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# **ENCLOSURE 1**

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**CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD  
LAHONTAN REGION**

**REPORT ON STATUS OF STANDING ITEMS**

**November 2013**

The Water Board has requested that it be kept informed of the status of a number of issues. The following table lists the items, the reporting frequency and the dates the items are due.

<b>ENTIRE BASIN</b>		
<b>ISSUE</b>	<b>FREQUENCY</b>	<b>DUE DATE</b>
Lake Tahoe Nearshore Standards	Semi-Annual	November 2013 (Agenda Item 9)
Status of Basin Plan Amendments	Semi-Annual	Due January 2014
Status of Grants	Semi-Annual	Due March 2014
Caltrans Statewide General Permit/Tahoe Basin	Annually	Due June 2014
Tahoe Municipal Permit	Annually	Due June 2014
County Sanitation Districts of Los Angeles - District No. 14	Annually	Due January 2014
County Sanitation Districts of Los Angeles - District No. 20	Annually	Due January 2014
Status of Dairies	Semi-Annual	Due April 2014
City of Barstow	Semi-Annual	Due January 2014
Pacific Gas & Electric Company	Each Southern Board Meeting	Due January 2014

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## **ENCLOSURE 2**

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# EXECUTIVE OFFICER'S REPORT

November 2013

## STATE AND REGIONAL

### 1. Progress Report for Establishing Statewide Biological Water Quality Objectives –

*Alan Miller/Tom Suk*

Work is underway by the State Water Board pursuant to a U.S. Environmental Protection Agency grant to further develop scientific and policy recommendations for numerically assessing the biological integrity of year-round wadeable streams using benthic macroinvertebrates (spineless bottom-dwelling animals visible to the naked eye). Each stream reach of the state may be assessed by collecting field data for a statistical modeling tool, and given a score called the California Stream Condition Index (CSCI). The CSCI is between 0 and 100 relative to what would be expected biologically at a reference (minimally-disturbed) stream site in that setting. In addition to setting forth a policy with consistent methods for bioassessments for the CSCI, there is a need to determine what to do about CSCI scores affected adversely by wastes, physical stream modifications, and water uses. For example, what score should trigger regulatory action? In the case of uncertainty, what score represents unacceptable biological conditions?

During September meetings of the Steering Committee, Regulatory Advisory Group, and Public Stakeholder Group, the State Water Board staff presented several options for using biological assessment tools in a regulatory framework. These may include: 1) adopt a Policy or Plan with a statewide narrative objective with numeric translators (i.e., pass/fail standards) for use by Regional Boards in regulatory actions; 2) amend the State's policy for listings under CWA section 303(d) to establish requirements for

addressing when a water body's biology is "impaired"; 3) adopt a statewide Policy to establish methods, scoring tools and targets for biological assessments (no water quality objective), mainly for use by Regional Boards in discretionary regulatory actions; or a combination of the above.

While State Water Board explores the statewide ramifications of the policy effort, Water Board staff recommended the approach outlined in 1) above, as one of the most direct ways to measure and protect the health of the region's streams. Staff suggested a broad enforceable narrative objective is needed to cover all state waters, to prevent degradation from existing conditions, and to regulate for best-attainable conditions that will not limit restoration opportunities. However, agreement or consensus among the regional representatives and/or stakeholders was not reached after the pros and cons of the various options were examined and debated. There seemed to be wide agreement that the CSCI was not suited for use in all potential stream settings, particularly in areas lacking suitable reference sites (e.g., Central Valley) or in certain highly-modified perennial stream settings yet to be fully articulated.

State Water Board staff will use the information from the meetings in preparing a Substitute Environmental Document to examine a range of regulatory and non-regulatory alternatives for implementing a draft Policy for bio-objectives, expected for public comment in 2014. Policy consideration by the State Water Board will likely follow in 2014.

2. **UC Berkeley Dept. of Forestry Conference on Sustainable Forestry** - *Douglas Cushman*

On October 10, 2013, Nonpoint Source Unit Chief, Douglas Cushman, attended a conference hosted by the University of California at Berkeley Center for Forestry entitled "Working for Conservation: Active Engagement in Forest and Woodland Sustainability." The conference focused on restoration and conservation of forest and woodland ecosystems with an emphasis on the anticipated changes that will occur as climate change impacts occur.

