

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

**MEETING OF MAY 13, 2015
SOUTH LAKE TAHOE , CA**

ITEM: 4

SUBJECT: EXECUTIVE OFFICER'S REPORT

DISCUSSION: The Executive Officer's report includes the following:

ENCLOSURE:	ITEM:	BATES NUMBER:
1	Standing Items	4-5
2	Executive Officer's Written Reports	4-9
3	Notification of Spills	4-29
4	Notification of Closure of Underground Storage Tanks	4-37

ENCLOSURE 1

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

MAY 2015 STANDING ITEMS

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.

ENTIRE BASIN		
ISSUE	FREQUENCY	DUE DATE
Lake Tahoe Nearshore Standards	Semi-Annual	July 2015 January 2016
Status of Basin Plan Amendments	Semi-Annual	July 2015 January 2016
Status of Grants	Annually	March 2016
Caltrans Statewide General Permit/Tahoe Basin	Annually	July 2015
Tahoe Municipal Permit	Annually	July 2015
County Sanitation Districts of Los Angeles - District No. 14	Annually	January 2016
County Sanitation Districts of Los Angeles - District No. 20	Annually	January 2016
Status of Dairies	Semi-Annual	August 2015 January 2016
City of Barstow	Annually	September 2015
Pacific Gas & Electric Company	Each Southern Board Meeting	September 2015
Leviathan Mine	Semi-Annual	July 2015 January 2016
Salt & Nutrient Management Plans	Semi-Annual	May 2015 (EO Report Item 4) November 2015
Onsite Septic Tanks	Annually	June 2015
Bridgeport Grazing Waiver	Annually	June 2015
Bacteria Water Quality Objectives Project	Semi-Annual	May 2015 (EO Report Item 3) November 2015

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ENCLOSURE 2

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Lahontan Regional Water Quality Control Board



EXECUTIVE OFFICER'S REPORT

April 2015

STATE AND REGIONAL

1. Water Board Staff Attend Rangeland Science Symposium - *Douglas Cushman*

The University of California at Davis, Department of Rangeland Science hosted the 3rd Rustici Rangeland Science Symposium in early March 2015. The two day symposium focused on water quality and sustainable public lands grazing. Water Board staff and I attended the Symposium, which featured many presentations by rangeland science researchers, UC Extension agricultural outreach coordinators, federal land managers, regulatory agency staff, ranchers, and members of non-governmental organizations.

The Symposium was well attended and allowed Water Board staff to engage with entities interested in the State Water Board directed Grazing Regulatory Action Project (GRAP). The GRAP is a statewide effort to evaluate how to best address water quality issues associated with livestock grazing in California. The Symposium provided up to date information and case studies of management practices and implementation approaches that can be used to protect water quality and ensure that California's rangelands continue to provide economic, environmental, and social benefits for future generations.

2. Sustainable Groundwater Management Act - *Rich Booth*

Water Board staff attended a two-day conference on the Sustainable Groundwater Management Act of 2014 (SGMA, and pronounced "sigma"). SGMA is a comprehensive three-bill package that provides a framework for sustainable management of groundwater by local authorities, with a limited role for State Board intervention only if necessary to protect the groundwater resource.

SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local groundwater basins and adopt locally-based management plans. SGMA allows 20 years for GSA's to implement plans and achieve long-term groundwater sustainability. It protects existing surface water and groundwater rights and does not impact current drought response measures. SGMA is intended to ensure a reliable water supply for California.

The Department of Water Resources (DWR) has prioritized California's groundwater basins based on several factors, including population, population growth, irrigated acreage, and reliance on groundwater. GSAs for high- and medium-priority basins must form by

June 30, 2017 or the State Board may intervene. In areas where there are no jurisdictions by water districts or other potential GSAs, the county is expected to step in and become the GSA for those “potentially un-managed areas” or PUMAs.

The Lahontan Region has two high priority basins, Mojave and Antelope Valley. Both are exempt from SGMA because the Mojave Basin is adjudicated and the Antelope Valley Basin has made sufficient progress towards adjudication.

The Lahontan Region also has six medium priority basins (groundwater basin numbers from the Basin Plan are shown in parentheses):

- Martis Valley (6-67)
- Tahoe South (6-5.01)
- Owens Valley (6-12)
- Indian Wells Valley (6-54)
- Lower Mojave River Valley (6-40)
- El Mirage Valley (6-43)

SGMA provides local GSAs with tools and authority to:

- Require registration of groundwater wells
- Measure and manage extractions
- Require reports and assess fees
- Request revisions of basin boundaries, including establishing new sub-basins

Speakers presented several topics, including:

- Hydrogeology basics
- Existing groundwater law
- Development of Groundwater Sustainability Agencies and Plans
- How the DWR can help the GSAs
- Relationship between SGMA and other planning requirements (e.g., a General Plan)
- How to finance the requirements of SGMA
- Resolving groundwater disputes

- What the State Board will do if the plan fails
- Case studies of issues in controversial areas

Kirby Brill, General Manager of Mojave Water Agency (MWA) stated in his talk that an adjudicated groundwater basin (like the Mojave Basin) may not be completely “exempt” from SGMA. According to SGMA, MWA needs to report certain information to DWR, including any change in groundwater storage. Such information may influence the judge overseeing the adjudication.

