wastewater Authority's Regional Treatment Plant.

   In response, Adelanto constructed new percolation pond No. 9 and is upgrading its treatment plant capacity to 4.0 MGD. The previously constructed and permitted micro-media plant is inactive and will not be used. Treatment plant upgrades should be completed by August. Additionally, in July, staff intends to recommend that the Board adopt revised waste discharge requirements replacing two existing Board Orders. In the future, staff will recommend rescinding the Cease and Desist Orders once compliance has been verified.

9. **Upper-Level Management Meeting Concerning Edwards AFB Arroyos Record of Decision** – *Tim Post*

   As a direct result of the Air Force's recent Rapid Improvement Event and to provide input to the Air Force on finalizing the Edwards Air Force Base Operable Unit 4/9 Record of Decision (RoD), a meeting was held among senior-level representatives of the U.S. Environmental Protection Agency (USEPA), Department of Toxic Substances Control (DTSC), and the Lahontan Water Board. The focus of the meeting was to identify the remaining issues the various agencies have concerning the proposed RoD.

   This meeting is part of the process agreed to by the agencies and the Air Force to form high-level groups to focus on the remaining roadblocks to implement remedies at the most technically difficult sites at Edwards

AFB. One of these sites is the Arroyos area which contains an extensive mass of chlorinated solvents, perchlorate, nitrosodimethylamine, and nitrate in groundwater.

The remedy proposed by the Air Force in the Arroyos RoD is to identify a containment zone, approximately 12.3 square miles long and extending 500 feet below ground surface, large enough to encompass the predicted maximum extent of solvent migration.

The Air Force has also proposed that, when the solvent plume moves from the fractured bedrock to the alluvial basin, they will conduct an analysis of remedial alternatives for the alluvial basin and a technical and feasibility analysis of cleaning up the groundwater.

Hydrogeologic information recently gathered by the Air Force indicates the bedrock-alluvium boundary is much closer to the source area than previously suspected. Although this new information does not significantly affect the proposed remedy it has led to some uncertainty concerning the modeled travel times of when the solvents will reach the containment zone boundary.

To mitigate this uncertainty, the agencies agreed that some minor changes to the RoD were needed. These changes include: installing a more robust groundwater monitoring system to track the leading edges of the plumes, calculating the volume of water affected (gallons of the water resource lost), and clarifying what is a confirmed detection of solvents in the alluvium. These changes and the remedy components already in the RoD will ensure that the Air Force is able to track the solvents and take measures to prevent their migration beyond the Containment Zone Boundary.

The Air Force is on schedule to submit a revised Final ROD to the agencies for review on June 29, 2013.

10. **Hinkley Community Water Panel** – *Lisa Dernbach*

Water Board staff organized a public meeting of water experts in May to discuss the feasibility of water supply options in Hinkley. The Panel consisted of the general managers of the Helendale Community Services District and Mojave Water Agency, the executive officer of the Local Agencies Formation Commission for San Bernardino County, the Vice President for Golden State Water Company, and staff with the Drinking Water Program of the California Department of Public Health.

The County described the process for creating a community services district and stated that it took four years for Helendale to create theirs. The Department of Public Health explained some of the best available technologies for removing chromium and arsenic from drinking water and stated that PG&E's ion exchange wellhead treatment system offered to residents was likely the best option for residents in Hinkley. Golden State Water Company stated a willingness to work with communities to bring commercial water service to residences. Asked the cost for laying pipeline in an area where homes are greatly spread out, the residents were told that it ranged from $250,000 to $500,000 per mile and did not include other infrastructure costs, such as pumps, tanks, horizontal borings, etc.

The Mojave Water Agency informed the audience that access to water in a pipeline that flows through Hinkley from the State Water Project could be tapped for potential drinking water supply. It was stated however that the water in the pipeline which originates from the Central Valley may contain chromium at concentrations higher than that in Hinkley domestic wells. The Panel also warned that the County tends not to permit such water supply for municipal drinking use since it is an unreliable source during drought years. In every case where

the State Water Project is used for domestic supply, a back-up supply must be identified.