The conference was well attended with a diverse stakeholder group including academics, forest product industry representatives, environmental conservation groups, rangeland managers, environmental consultants, and regulatory agency staff. The keynote speakers emphasized that restoration efforts must acknowledge climate change and altered landscapes in implementing restoration projects.

Historical alteration of the landscape may restrict the capability of the project to restore the ecosystem to a state that existed prior to European settlement in California. The past and future role of wild land fire and prescribed burning were also discussed, as were rangeland impacts and policy. Information from the conference will aid staff in reviewing project proposals and implementing the statewide Nonpoint Source Policy.

3. **National Confined Animal Feeding Operation Roundtable Conference in Sacramento** - *Ghasem Pour-Ghasemi*

Water Board staff attended the Confined Animal Feeding Operation (CAFO) conference in Sacramento on October 15 - 18, 2013. This conference was organized by the Association of Clean Water Administrators (ACWA) and supported by all 50 states.

Presentations were made by regional Water Board staff from Region 1, 5, and 8. Topics included stormwater and runoff control for dairies and large animal operations, and nutrient management.

Region 1 regulates all dairies under waivers or general Waste Discharge Requirements (WDRs), and Region 8 includes all dairies under NPDES permits. Region 5 covers all dairies under one general WDR and rather than requiring each of its 1,200 dairies to have its own groundwater monitoring program, Region 5 has worked with the dairymen and together they selected 42 representative dairies to monitor groundwater quality. These representative sites were chosen on the basis of similar dairy size, soil types, agricultural and dairy operations. The dairies pool resources to share the cost of constructing monitoring wells, collecting groundwater quality data, and producing monitoring reports. Of the 42 dairies, approximately half of them already had existing monitoring wells (average of four monitoring wells each) and the other half were required to install new monitoring wells. The number of monitoring wells per representative dairy ranges from seven to eleven.

Preliminary results from 18 sites show that groundwater quality beneath the cropped fields and corrals is degraded. Nitrate concentrations in groundwater below wash water ponds were generally lower where ponds were lined with clay type soil than sandy soil. Shared groundwater monitoring well networks, are a reliable method to assess groundwater quality. This approach may be applicable for animal facilities and irrigated agricultural land in our Region where similar environmental conditions exist.

## NORTH BASIN

### 4. **Lake Tahoe Regional Storm Water Monitoring Program – Robert Larsen**

In March 2008, members of the Lake Tahoe Science Consortium released a conceptual plan to establish a Regional Storm Water Monitoring Program (RSWMP). The conceptual plan called for a coordinated, comprehensive, urban stormwater monitoring program to; 1) assess the efficacy of individual best management practices and treatment devices/facilities; 2) evaluate the accuracy of numeric models in predicting storm water pollutant loads; and 3) monitor long term trends at established stormwater outfalls.

The 2008 conceptual plan was followed in May 2011 by a detailed sampling and analysis plan and a quality assurance project plan. The sampling plan estimated that full program implementation would cost approximately \$1.4M per year. To help initiate the stormwater monitoring envisioned by the RSWMP planning documents, the Water Board included detailed stormwater monitoring requirements in the Municipal Storm Water Permit issued to the City of South Lake Tahoe, El Dorado County, and Placer County in December of 2011. The Forest Service agreed to help local government fund the required monitoring through the Southern Nevada Public Lands Management Act. Approximately \$750,000 was allocated for three years of stormwater monitoring that will begin this year.

While various agencies and the scientific communities were involved in development of the RSWMP documents, the detailed RSWMP plan did not include guidance regarding an advisory committee, data management process, or an established agency lead. The Tahoe Resource Conservation District (TRCD) applied for and was awarded Proposition 84 funding to address this need. Working with university researchers and experienced

consultants, the TRCD will establish a Science Advisory Committee that will evaluate existing stormwater monitoring efforts, review monitoring proposals, and provide recommendations for targeted data collection. Through this project, the TRCD will also develop a dedicated stormwater monitoring database to house existing and future stormwater data to provide consistent and convenient access to such data for all users. Finally, a portion of the grant funds will be used to enhance the stormwater monitoring network and collect additional samples from monitoring sites established by local government.