3. Alpine, Inyo and Mono County – Onsite Wastewater Treatment System (Septic) Policy and Local Agency Management Program – Jehiel Cass

Staff met in late February 2015 with the Environmental Health Service directors for Alpine, Inyo and Mono Counties to discuss the State Board’s 2012 Onsite Wastewater Treatment System (OWTS, or septic system) policy. The Counties are each considering proposing a Local Agency Management Plan, or LAMP to the Water Board, which would establish local criteria.

The policy establishes the following five tiers for septic tank systems:

- Tier 0 – Existing systems up to 10,000 gallons per day flow. Larger systems must be regulated by the Water Board.
- Tier 1 – Low Risk new or replacement systems. The policy establishes minimum statewide criteria applicable as of May 13, 2017, unless a LAMP is approved by the Water Board. Until this date, our existing Memoranda of Understanding with local agencies governs the septic approval process.
- Tier 2 – Local Agency Management Plans. Allows local agencies to submit their own minimum criteria in the form of a

LAMP to the Water Board by May 13, 2016. The Water Board must review and approve LAMPs by May 13, 2017.

- Tier 3 – Advanced Protection Management Program. This is required where septic tank installation may occur near impaired water bodies subject to a Total Maximum Daily Load (Lahontan Region has none of these).
- Tier 4 – Septic systems requiring corrective action due to failure.

In general, the Counties prefer operating under the existing Basin Plan septic criteria. We informed them that the OWTS policy's Tier 1 criteria will replace the current criteria by May 2016, unless a LAMP is proposed and accepted. We recommended that these small counties pool resources to develop common LAMP language and criteria that could apply through the eastern Sierra area. We indicated that the Water Board will work with the Counties as they develop their LAMPs.

NORTH

4. Walker Basin Restoration Project *- Bruce Warden*

Water Board staff attended a seminar titled "Hydrologic Modeling Tools for the Upper Walker River Basin" by Dr. Greg Pohll of the University of Nevada, Reno on March 6, 2015. Dr. Pohll described his modeling efforts as part of the larger effort to reduce salinity concentrations in Walker Lake to the levels that existed prior to impacts from agricultural activities in the upstream watersheds. Walker Lake is a natural desert lake in Nevada at the terminus of Nevada and California's East- and West-Walker River watersheds. Walker Lake is critical to recovery of the threatened Lahontan cutthroat trout (LCT) and is an important stopover for common loons and other migratory birds. Current salinity in Walker Lake is 22,000 parts per million (ppm) total dissolved solids (TDS), about 2/3 the salinity of sea water, which is too salty for LCT to live or reproduce. Target TDS is 8,000 to 12,000 ppm. The model suggests that the target can be reached with 50,000 acre-feet (AF) of additional water inflows, which is hoped to be accomplished through the acquisition of upstream water rights and agricultural conservation measures.

Walker Lake has benefitted from the U.S. Congress adopted Desert Terminal Lakes Act in 2002 to provide water to at-risk natural desert terminal lakes. An Act amendment in 2009 established the Walker Basin Restoration Program which is administered and managed by the National Fish and Wildlife Foundation (NFWF). With funding of over \$300 million, the NFWF has acquired approximately 27,000 AF of surface water storage rights and over 6,300 acres of

land from willing sellers for approximately \$45.1 million to date. These efforts have been in Nevada's Smith, Mason, and East Walker Valleys. Future water rights and land acquisition purchases may focus on the upper reaches of the East and West Walker River watersheds in California. These watershed reaches are within the Lahontan Water Board's geographic boundaries in California's Bridgeport and Antelope Valleys.

5. Status Update for the Tahoe Tom's Gasoline Station - Lisa Dernbach

On March 3, 2015, Water Board staff notified the owners of the Mark Twain Lodge in South Lake Tahoe that water collected from their supply well over President's Day contained 21 parts per billion (ppb) MTBE, exceeding the drinking water standard of 13 ppb. This is the second time in two months that the drinking water standard has been exceeded, following three sampling events where well water met the drinking water standard. Current owners of Tahoe Tom's Gas Station continue to provide bottled water to the Mark Twain Lodge.

The information prompted a meeting on March 9, 2015 involving Water Board staff, the Lodge co-owners, El Dorado County Environmental Management staff, and the consultant for Lake Tahoe Investments, the current owner of the Tahoe Tom's Gas Station. The meeting's purpose was to discuss the plan for permanent, alternate water supply for the Lodge required by the Cleanup and Abatement Order. In October 2014, Water Board staff approved the consultant's proposal for wellhead treatment at the motel well. Due to proposal revisions and concerns by the Lodge co-owners, wellhead treatment was not installed. During the meeting, the Lodge co-owners expressed concerns about building a shed

to house wellhead treatment equipment, going through the building permit process, and the loss of vacant space on the property.