When asked about the possibility of residents installing large storage tanks and having drinking water hauled in from a permitted source, the Panel stated that this practice was no longer allowed by the County as a permanent water supply due to too many uncertainties (i.e., truck and truck driver used for hauling and water rights issues from the permitted water source). The County does allow this situation on a temporary basis in emergency situations (i.e., a few months).

The Panel was asked about a scenario where an outside or third party permitted, designed, and installed a drinking water system and turned it over to the Hinkley community to operate and maintain. In addition to the length of time (at best three years) to permit such a system, the requirements for long term financial and operational capabilities were discussed.

Panel experts expressed a willingness to work with the Hinkley community if it chose to pursue a community drinking water supply. And while the Panel information highlighted challenges (i.e.,time, complexity, and costs), the audience appeared to appreciate gaining information for future decisions by individuals and the community.

Region 6 SWAMP Rivers and Streams Data 2011

Regional Board	Station Name (County)	Fish Species	Sample Type	Mercury (µg/g ww)	Dieldrin (ng/g ww)	Selenium (µg/g ww)	Sum of Chlordanes (ng/g ww)	Sum of DDTs (ng/g ww)	Sum of PCBs (ng/g ww)
6	**Susan River ~0.6mi above Jensen Slough** (Lassen)	Brown Trout	C1	0.03	0.0	0.08	0.0	0.0	0.0
6	**Middle Truckee River, Below Canyon 24** (Nevada)	Brown Trout	C1	0.03	0.0	0.25	0.3	0.0	0.9
6	Middle Truckee River, Below Canyon 24	Rainbow Trout	C1	0.03		0.08			
6	**West Fork Carson River, at HWY 89 (Hope Valley)** (Alpine)	Rainbow Trout	C1	0.02	0.7	0.08	0.3	1.9	6.3
6	**Carson River, East Fork upstream of Hangman's Bridge** (Alpine)	Rainbow Trout	C1	0.02	0.7	0.08	0.2	1.9	4.6
6	**West Walker River, near Chris Flat Campground** (Mono)	Rainbow Trout	C1	0.02	0.0	0.08	0.0	1.1	2.2
6	**East Walker River below Bridgeport Reservoir** (Mono)	Rainbow Trout	NA	0.17					
6	East Walker River below Bridgeport Reservoir	Sacramento Blackfish	C1		0.5	0.30	0.2	1.1	1.8
6	East Walker River below Bridgeport Reservoir	Sacramento Blackfish	NA	0.36					
6	**Buckeye Cr, above Eagle Cr (abv campground)** (Mono)	Rainbow Trout	C1		0.6	0.08	0.0	0.9	2.0
6	Buckeye Cr, above Eagle Cr (abv campground)	Rainbow Trout	NA	0.02					
6	**Virgina Cr, below Willow Springs (at USGS gage)** (Mono)	Rainbow Trout	C1			0.25			
6	Virgina Cr, below Willow Springs (at USGS gage)	Rainbow Trout	NA	0.02					
6	Virgina Cr, below Willow Springs (at USGS gage)	Sacramento Sucker	C1	0.18	0.5	0.53	0.7	0.0	5.2
6	**Lee Vining Cr, at Moraine Camp** (Mono)	Rainbow Trout	C1		0.8	0.17	0.0	1.2	4.4
6	Lee Vining Cr, at Moraine Camp	Rainbow Trout	NA	0.03					
6	**Owens River at Hwy 6** (Inyo)	Rainbow Trout	C1	0.03	0.5	0.30	0.0	0.7	0.9
6	**Bishop Creek below Bishop Park Campground** (Inyo)	Brown Trout	C1	0.04	0.9	0.39	0.3	2.8	13.7
6	Bishop Creek below Bishop Park Campground	Rainbow Trout	C1	0.02		0.21			
6	**Big Pine Creek above Big Pine Campground** (Inyo)	Rainbow Trout	C1	0.30	0.6	0.49	0.0	1.2	3.0
6	**Independence Creek at Grays Meadow Campground** (Inyo)	Brown Trout	C1	0.33	0.0	0.16	0.3	0.8	0.2
6	Independence Creek at Grays Meadow Campground	Rainbow Trout	C1	0.02		0.58			
6	**Lone Pine Creek at Whitney Portal Campground** (Inyo)	Brown Trout	C1	0.06	0.0	0.17	0.0	1.7	0.6
6	Lone Pine Creek at Whitney Portal Campground	Rainbow Trout	C1	0.02		0.39			