Water Board staff have been RSWMP partners since the program was initially envisioned, and are pleased to facilitate further program development with the Proposition 84 grant. Within the coming years, the RSWMP will begin to provide data to help improve our quantitative estimation tools and, over time, help validate the effectiveness of the Lake Tahoe TMDL implementation plan.

### 5. **Staff Participation in Tahoe Environmental Education –**

*Mary Fiore-Wagner and Cindy Wise*

As a member of the South Tahoe Environmental Education Coalition (STEEC), Water Board staff continues to develop and deliver environmental education to students in grades K-12 in the Lake Tahoe Basin. Founded in 2008, STEEC's partnership includes staff from the Lake Tahoe Unified School District, Tahoe Resource Conservation District (RCD), AmeriCorp, U.S. Forest Service-Lake Tahoe Basin Management Unit (LTBMU), Sugar Pine Foundation, Tahoe Institute for Natural Science, American River Conservancy, and Sierra Watershed Education Partnership

(SWEF) during the months of September and October 2013, Water Board staff Cindy Wise, Carly Nilson, and Mary Fiore-Wagner participated in three STECC developed education efforts that reached over 1500 students in the Lake Tahoe Unified School District and some high school students from North Lake Tahoe and Truckee. All programs, which meet California State content standards, exposed children to earth sciences and promoted environmental stewardship.

The recently developed Tahoe Basin Watershed Education Summit (TBWES) program was designed to provide high-school students with an integrated experience combining community service, academic achievement, environmental stewardship, and career exploration. Water Board staff, in collaboration with other STEEC members, prepared a grant application seeking funds from the American River Conservancy to support TBWES and was awarded just over \$3,500. These funds, along with a Clif Bar Family Foundation grant secured by SWEF, helped offset program costs.

For the second year in a row, Water Board staff joined other resource specialists and teachers to help students conduct a watershed assessment within Blackwood Creek located on the west shore of Lake Tahoe. Twenty-four high school students from four Lake Tahoe basin high schools collected critical stream cross section measures for two and a half days in Blackwood Canyon on the West Shore of Lake Tahoe. Students learned about stream channel morphology, substrate conditions, and water quality. Students also surveyed, mapped, observed bird banding scientific procedures, and removed invasive weeds that have infested the project area.

Monitoring data collected by the students will assist the U.S. Forest Service as it continues to evaluate the efficacy of the ongoing Blackwood Creek restoration project. The data collected at TBWES will ultimately help the

U.S. Forest Service and other project stakeholders better understand the creek's recovery after the restoration and engineering efforts of Blackwood Canyon Creek. These efforts are critical to the implementation of the Blackwood Creek TMDL.

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

## SOUTH BASIN

### 6. **Successful Enforcement – Wetlands Restoration in Mono County –** Scott Ferguson

On June 19, 2013, Water Board staff observed recent soil disturbance (grading and filling) on a property located adjacent to Highway 395 near Devils Gate Summit, south of Bridgeport, California. Staff also observed wetland vegetation and soils stockpiled near the disturbed area. The property owner responded positively to staff's informal request for a surface waters delineation report and restoration plan. It was noted in the delineation report that 0.1 acres of wetland habitat had been graded and subsequently filled with 320 cubic yards of earthen fill, as approved by Mono County staff. This situation highlighted the need to improve our coordination with Mono County regarding project proposals involving surface water impacts, in addition to restoring the damaged wetlands.

Mono County staff, Water Board staff and the owner's consultant effectively worked together to finalize the restoration plan. Water Board staff also drafted a Cleanup and Abatement Order (CAO) to manage the restoration activities and subsequent monitoring. The draft CAO proceeded through the new "paper hearing" process, which includes a public review and comment period, followed by the Executive Officer signing the CAO on October 3, 2013 on behalf of the Water Board. After receiving the CAO, the owner quickly began working on restoring the site, which should be completed by the end of October.

It is fortunate that the property owner stockpiled the wetlands vegetation and soils that had been removed from the 0.1 acre wetland area. This resulted in a readily available seed source and wetlands soils

that will now be combined with the sites hydrology, which remained intact. Given these conditions and the owner's cooperation, there is a very strong potential for quick and full wetlands restoration at this site.