During the meeting, the urgency of the matter was stressed to all parties by both regulators. As drought conditions continue, it was believed that MTBE levels may increase with time and with well use during the upcoming summer tourist season. Permanent alternate water supply is necessary to protect public health, including the motel managers who live on site. The County, which regulates the well for small community supply, stressed that it would not allow well water containing MTBE to be used to fill the swimming pool. Both regulators stated the need for permanent alternate water supply to be in place by the Memorial Day weekend. The Lodge co-owners and the consultant agreed to talk to the Lakeside Park Water Company to request that the \$52,000 cost estimate for connection be reduced. Being a private water supplier, the Lodge co-owners do not qualify for Division of Drinking Water grants and loans.

In the meantime, the responsible parties for the gas station are in compliance with directives in the cleanup and abatement order for providing bottled water to the motel and conducting groundwater sampling and reporting. While petroleum contamination on the gas station property appears to be adequately cleaned up, off-site contamination persists. Remedial efforts over the years have been insufficient at reducing off-site MTBE in soil and groundwater resulting from past gasoline free-product migration. Additional investigations will be needed to determine exactly where off-site contamination remains so that adequate remedial measures can be applied.

SOUTH

6. Littlerock Creek Groundwater Recharge and Recovery Project

– Jehiel Cass

In late February 2015, Palmdale Water District staff and consultants presented to stakeholders the Littlerock Creek Groundwater Recharge and Recovery Project. The Project is a conjunctive use, indirect potable reuse project. Tertiary treated, nitrogen reduced wastewater effluent from the Palmdale wastewater plant, operated by the County Sanitation Districts of Los Angeles County, would be combined with State Water Project water, percolated to the underlying Lancaster Sub-basin aquifer, and subsequently extracted for delivery to potable water system users. Pending District board approval, a draft Environmental Impact Report will be submitted by the end of 2015.

A Title 22 Engineering Report must be submitted to the State Board Division of Drinking Water. Its recommendations would be incorporated into waste discharge and water recycling requirements issued by the Water Board.

The Project envisions delivery of about one-third part of treated effluent, along with about two-thirds part of State Water Project water to 60 acres of percolation ponds to be located about five miles east of Air Force Plant 42. The blended water would percolate to the underlying groundwater, currently over 200 feet below ground surface. A ring of extraction wells would be placed around these basins such that the minimum in-situ mixing, blending, and travel time requirements established by the Division of Drinking Water are met.

The percolation basins and extraction wells will be located about three miles east of Littlerock Creek, which would not be impacted except for temporary construction of a permanent pipeline beneath the wash. The Project would not interfere with the Palmdale wastewater plant nitrate plume groundwater cleanup project, which is located about five miles to the southwest.

The Project is expected to cost about \$85 million dollars and to begin operation in 2018. The District plans an extensive effort to discuss the Project with its ratepayers and seek the support of its residents. The Phase I project would deliver an estimated 6,000 acre-feet and at full capacity, about 12,000 acre-feet per year of banked, extracted water will be available to Palmdale Water District to help meet its future drinking water supply demand.

7. City of Bishop and Eastern Sierra Community Services District Wastewater Treatment Plants

– Jehiel Cass

Water Board staff met in late February 2015 with staff from the City of Bishop (City) and the Eastern Sierra Community Services District (CSD) to discuss their wastewater treatment plants, nitrate impacts in groundwater, and future plans. Both plants are physically adjacent to each other and located one mile east of Bishop. The Bishop plant serves the City and the Eastern Sierra plant serves the Bishop Paiute Tribe and unincorporated areas adjacent to the City. Both plants have secondary aerated oxidation pond treatment and dispose effluent using either percolation ponds or as recycled

water applied to irrigated pastureland. The recycled water pastureland is owned by the City of Los Angeles Department of Water and Power and leased to a local rancher.

Results from groundwater monitoring wells near the recycled water application area show elevated nitrate and total dissolved solids, with some monitoring wells occasionally exceeding the water quality objectives of 10 mg/L for NO₃ - N and 500 mg/L for TDS. The groundwater at the reuse site are generally shallow, about 10 - 15 feet below ground surface. The purpose of the meeting was to discuss these data and determine the status of intended plant upgrades.

Eastern Sierra CSD was recently asked by the Bishop Paiute Tribe to consider treatment plant expansion to accommodate larger flow from planned tribal improvements. At the same time, both entities were aware of groundwater impacts. As a result, a joint Hydrogeology Study and Feasibility Study were begun and are almost completed. The Hydrogeology Study is intended to evaluate the local aquifer characteristics and pollutant fate and transport. The Feasibility Study will consider the cost/benefit of alternatives to improve wastewater plant treatment performance and methods of wastewater disposal and reuse.