LEGEND

	Fish Contaminant Goal (FCG) exceeded	FCG =	0.220	0.46	7.4	5.6	21.0	3.6
	Advisory Tissue Level 3 (ATL3) exceeded	ATL3 =	0.070	15.0	2.5	190.0	520.0	21.0
	Advisory Tissue Level 2 (ATL2) exceeded	ATL2 =	0.150	23.0	4.9	280.0	1000.0	42.0
	"No consumption" (NC) level exceeded	NC =	0.440	46.0	15.0	560.0	2100.0	120.0

C1 Composite
NA Average of Individuals

Status of Actions For
PG&E Hinkley Chromium Contamination
May 2013

Enforcement

1. **Supplemental Environmental Project (SEP):** The ACL settlement adopted by the Board on March 14, 2012 allows PG&E to spend at least $1.8 million to update the drinking water system at the Hinkley School by the end of 2017. Although the Barstow Unified School District decided to close the Hinkley School this school year, the District has requested the Water Board continue to support completion of the drinking water system since the District may choose to use the Hinkley School in the future. In a May 8, 2013 letter, PG&E reported working with the county to retrofit current freshwater wells located south of the compressor station and to identify a location for a new well to supply water to the school. In second quarter 2013, preconstruction activities will be initiated for the school connection pipeline.

2. **Cleanup and Abatement Order for Whole House Water (WHW) Supply:** Revised Order (R6V-2011-0005A2) was issued on June 7, 2012. In early 2013, PG&E submitted a request to revise the monitoring program for the WHW system to reduce the number of samples collected so as to lessen the inconvenience to residents. PG&E also submitted a request to suspend WHW system requirements for 90 days while the replacement water options are re-evaluated following public complaints.

   In a May 9, 2013 response, the Water Board Executive Officer agreed to let residents decide to not accept reverse osmosis (RO) systems as part of WHW supply. For those residents accepting WHW with RO systems, monitoring requirements were reduced after startup to once every six months. Hexavalent chromium testing for bottled water was changed to 1.2 ppb, the average background concentration in Hinkley. Bottled water, however, was not allowed to be a replacement for WHW supply. PG&E's request for a 90-day extension of deadlines in the CAO was declined; residents who accepted PG&E's offer of WHW by April 18, 2013 must have operating WHW systems by Aug. 31, 2013. Residents added to the program after April 18, 2013, must have an operating WHW system within six months.

3. **Cleanup and Abatement Order for Plume Definition:** Amended Order (R6V-2008-0002A4) issued on January 8, 2013 requires PG&E to delineate the extent of the chromium plume in groundwater and determine threats to domestic wells. PG&E has petitioned the CAO to the State Water Board. Until the State Board makes a decision, PG&E is obligated to comply with tasks and deadlines in the CAO.

As required in the CAO, PG&E submitted a workplan and followed with an addendum for conducting additional investigations to define the extant of chromium in groundwater. The CAC, via Project Navigator provided comments on proposed tasks. On May 2, the Water Board authorized the workplan with revisions, including the installation of twenty (20) monitoring wells. The full plume delineation findings are due in a report by October 30, 2013.