### 7. **Field Tour of Los Angeles Department of Water & Power Ranch Lands -** Cindy Wise

The City of Los Angeles owns about 315,000 acres of eastern Sierra watershed land. These lands are administered by its Department of Water & Power (DWP); 239,000 acres of which are leased for livestock grazing and alfalfa farming with the written lease agreement that at least 75 percent of the property remain open for public recreation access.

On September 17, Water Board staff and Board Chair, Peter Pumphrey, joined DWP Range and Wildlife Management Specialists for a field tour of some of the livestock grazing lands. DWP staff explained elements of its Livestock Grazing Management Plan and its lease agreement process with ranchers.

Two projects included in the field tour were: 1) a fencing project to protect stream banks, enhance streamside vegetation and provide alternative strategies for livestock grazing activities along four major streams tributary to Crowley Lake. The fencing included walk-in fisherman access points and wildlife access points; and 2) fencing installed around Layton Spring, on the east shore of Crowley Lake, to protect the site from impacts caused by indiscriminant camping and by large numbers of livestock driven through the area on cattle drives. Water Board staff learned various ways that

livestock grazing can be used to limit adverse environmental impacts, and in some cases, improve the ecosystem conditions.

DWP staff also explained its ongoing efforts to control the aquatic invasive quagga mussel. These efforts include public education and awareness about the potential impacts from quagga mussels, mandatory inspections of all boats before allowing them to be launched on Crowley Lake, and closing access roads to stop boats from launching on the lake from unauthorized locations without inspection stations. Though DWP recoups only a tiny fraction of the approximate \$100,000 per year needed to run the aquatic invasive species program, DWP believes preventative measures will be significantly less costly in the long run than corrective actions that would be needed to remove mussel infestations from its pipelines and pumps.

**8. Lake Arrowhead Community Services District Fiscal Year 2013-14 Infiltration/Inflow Project Plan - Mike Coony**

The Board adopted a Cease and Desist (CDO) in March 2013 ordering the Lake Arrowhead Community Services District (District) to reduce sewer service area Infiltration/Inflow (I/I) by 40% by 2026. CDO reporting requirement III.C requires the District to submit an I/I project plan each year on August 1 that identifies budgeted I/I reduction actions for the fiscal year that began on July 1.

The District submitted its Fiscal Year 2013-14 project plan and plans to install manhole flow monitors and rain gages to characterize basins along the south side of Lake Arrowhead, from Blue Jay on the west to Cedar Pines on the east. The District also has budgeted projects for manhole rehabilitation, including raising manhole covers where located in areas subject to flooding from stormwater or snowmelt.

The District's project plan also includes projects for other purposes where I/I reduction is a side benefit. For example, while the purpose of sewer slip-lining is to prevent exfiltration into the Lake, it also reduces infiltration during rain events. Ongoing smoke testing to find improper connections has a side benefit of detecting inflow points.

For Fiscal Year 2013-14, the District has budgeted \$156,440 for basin flow monitoring, and \$248,000 for projects to raise manholes and rehabilitate manholes to address I/I projects. Other collection systems projects are budgeted in the amount of \$1,980,000.

**9. Wrightwood Facilities Plan - Mike Coony**

Wrightwood is a mountain community of approximately 3,000 people within the Angeles National Forest. It is primarily located in San Bernardino County, with a small portion of the community in Los Angeles County.

In the 1970's, the Wrightwood community decided against accepting federal Clean Water Act grant funding to install sewers; intending for the community to retain a rural atmosphere. Wrightwood waste disposal is managed solely by onsite septic systems.

The Water Board's 1975 Basin Plan indicated that Wrightwood should build a sewer collection system, treatment plant and disposal ponds by 1978. This never occurred and instead the Water Board adopted waste discharge requirements for San Bernardino County Service Area 56 (Wrightwood). The board rescinded those requirements this year because the county did not operate a facility discharging waste and that issuing requirements to the county for a community with septic systems was inappropriate. Data from a monitoring well located down gradient of Wrightwood had indicated groundwater nitrate concentrations were increasing but still less than the drinking water standard. There is no data regarding groundwater quality directly

beneath the older, more densely developed part of the community. However, an April 2012 failure of a Wrightwood restaurant's septic system, without land for replacement, sparked the community's interest in a community sewage collection and treatment system. This led to formation of a sewer committee. The community understands that long-term waste disposal options are limited because of a lack of septic system replacement area. The community also understands that the Water Board could consider a Basin Plan prohibition of individual disposal systems at some future date.