Staff were encouraged that both entities self-identified a need to evaluate plant upgrades. We expect to receive the reports within the next month and plan another meeting shortly thereafter. We recommended the entities participate closely with those developing the Owens Valley Integrated Regional Water Management Plan and Salt and Nutrient Management Plan to ensure their projects are considered for grant funding. We also

suggested they begin contact with the Department of Water and Power regarding future reuse areas. Some actions will be taken this growing season to improve irrigation practices on the current reuse areas to prevent over-application of effluent to land.

8. Barstow Perchlorate Site Investigation, Status Update – Bill Muir

Water Board staff performed groundwater sampling in the Barstow area to monitor the movement of perchlorate within the area east of the Barstow city limits. Staff sampled in combination with the City of Barstow who is collecting nitrate data as part of the City's nitrate investigation. A total of 11 city-owned monitoring wells were sampled and analyzed for perchlorate and general minerals on January 13, 2015. Analytical results for perchlorate ranged from non-detectable to 510 µg/L in the monitoring wells. Private residential wells in the area were sampled in December 2014 and showed perchlorate concentrations from non-detectable to 1,800 µg/L. Private and city-owned monitoring wells southeast of Interstate 15 show increasing perchlorate concentrations indicating that the perchlorate plume continues to expand to the southeast within the Mojave River aquifer.

Residents of the affected community partnered with the Mojave Water Agency and the California Rural Water Association in submitting a grant application to the State Water Board, Division of Drinking Water. They requested grant funds to form an entity that would evaluate long-term solutions for providing a safe source of drinking water to the community. The entity formation grant was awarded in November 2014 and a planning meeting between the Mojave Water Agency, its

consultants, California Rural Water Association, and the Water Board staff was held March 5, 2015. The purpose of the meeting was to discuss the status of the grant tasks and the path forward.

Water Board staff also applied for additional funds from the State Water Board to continue to purchase bottled water for the next few years for two residences with private wells impacted by the perchlorate plume. The application was submitted in February, received approval and a contract is now (April 2015) in place to supply bottled water. Residents in the downgradient portion of the perchlorate plume already receive bottled water from the City of Barstow in response to nitrate pollution.

9. Status of Formal Dispute Resolution for the South Air Force Research Laboratory, Operable Unit 4/9, Edwards Air Force Base – Christina Guerra

Edwards Air Force Base recently held a public meeting where it informed members of its Restoration Advisory Board (RAB) and local residents on the status of resolution of a formal dispute initiated between the Air Force and the state. Dispute was initiated by the Department of Toxic Substances Control (DTSC) in response to remedial actions proposed by the Air Force. The USEPA, DTSC, and the Air Force described their positions to the RAB. Community representative, Jane Williams, Executive Director of California Communities Against Toxics attended and provided a public comment to the RAB supporting the agencies position. The Water Board and DTSC also received a letter stating these same comments signed by 13 concerned public members.

Dispute was invoked over the Air Force's proposed changes to the vapor intrusion

cleanup level for tetrachloroethene (PCE) for the South Air Force Research Laboratory remedy. The Air Force proposed the use of USEPA's Integrated Risk Information System (IRIS) PCE inhalation toxicity criteria rather than use California's EPA Office of Environmental Health Hazard Assessment (OEHHA) more stringent PCE toxicity criteria to determine an action level. As a common practice, the state and federal environmental agencies generally rely on the more stringent criteria established by either state or federal regulations. Water Board staff agree with DTSC in its position to use Cal/EPA OEHHA PCE toxicity criteria to protect human health and will continue to support DTSC through the formal dispute resolution process.

The dispute has been elevated to the Senior Executive Committee (SEC) which includes the Lahontan Water Board Assistant Executive Officer. The SEC plans to meet in May. Should the SEC not reach resolution, the dispute will be elevated to the EPA Administrator for resolution.



EXECUTIVE OFFICER'S REPORT

May 2015

STATE AND REGIONAL

1. Harmful Algal Blooms

- Lisa M. Petrusa and Dr. Bruce Warden

Water Board staff attended a seminar about harmful cyanobacterial algal blooms (cyanoHAB) on April 3, 2015. Cyanobacteria have thrived on the earth for 3.5 billion years, which makes them the oldest photosynthetic organism on the planet, and are credited with the transformation of the earth's atmosphere from noxious volcanic gases to the current breathable 21% oxygen. However, cyanoHAB release neurological and liver-damaging toxins which can sicken swimmers and impact drinking water supplies, alter water's taste and odor, and cause damage to ecosystems from induced anoxia and decline in normal phytoplankton and dependent food chain organisms. CyanoHAB growth is stimulated by increases in nitrogen and phosphorus, and in some cases, by nitrogen alone. CyanoHAB are efficient at out-competing phytoplankton for available nitrogen and, with increasing temperature from climate change, cyanobacteria grows more rapidly than phytoplankton. CyanoHAB will likely become an increasing problem with drought and climate change and control of both nitrogen and phosphorus

sources is part of our strategy to limit cyanobacteria growth.