Investigative and Reporting Orders

1. **Chromium Plume Boundary**
   The first quarter 2013 chromium plume map is posted on the Water Board website at: www.waterboards.ca.gov/lahontan, on the "PG&E Hinkley Chromium Cleanup" page, at the bottom of page.
2. **Chromium Plume Containment**
   Pursuant to the April 2012 Settlement Agreement, PG&E submitted the monthly Plume Capture Report on May 15, 2013 evaluating chromium capture at Thompson Road. In addition, PG&E corrected inconsistencies in the April 15, 2013 report to Board staff's satisfaction and it was re-submitted.
3. **Community Complaints of Manganese in Domestic Wells**
   In early April, Water Board staff collected samples from domestic wells in response to community complaints about black water. In addition, some samples were forwarded to Dr. Noblet of CSU-San Bernardino to analyze solids for metals. The Water Board's results and the CSU findings will be relayed to the CAC as soon as practicable.
4. **Manganese Plume Investigation & Cleanup - Investigative Order (R6V-2012-0060)**
   In a March 26, 2013 letter, the Water Board conditionally accepted PG&E's work plan for conducting further manganese investigations. Besides installing and sampling new monitoring wells, PG&E will conduct two tracer tests this summer to track the path of groundwater flow from the in-situ remediation areas. Initial results of the investigation will be reported by November 2013.
5. **Whole House Water System - Investigstive Order (R6V-2013-0001)** – Besides the two WHW systems in operation, four new residences have WHW systems in operation. Water samples collected from the ion exchange and the reverse osmosis systems at the new locations were all good--no exceedance for chromium or other metals. Up to 12 more residences are planned to have systems operating by end of May.

Status of Environmental Impact Report and Actions for Comprehensive Cleanup

May 15, 2013: Final EIR is released. The Final EIR contains two volumes; volume 1 is the responses to comments, and volume 2 is the revised Draft EIR, showing all changes made in response to comments.
June 6, 2013: Water Board staff hosting public information meeting at Hinkley School from 6 to 8 pm.
July 17, 2013: Water Board meeting in Barstow to consider certifying Final EIR and providing direction concerning a General Permit for remediation activities.
Late Summer 2013: Water Board staff will develop draft site-wide General Permit and a new Cleanup and Abatement Order for comprehensive cleanup of chromium in groundwater, based on the alternatives and analysis in the final EIR. The draft Permit and Cleanup Order will be circulated for public review and comment.

Status of Revised Chromium Background Study

Water Board staff, members of the CAC and its IRP, PG&E and its consultants, and Dr. John Izbicki of the US Geological Survey (USGS) continue to meet monthly to develop a revised chromium background study plan. Dr. Izbicki provided recommendations on data collection and analyses. The contract for Dr. Izbicki's services to develop the revised study plan is at the State Water Board contracts office for final signatures as of May 21. The contract should be in place by the end of May.

California Water Boards

Lahontan Regional Water Quality Control Board

Panel Discussion of Water Supply Options for Hinkley California
May 22, 2013
6:30 to 8:30 pm
Hinkley Elementary School

Panel Summary and Purpose: Bring water supply experts to the Hinkley community to discuss water supply options with the community. Panel members will be able to share expertise and experience concerning the planning, design, permitting, operation, and cost of water supply options for Hinkley residents. There will also be an opportunity for the public to ask questions of the experts.

Panel Chair: Patty Kouyoumdjian, Executive Officer, Lahontan Water Board

Panelists:

1. Jeff O'Keefe, Department of Public Health (jeff.okeefe@cdph.ca.gov) and/or Sean McCarthy (sean.mccarthy@cdph.ca.gov)
2. Kimberly Cox, Helendale Community Services District (kcox@helendalecsd.org)
3. Kirby Brill, Mojave Water Agency (kbrill@mojavewater.org)
4. William Gedney, Golden State Water Company (wcgedney@gswater.com)
5. Kathy Rollings-McDonald, San Bernardino County Local Agency Formation Commission (LAFCO) (krmcdonald@lafco.sbcounty.gov)