Water Board staff and county government staff were invited to attend the Wrightwood sewer committee's meeting of October 2, 2013. Water Board staff stated that the committee's first tasks are to form a legal entity so that they are eligible for financial assistance, such as under Proposition 84 grant program that is administered by the Mojave Water Agency. This would most likely be accomplished by San Bernardino County Special Districts activating latent sewer authority for Service Area 56. Water Board staff stated that the committee's second task is to complete a feasibility study to determine the apparent best alternative for management of sewage treatment and disposal in Wrightwood.

The sewer committee also submitted fifteen questions to the Water Board staff, and Water Board staff responded to the questions in a letter. In addition, Water Board staff handed out guidance documents, ranging from individual septic tank system management to centralized sewage collection, treatment, and disposal. The sewer committee indicated its next task was to request San Bernardino County Special Districts Department to assume the lead role in completing a sewer options feasibility study.

**10. The Fremont Valley Preservation Project by AquaHelio Resources, LLC –**  
*Jan M. Zimmerman and Patrice Copeland*

The Fremont Valley Preservation Project is proposed by AquaHelio Resources, LLC, and consists of three components: 1) a solar photovoltaic (PV) electrical generating facility (solar facility); 2) a water recharge and recovery facility (water banking); and 3) a native water extraction facility. The proposed Project would be located on approximately 4,800 acres of land on four geographically separate sites around Koehn Dry Lake in unincorporated eastern Kern County (Figure 1). The three project components (solar, water banking, and native water extraction) will be co-located in various combinations on each of the four Project sites.

The proposed solar facility would generate up to 1,008 megawatts of solar energy. Associated infrastructure includes an estimated 3.6 million PV solar modules, overhead and below-ground utilities, and operation and maintenance buildings (one at each of the four Project sites). The solar facility also includes transmission lines and associated access roads to transfer energy generated by the Project to one or more of five existing electrical substations. The solar facility will comprise up to 4,000 acres of the total Project area.