2. Irrigated Lands Regulatory Program Development – Eric Taxer

Most of the regional water boards currently implement a regulatory program to ensure discharges of waste associated with irrigated lands protect water quality of both ground and surface waters. In the Lahontan Region, no comprehensive program exists for all irrigated land in the region. Water Board staff has permitted some irrigated lands such as lands associated with dairies, grazing lands in the Bridgeport Valley, agricultural treatment units in Hinkley, and irrigated lands using recycled wastewater. Water Board staff has also identified current and past agricultural activities as the source or contributors to some nitrate and salt groundwater pollution problems in the region and in some cases, has taken enforcement actions. Water Board staff is in the beginning stages of developing a Lahontan Region regulatory approach for irrigated lands. Water Board staff has spent time this fiscal year evaluating the irrigated lands regulatory programs of the other eight regional boards, which vary in their development and

implementation. Available options include adopting individual or general Waste Discharge Requirements, and Waivers of Waste Discharge Requirements. Further, the use of third-party coalitions is being explored to help implement any selected regulatory approach. The following table identifies the regulatory approach implemented by the other Regional Water Boards.

Within the Lahontan Region, there are approximately 500,000 acres of irrigated land. About 80% of this land is used for grazing of livestock and does not produce a harvested crop.

Approximately 64,300 acres in the North Lahontan region are irrigated to produce hay, alfalfa, winter wheat, rye, and other crops (approximately 6,000 acres are fallow or idle cropland). Approximately 22,000 acres in the South Lahontan region are irrigated to produce alfalfa, hay, and other crops (approximately 10,700 acres are fallow or idle cropland).

As part of regulatory program development, Water Board staff needs to accurately identify types and locations of irrigated land in the region, conduct outreach to gather stakeholder input, and present options to the Water Board prior to bringing a proposed regulatory approach to the Board for adoption. Water Board staff participates in the State Water Board's Irrigated Lands Program Roundtable to remain up-to-date on the other regions' progress/lessons learned. The Water Boards are working together on consistent data collection and management and determining the best tools and resource needs for an effective program to achieve water quality goals.

Region	Coalitions (Yes/No/type)	Waivers	WDRs (general or individual)	Commodity Based	Additional Information
1	Forming. Plans to use 3rd Party Groups	Yes, for Scott & Shasta Rivers TMDL Waivers, which include coverage for ag lands. Use of Waivers vs WDRs is undecided for remaining ag lands.	Not yet. Likely, but undecided	Commodities: 1. Easter Lily Bulbs 2. Vineyards & Orchards 3. Cannabis Geographic: 1. Scott River Watershed 2. Shasta River Watershed 3. Tule Lake Watershed	Scott & Shasta Rivers Waivers are for TMDL coverage and were renewed in 2013. Remaining permits are under development.
2	Forming. Plans to use 3rd Party Groups	No	General	Napa Vineyards	Not adopted yet. TMDL Based
3	Monitoring Group. Plans to utilize 3rd Party Groups	Yes	No	Region Wide Based	Focused on nutrient management to protect GW. Food safety issues.
4	Farm Bureau and Nursery Group act as coalition.	Yes	No	Region Wide Based.	Needs the Groups to enhance their role to include reporting of monitoring data and management plan development.
5	Yes. Commodity and geographical coalitions	No	Both	One rice commodity-based coalition and 12 geographically based coalition WDRs	Added groundwater element in their WDRs.
7	Yes (Irrigation Districts)	Yes	No	No	Based on TMDLs and watershed coverage.
8	Yes	Yes	No	No	Not adopted yet. TMDL Based
9	Yes	Undecided	Undecided	Region Wide Based.	Not adopted yet.

3. Bacteria Water Quality Objective Project - Semi-annual update - Rich Booth

November 2014 Board meeting - One of the highest priority Basin Planning projects is to consider revision of the water quality objectives for bacteria. Staff presented a status report on the Bacteria Water Quality Objective (WQO) Project during the November 2014 Board meeting in Barstow. As requested by staff, the Board provided direction to help develop next steps in the Bacteria WQO Project.

Board members commented that we should not assume the public will expect to drink directly from waterbodies without treatment because (1) it is unrealistic to determine the exact water quality of such water bodies with sufficient health protection, and (2) it might provide a false sense of little or no health risk from drinking untreated water in such specified waterbodies.

Staff also requested direction from the Board on the appropriateness of relaxing the bacteria standard based on scientific information and on a case-by-case basis. The Board supported staff's efforts to continue investigating bacteria concentrations and sources throughout our region.

Bacteria information to State Board – The Board requested the information presented during the November 2014 item be transmitted to State Board and to express that the Lahontan Board feels it is very important to maintain the high quality of our waters. In response to this request, staff submitted the enclosed (R:\RB6\RB6Tahoe\TYPING\ EO Reports\EO Reports 2015\5_May\Bacteria WQO Project\bac wqo data to howard 1_23_15.pdf)

memorandum to Tom Howard, State Board Executive Director, on January 23, 2015 and copied other pertinent State Board staff. The memo summarized our region's position and provided information to support our position. The information included bacteria data in tabular form and maps showing locations and bacteria sample results throughout our region. Lahontan staff continues to collaborate with State Board staff to encourage the State Board to support Lahontan's effort to modernize and maintain our current bacteria standards in appropriate waters.