Panel Moderator: Gita Kapahi, State Water Board Office of Public Participation

AGENDA ITEM	Lead	TIME
Welcome	Patty K, Panel Chair	6:30 – 6:40
Introduction of Panelists, Ground Rules and Overview	Gita, Moderator	6:40 – 6:50
Panelists to address prepared questions (see page 2)	Gita, Moderator	6:50 – 7:55
Panelists to address questions from audience	Gita, Moderator	7:55 – 8:25
Wrap Up/Closing Comments	Gita and Patty	8:25 - 8:35

Questions for Panelists:

1. What is the feasibility of a community water system? What are some specific considerations (costs, design, operation and maintenance, opportunities for hybrid approach)?
    a. How is a community services district (CSD) formed? What would it take for the Hinkley community to get a community water system?
    b. Is it feasible for Golden State to pipe water to homes in Hinkley?
    c. Is it possible to tap into the Mojave Water Agency line for water supply?
    d. Can Hinkley merge with Helendale CSD?
    e. Would Golden State be willing to operate and maintain a community water supply system with water provided by PG&E from a future pump and treat system if such a system is employed as part of the chromium cleanup effort?
2. [DPH, County, Golden State Water] What is the feasibility of tanked water systems for individual or groups of households? What are some specific considerations (costs, design, operation and maintenance, opportunities for hybrid approach)?
3. [DPH, Golden State, Helendale] Are there any new or promising technologies for hexavalent chromium removal at a community or household level?
4. [DPH, County] How can a resident with a private supply well be assured of safe drinking water?
5. What are the relative costs and are there any funding opportunities for the various water supply options?

Background Information Concerning Water Supply Options:

Chromium contamination from PG&E's compressor station affects an area of groundwater at least six miles long and two miles wide. Over three hundred residents are faced with a decision to enter into property acquisition with PG&E, select an ion exchange system for their private residential well supply, or rely on either commercial bottled water or their well supply as is. Most residents are on large lots spread out over distances while some residents live closer to each other on smaller lots within tracts.

1. Community Water System
    a. Use of wells upgradient or otherwise unaffected by the chromium plume or remediation, combined with a system of pipelines to water recipients. For example, wells near the Mojave River are upgradient of the chromium plume, consistently productive, and could be potential candidates for a well source. Based on experience with freshwater injection using PG&E's wells south of the Compressor Station, there may be naturally-occurring constituents, such as arsenic, that might require pre-treatment before providing as drinking water.
    b. Use of a connection to Golden State Water Company which could involve an estimated 12-mile pipeline to tie in to the existing water treatment system.
    c. Use of a connection to the MWA recharge pipeline located along Community Blvd. The MWA recharge pipeline derives water from the California aqueduct. If this water is unable to meet drinking water standards in its original state, it may require treatment before distribution as a water source. There may also be a water supply issue during drought years.
2. Tanked Water Supply
    a. Individuals or groups of households could share an above ground tank with potable water.
    b. Need for Commercial/licensed truck to supply potable water.
    c. Sources could be one of the permitted sources discussed above or another permitted source.
3. Point of Entry/Point of Use Water Treatment Systems
    a. Ion Exchange outside the house to provide water to all taps inside
    b. Reverse Osmosis at internal tap to provide additional salt/nitrate removal
    c. Other options

May 28, 2013

NOTICE OF PUBLIC INFORMATION MEETING

REVIEW OF FINAL ENVIRONMENTAL IMPACT REPORT HINKLEY, SAN BERNARDINO COUNTY

Lahontan Water Board staff will host a public meeting to review the Final Environmental Impact Report (EIR) for comprehensive cleanup of chromium in groundwater near PG&E's Hinkley Compressor Station.

*This meeting is for information purposes only; it is **not** a formal Water Board meeting. No Water Board decisions will result from this meeting.*

When: June 6, 2013 from 6:00 to 8:00 pm
Where: Hinkley School, 37600 Hinkley Road
Purpose: The purpose of the meeting is to provide information on key revisions to the Final EIR in response to public comments received on the Draft EIR. The Draft EIR was circulated for public review and comment from August 21 to November 5, 2012. Comments are not being solicited on the Final EIR, as the California Environmental Quality Act (CEQA) does not mandate a comment period.