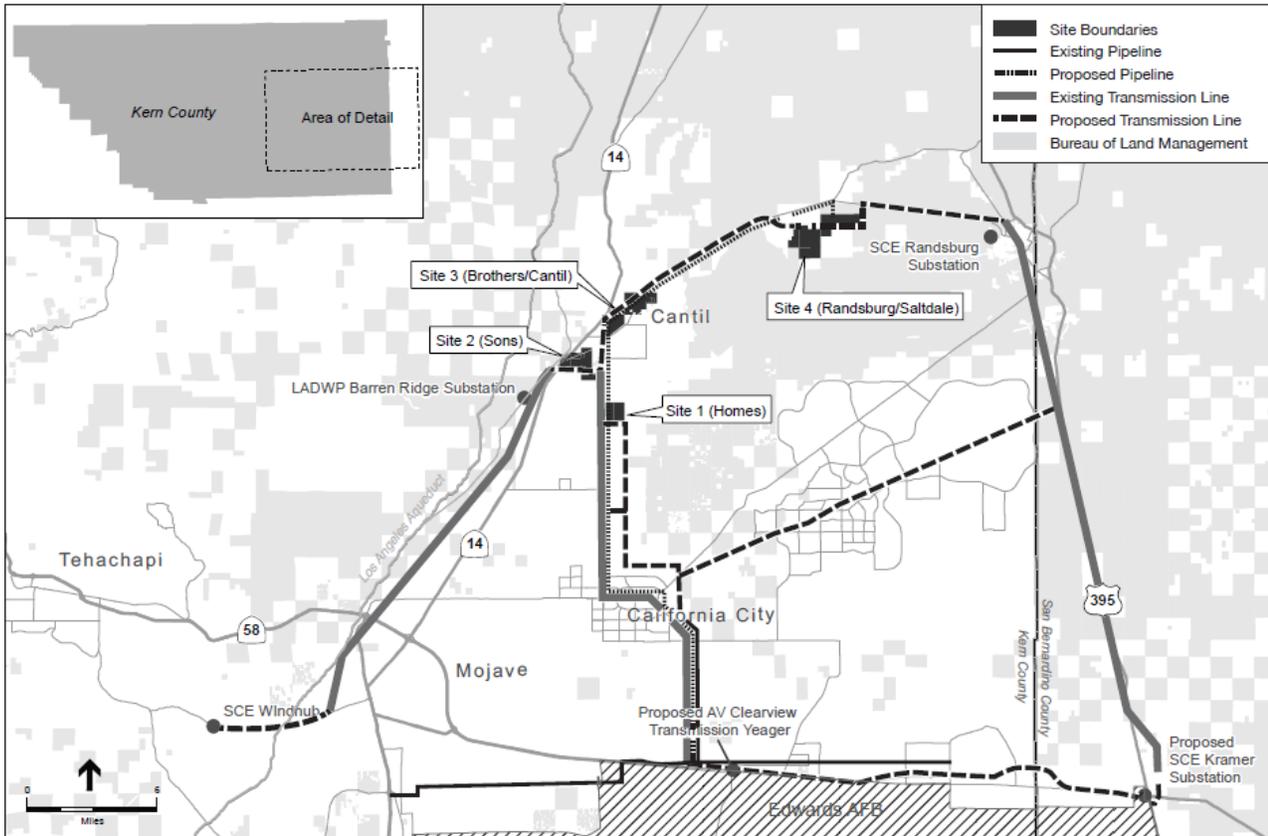


Figure 1: Fremont Valley Preservation Project site vicinity map; taken from Draft Environmental Impact Report (September 2013).

The proposed water banking facility would store water supplies in the Fremont Valley Groundwater Basin beneath the Project sites for recovery at a later date. Potential water banking sources include water from the Los Angeles Aqueduct, Antelope Valley-East Kern Water Agency, and State Water Project Aqueduct. The banking would be accomplished through a combination of percolation (impoundments and spreading basins) and direct injection (up to 73 injection wells). The proposed recharge capacity is 222,000 acre-feet per year (AF/Y) and the recovery capacity is 200,000 AF/Y. The recharge basins will comprise approximately 550 acres of the total Project area, with over 300 acres on Site 2 allocated for recharge.

The proposed native water extraction facility is separate from the water banking facility and would provide for the extract of up to an additional 114,000 AF/Y of groundwater from the Fremont Valley Basin. These waters would be allocated for sale, distribution, or exchange within Kern County only.

On September 25, 2013, Water Board staff (Jan Zimmerman, Tobi Tyler, and Patrice Copeland) attended a site meeting with the Project proponent and their consultants to discuss the components of the Project and to observe existing conditions on the Project sites. Also in attendance were staff from the California Department of Fish and Wildlife (DFW) and the Bureau of Land Management (BLM). The four Project sites are primarily undeveloped and are either fallow agriculture and grazed lands or are other previously disturbed lands. Several abandoned homestead structures exist on the Project sites. Numerous ephemeral streams flow through the Project sites, most of which have been altered (rerouted or bermed) due to former site uses. At the meeting, staff encouraged the siting of solar development on previously disturbed lands,

as such reuse can benefit environmental resources, including hydrology and water quality, by avoiding relatively undisturbed desert areas. Staff also informed the Project proponent that a detailed antidegradation analysis performed in accordance with State Water Board Resolution No. 68-16 would be required to evaluate the potential water quality effects associated with the water banking component of the Project. In addition, staff pointed out that the environmental review must disclose all potential effects on the environment, both direct and indirect, and cited the proposed water treatment systems as an example. The water banking and native water extraction facilities both require water treatment, either before recharge/injection (banking) or prior to distribution (extraction). The characteristic of the waste generated by these treatment systems, including handling, storage, and disposal of such waste, must also be included in the environmental review.

The Kern County Planning and Community Development Department (County) has prepared a Draft Environmental Impact Report (DEIR) for the Project. In September 2013, the DEIR was circulated through the State Clearinghouse for agency and public review. As a state "responsible" agency under the provisions of the California Environmental Quality Act, staff are currently reviewing the document and preparing comments with respect to the Projects potential impacts on water quality and hydrology. Our comments on the DEIR are due back to the County later this month.