March 2015 SNARL Bacteria Report - In March 2015, staff received a final report entitled "Assessment of Bacterial Water Quality in the Lahontan Region." Researchers at the Sierra Nevada Aquatic Research Laboratory (SNARL), University of California, produced the report based on studies conducted during 2012 through 2014, under contract to Lahontan Water Board. The study area was certain Eastern Sierra streams in Mono and Inyo counties and included 705 samples at 111 sample sites.

The SNARL study had three primary objectives: (1) describe the spatial and temporal patterns of fecal indicator bacteria concentrations in the streams of the study area, (2) identify the primary drivers, and (3) test modern microbial source tracking assays as a means to identify the primary sources in the study area.

Results of statistical analyses suggested that the primary drivers of *E. coli* concentrations in the study area were the presence of livestock (primarily cattle), day of the year, and time of sample collection. Predictive modeling suggested that if management

measures are implemented to effectively address fecal inputs from livestock into streams, virtually all of the streams in the study area would meet the current 20 colony forming units per 100 milliliter fecal coliform standard used by the Lahontan Water Board. The importance of livestock as a driver of fecal bacteria concentrations in the study area was further indicated by the results from microbial source tracking assays. Microbial source tracking results showed that ruminants (including cattle) were a much more significant source of fecal bacteria than were humans.

4. Salt and Nutrient Management Plans in the Lahontan Region – An Update - Cindy Wise

The Board has requested regular updates from staff on the progress of Salt and Nutrient Management Plan (SNMP) development. This item and the related table ([SNMP Table for EO Report April 2015.xlsx](#)) summarize the status of the seven SNMP efforts underway in the Region.

These efforts focus on ten priority groundwater basins as determined by information in the State's Groundwater Ambient Monitoring and Assessment Program (GAMA.) Development of SNMPS by local stakeholders for every groundwater basin in the state by 2014 (with a possible two year time extension) is a requirement of the State's 2009 Recycled Water Policy.

Time extensions have been granted for the three SNMP groups (Antelope Valley, Indian Wells Valley, and Lahontan Basins) in the Region that have requested one.

The Antelope Valley SNMP was the first of the seven to be accepted by the Board in November 2014. The Mojave SNMP is scheduled as the next SNMP to be considered by the Board at its regular meeting in June. The Indian Wells Valley draft SNMP is planned for completion by the end of this year. Other SNMP development is underway for the priority basins of Tahoe Valley, Martis Valley, Honey Lake Valley and Tehachapi Valley. These efforts are planned for completion in 2016.

Currently, no SNMP development is underway for Owens Valley, a priority basin per GAMA. As resources allow, staff plans to work with Owens Valley stakeholders to start a SNMP effort for the Owens Valley basin.

Thus, SNMPS have been or are being developed for 90% of the priority basins in the Region. The average percent of GAMA priority groundwater basins currently covered by completed or developing SNMPS across the state is also 90%. Common challenges to the SNMP development for all nine of the Regional Boards are incomplete or lack of monitoring well data and absence of adequate participation in the process by local stakeholders.

Salt/Nutrient Management Planning Progress Report
 Region 6: Lahontan Regional Water Quality Control Board
 Date: April 8, 2015