The Final EIR was released on May 15, 2013, and will be considered for certification at the July 17, 2013 Water Board meeting in Barstow. Details on the July Water Board meeting will be available at http://www.waterboards.ca.gov/lahontan/ no later than 10 days prior to the meeting.

The Final EIR is available on the Lahontan Water Board's PG&E Hinkley project webpage (http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml)/

- Compact Discs of the Final EIR will be available at the meeting
- Spanish language interpreters will be present at the meeting

Please contact Anne Holden with questions at (530) 542-5450 or aholden@waterboards.ca.gov.

Media Release

LAHONTAN BOARD APPROVES FOREST SERVICE PLAN TO PROTECT WATER QUALITY DURING FUEL REDUCTION TREATMENTS

For Immediate Release

Contact: Douglas F. Smith
(530) 542-5453

The Lahontan Regional Water Board (Water Board) has approved the U.S. Forest Service Lake Tahoe Basin Management Unit's (LTBMU) operating plan for fuel reduction and forest health work in South Lake Tahoe for the upcoming summer.

The plan provides detailed, site-specific information on how the Forest Service will comply with its 2012 permit and protect water quality during the project.

Fuel reduction operations, which include thinning trees and brush, are vital in reducing the risk of wildland fires. The project also includes thinning for forest health, which reduces competition among remaining trees for water, sunlight and nutrients.

The Water Board and the LTBMU collaborated over the last several months to develop the plan, assuring that it was completed and approved well in advance of the high fire danger season.

"I am delighted that both agencies have worked cooperatively during the winter months to produce a plan that aggressively targets fuel reduction safety for neighborhoods while protecting water quality," said Patty Z. Kouyoumdjian, the Water Board's Executive Officer.

The 10,000-acre fuels reduction and healthy restoration project is expected to be completed in eight to 10 years. This is the second year of the project. The LTBMU treated about 700 acres last year and hopes to treat 1,300 acres this season.

Catastrophic wild fires also have potential to create landslides and accelerated erosion that could impact Lake Tahoe's famed clarity. Planning of the fuels reduction and healthy forest restoration began after the 2007 Angora Fire which resulted in the loss of 254 homes. That tragic fire heightened the community's concern about future wildfires.

This year's operating plan covers mechanical fuel reduction activities in nine distinct areas near residential neighborhoods in the wildland urban interface areas of South Lake Tahoe. The areas that may be treated this field season include summer cabins in the Spring Creek area, the east and west shores of Fallen Leaf Lake, the Gardner Mountain and South Tahoe High School areas, the North and South Upper Truckee neighborhoods, a large tract of forest between the Golden Bear and Sierra Tract neighborhoods, and the area near Trout Creek south of Pioneer Trail.

The plan also includes hand-thinning of urban lots by chainsaw crews and burning of some biomass piles from previous years' fuel reduction actions.

More information on the South Shore project can be found at http://www.fs.usda.gov/goto/ltbmu/SouthShoreFuelReduction.

"Our ability to work together has helped expedite these important fuels projects and insure we are meeting the intent of the Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy. This Strategy represents the full array of land management agencies and cooperators in the Lake Tahoe Basin whose responsibility is the protection of life and property in our communities and neighborhoods," said LTBMU forest supervisor Nancy Gibson. "I'm very proud of the work of both LTBMU and Lahontan staff in fulfilling this important need."

The Lahontan Regional Water Board is a State of California office within the State Water Resources Control Board, an agency of the California Environmental Protection Agency. The Lahontan Water Board protects and restores water quality in California east of the Cascade and Sierra Nevada crests from the Oregon border through the Mojave Desert.

The State Water Boards are now on Twitter! *Follow us at:*
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ENCLOSURE 2

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