#### 11. Sewage Collection Agency Class – *Mike Coony*

The Desert and Mountain Section of the California Water Environment Association invited Mike Coony, Water Resource Control Engineer, to speak at the Section's annual sewage collection system workshop in Apple Valley on October 10, 2013. The topic was "Amended Monitoring and Reporting Requirements Program for Sanitary Sewer Systems."

A monitoring and reporting program (program) is part of the statewide order for sewage collection systems. Recently, State Water Board amended the program to improve spill information management from occurrence to final cleanup.

Mr. Coony presented the amended notification and reporting requirements of the program. Topics included a description of the program changes and clear definition of the differences between notification (immediate) and reporting (cleanup and restoration). Mr. Coony also presented eight spill exercises, each with different spill scenarios, and asked the audience to determine the proper notification procedure, the proper reporting category, and reporting due dates. There were about 45 collection system personnel from different agencies attending.

## Lahontan Regional Water Quality Control Board

### Status of Actions For PG&E Hinkley Chromium Contamination October 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. PG&E has reported that construction started in October on the Hinkley School water upgrade project. The project will likely progress through the next summer, involving a new supply well, pipeline installation, and water system upgrades. The project is scheduled to be handed over to the Barstow Unified School District in 3<sup>rd</sup> quarter 2014.
- 2. Cleanup and Abatement Order for Whole House Water (WHW) Supply:** Revised Order (R6V-2011-0005A2) was issued on June 7, 2012 directing PG&E to provide whole house replacement water to residences in the affected area. The Water Board received two requests to modify this order. The first request by a few residents concerned expanding the affected area to include chromium detections within one mile of non-continuous plume lines. The second request, made by PG&E, asked to continue providing whole house replacement water to existing participants and only add new households to the program when domestic wells are at or above 3.1 ppb Cr(VI)/3.2 ppb Cr(T) and within the contiguous plume boundary. The Water Board Executive Officer is reviewing public comments and will issue a decision in the near future.
- 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. New monitoring wells at 21 new locations have been installed and sampled. The results will be used to draw an updated chromium plume map to be submitted by October 30, 2013.

#### Investigative and Reporting Orders

- 1. Chromium Plume Boundary**

The second quarter 2013 chromium plume map is posted on the Water Board website at: [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan), on the "PG&E Hinkley Chromium Cleanup" page, at the bottom of page. The third quarter 2013 plume map is due at the end of October.
- 2. Chromium Detections in the West**

On August 2, the Water Board issued an investigative order requiring PG&E to submit an action plan and schedule to reduce chromium detections in groundwater in the area of the Heifer Ranch, between Serra and Hinkley Roads. PG&E submitted an action plan on September 9 and following a meeting with Water Board staff, submitted a revised Action Plan on September 24. The Water Board is evaluating the Plan to conduct a

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

pumping test at the agricultural well on the Heifer Ranch and install two injection wells at the Northwest Freshwater Injection system to replace two wells that had reduced injection rates in the past.

**3. Chromium Plume Containment**

Pursuant to the amended March 2012 CAO, PG&E submitted the monthly Plume Capture Report on September 15, 2013 evaluating chromium capture south of Thompson Road. The report states that overall data indicates the chromium plume capture was maintained during the reporting period. This means that the main chromium plume associated with groundwater from beneath the Compressor Station is being contained at Thompson Road. The report complies with CAO requirements.

**4. Manganese Plume Investigation & Cleanup - Investigative Order (R6V-2012-0060)**

PG&E submitted a status report in August stating that monitoring wells have been installed and sampled for byproduct chemicals, such as manganese. In addition, two tracer tests in groundwater were begun in July to track the path of groundwater flow from the IRZ areas. Initial results of the investigation will be reported by end of November 2013.

**5. Whole House Water System - Investigative Order (R6V-2013-0001)** – According to PG&E, WHW systems are in operation at 37 residences. Water samples collected from the ion exchange and the reverse osmosis systems at the new locations were all of good quality--no exceedances for chromium or other metals. PG&E is in negotiations to install treatment systems at one prior household and five new eligible households.