Stakeholder Group	Antelope Valley IRWM Group (Major)	Mojave IRWM Group (Major)	Tahoe Sierra IRWM Group (Major)	Inyo Mono IRWM Group (Major)	Indian Wells Valley Group (part of Inyo Mono IRWM) (Major)	Lahontan Basins IRWM Group (Major)	Fremont Basin IRWM Group (Major)
Memberships	Antelope Valley State Water Contractors Association, Palmdale Water District	Mojave Water Agency (Note: some areas in Region 7 but Region 6 is lead)	South Tahoe Public Utility District	California Trout	Indian Wells Valley Cooperative Groundwater Management Team – Indian Wells Valley Water District, Naval Air Weapons Station, Seafair Valley Minerals, City of Ridgecrest, BLM, Inyo Kern CSD, Kern Co, Kern Co Water Agency, Eastern Kern Co Airport District	Honey Lake Valley Resource Conservation District	Department of Public Works, California City
Lead Organization	Antelope Valley State Water Contractors Association	Mojave Water Agency	South Tahoe Public Utility District	California Trout	TBD - likely Indian Wells Valley Water District or City of Ridgecrest	Honey Lake Valley Resource Conservation District	Department of Public Works, California City
Lead Group Contact	Matt Knudson (Palmdale Water District) (861) 947-4111x118 mknudson@palmdalewater.org	Kirby Brill (760) 946-7008 kbrill@mojavewater.org	Lynn Nolan (530) 543-6215 lnolan@stpubd.dst.ca.us	Mark Drew (760) 924-1008 mdrew@calltrout.org	Don Zbeda/Indian Wells Water Agency (760) 384-5555 don.zbeda@iwvwd.com	Tim Keeseey (530) 260-0934 info@honeylakevalleyrcd.us	Michael Bevins (760) 373-7297 pvdri@california-city.com
Basins Covered DWR 118 Bulletins	6-40 Lower Mojave River Valley 6-41 Middle Mojave River Valley 6-42 Upper Mojave River Valley R7 basins Lucerne Valley, Johnson Valley, and Morongo	6-5 Tahoe Valley 6-5.01 Tahoe Valley South 6-5.02 Tahoe Valley West 6-5.03 Tahoe Valley North 6-67 Maritis (Tuckee Valley) 6-6 Carson Valley 6-108 Olympic Valley	6-12 Owens Valley	6-54 Indian Wells Valley	6-4 Honey Lake Valley	6-46 Fremont Valley, Tehachapi Valley East 6-45	
What Group has Done to Date: (including significant milestones)	Salt/nutrient approach/concept presented to and accepted by Lahontan Regional Water Board. Regional Board to consider plan acceptance in late 2015.	Salt/nutrient approach/concept presented to and accepted by Lahontan Regional Water Board. Time extension granted. Regional Board accepted completed SNMP in November 2014.	Part of IRWM; currently seeking funding to begin SNMP development.	The Indian Wells Valley Cooperative Groundwater Management Team decided to develop its own SNMP as a subset of the Inyo Mono IRWM group's effort. Time extension granted. A draft SNMP is under development with a possible status presentation to the Regional Board in late 2015.	Part of IRWM (planning funds to update IRWM plan include SNMP). Time extension granted. SNMP development is underway with possible status presentation to the Regional Board in late 2015.	• Potential draft plan completed and currently under review by the Regional Board. Possible status presentation to the Regional Board in late 2015.	

NORTH

5. Lake Tahoe Maintenance Dredging Activity - Tobi Tyler

Lake Tahoe water levels have not been immune to the impacts of four years of drought conditions. The lake level has been steadily declining over the past four years and is currently (April 20, 2015) at 6,222.7 feet above mean sea level, which is below the lake's natural rim (6,223 feet above mean sea level). Lake levels are expected to continue declining over the summer and the Water Board continues to receive applications for maintenance dredging projects.

In 2013, the Water Board issued permits to two commercial marinas (Tahoe City Marina and North Tahoe Marina) to conduct maintenance dredging projects. In 2014, the Water Board issued permits to three commercial marinas (Obexer's Marina, Meeks Bay Marina, and Tahoe City Marina), one property owners association (Tahoe Keys POA West Channel), and one public boat ramp facility (Tahoe City PUD Lake Forest Boat Ramp) to conduct maintenance dredging projects. In 2015, the Water Board has already issued permits to three commercial marinas (Tahoe Keys Marina, Ski Run Marina, and Homewood High & Dry Marina) and one property owners association (Star Harbor) to conduct maintenance dredging projects. Water Board staff is currently reviewing applications for two additional maintenance dredging projects (Fleur Du Lac and Lakeside Marina).

All of the above-referenced maintenance dredging projects have been or will be permitted under a combination of Board Order No. R6T-2011-0024 (General Permit for Industrial Storm Water Discharges from Lake Tahoe Marinas and Maintenance Dredging) and Clean Water Act Section 401 Water Quality Certifications. The General Permit has facilitated project review and approval.

The newest issue Water Board staff and stakeholders have encountered is managing aquatic invasive species prior to and during dredging operations. This issue is not directly addressed by the General Permit; however, Water Board staff has effectively addressed the issue by establishing project-specific conditions in the Water Board's Water Quality Certification Orders.

Looking forward, the General Permit will be up for renewal April 2016. Water Board staff and marina owners have already been meeting to identify issues to be addressed by the new General Permit. Some of these issues involve maintenance dredging elevations, while others involve storm water monitoring and reporting. Water Board staff have also begun to reach out to other stakeholders who have expressed an interest in marina operations and maintenance dredging operations. Water Board staff plans to hold workshops this fall, in preparation of developing a new General Permit.

SOUTH

6. Mojave Water Agency's Careers and Education Opportunities in Water

- Patrice Copeland

Water Board staff was invited to participate in a panel discussion regarding careers and education opportunities in water during the Mojave Water Agency bi-monthly series entitled *ABC's of Water*. The panel included Wayne Vogel, Mojave Water Agency, Logan Olds, Victor Valley Wastewater Reclamation Authority, Patrice Copeland, Water Board, and Neville Slade, Victor Valley College.

Mr. Vogel spoke about field work in the water industry. Mr. Olds gave a presentation regarding careers and opportunities in the wastewater industry and mentioned that anywhere people are, you will find jobs in wastewater. Ms. Copeland presented the career path of a geologist in water quality and recommended high school courses to be taken to prepare for a career in the sciences. She also outlined the various college courses needed for a degree in the geo-sciences and opportunities open to such students, including part-time work for the water boards as a scientific aid. Mr. Slade's presentation included information for students on educational opportunities at Victor Valley College for the Natural Resource Management program at Victor Valley College, which includes certificates in Water Resource Management, Geospatial Technology, and Irrigation Design Technician. The panel then answered questions from the audience. Approximately 60 members of the public attended this event.