**Status of Environmental Impact Report and Actions for Comprehensive Cleanup**

**July 17, 2013:** The Water Board certified the Final EIR at its regular meeting in Barstow.

**August 29, 2013:** Discussion of options for expanding agricultural treatment at a technical meeting in Hinkley with PG&E, Water Board staff, CAC members, and the IRP manager.

**October 9, 2013:** Water Board workshop to discuss agricultural treatment unit permitting options at regular meeting in Barstow.

**December 2013:** Release draft Waste Discharge Requirements (permit) for agricultural treatment units for public review.

**January 8, 2014:** Water Board workshop to discuss draft permit and hear public comments.

**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 submitted a draft proposal for the USGS's activities in the revised study at the September 19 meeting. Dr. Izbicki's proposal is being reviewed by members of the background study working group. The Water Board plans to hear a presentation and discuss the study plan at its January 8, 2014 Board Meeting.

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# **ENCLOSURE 3**

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**Summary of  
No Further Action Required Letters Issued  
October 16 - November 15, 2013  
December 2013 EO Report**

State of California  
Lahontan Regional Water Quality Control Board

Date Closure Issued	Site Name	Site Address	Case Number	Case Type	Groundwater Pathway	Vapor Intrusion to Indoor Air Pathway	Direct Contact and Outdoor Air Exposure Pathway	Comments	Additional Information
TBD	North Tahoe High School-2	2945 Polaris Road, Tahoe City	6T0284A	UST	The residual ground water plume is less than 250 feet in length, and is decreasing in size and concentration. There is no free product. The nearest water supply well or surface water body is greater than 1,000 feet from the residual plume boundary. Dissolved benzene is less than 3000 ug/L and dissolved MTBE is less than 1000 ug/L. Groundwater is expected to reach WQOs in a reasonable amount of time. (Meets LTCCP Criteria 1.2)	The site does not meet media specific criteria (TPH concentrations >100 mg/kg were reported at the 8 foot depth during the UST removals in 1998); however the location of the contamination relative to existing building make it highly unlikely for soil vapors to affect indoor air quality under current or future scenarios.	Sidewall samples of volcanic bedrock collected during the UST removals in 1998 exceed Table 1 residential screening levels for direct contact and outdoor air exposure; however, these concentrations do not exceed screening levels considered protective of human health for the current land use including utility worker scenarios. Land use is not expected to change in the foreseeable future.	Remaining soil and groundwater contamination is limited in extent and does not pose a threat to human health or the environment.	<a href="http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606100371">http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606100371</a>
TBD	Shell Service Station	487 North Main Street, Bishop	6B1400174T	UST	The residual ground water plume is less than 250 feet in length, and is decreasing in size and concentration. There is no free product. The nearest water supply well or surface water body is greater than 1,000 feet from the residual plume boundary. Dissolved benzene is less than 3000 ug/L and dissolved MTBE is less than 1000 ug/L. Groundwater is expected to reach WQOs in a reasonable amount of time. (Meets LTCCP Criteria 1.2)	Maximum concentrations of petroleum constituents in soil gas are less than or equal to those listed in the LTCCP (Meets LTCCP Criteria 2a, Scenario 4)	There is not a complete pathway for direct contact with petroleum-affected soil or groundwater. On-site petroleum-affected soil was excavated to the depth of groundwater, and remaining affected soil is located beneath the sidewalk and State Highway 395. Outdoor air exposure from the remaining contamination is considered to be insignificant as evidenced by the results of soil vapor assessments conducted in December 2011 and June 2012.	Remaining soil and groundwater contamination is limited in extent and does not pose a threat to human health or the environment.	<a href="http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602700023">http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602700023</a>

**Notes:**

-- Approximately  
bgs - below ground surface  
COC - constituents of concern  
LTCCP- Low Threat Underground Storage Tank Case Closure Policy  
MCS- Military Cleanup Site  
MUST- Military Underground Storage Tank  
NFAR- No Further Action Required  
SCP-Site Cleanup Program  
UST-Underground Storage Tank

Additional information about the LTCCP is available at:  
[http://www.swrcb.ca.gov/water\\_issues/programs/ust/lt\\_cls\\_plcy.shtml](http://www.swrcb.ca.gov/water_issues/programs/ust/lt_cls_plcy.shtml)

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