7. Status of Residential Well Sampling in Hinkley

- Ghasem Pour-ghasemi

The Water Board was concerned that some residents in Hinkley that were previously provided replacement water from Pacific Gas and Electric may have nitrate pollution in their wells above the drinking water standard. Management directed staff to collect groundwater samples from willing residents in the area to assess whether any drinking water risks existed. Some residential wells may have been affected by past and existing agricultural activities and dairy operations.

Staff evaluated existing information, primarily provided by PG&E. Potentially affected residents would likely be located in areas 1, 2, and 3 as shown on the map titled Hinkley Residential Well Nitrate Study Areas.

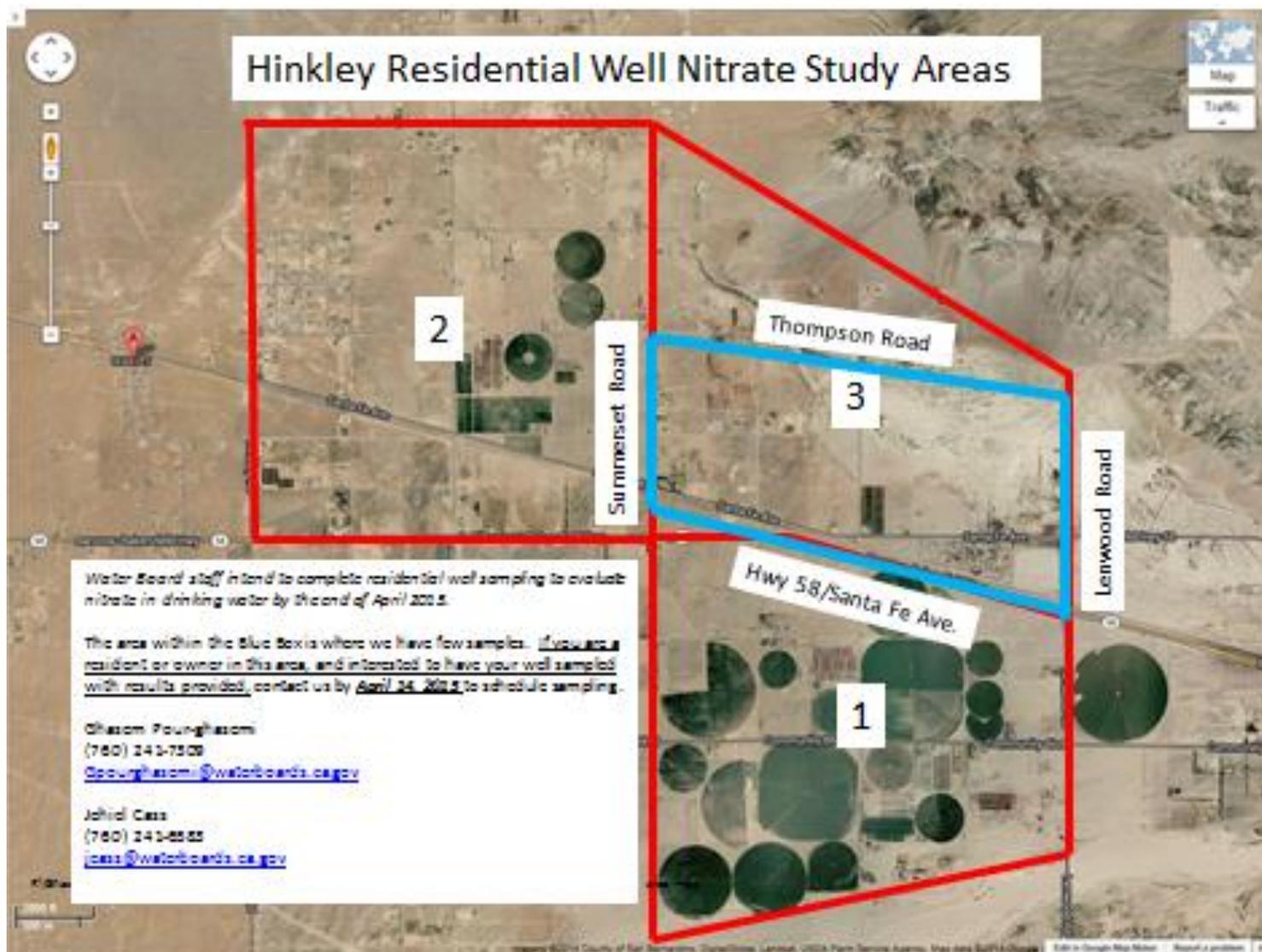
Staff provided a brief presentation to the Hinkley Community Advisory Committee on September 25, 2014 offering to sample residential wells in these areas. On April 2, 2015, staff again spoke to the Hinkley Community Advisory Committee and offered a final opportunity for well sampling. The last field sampling was conducted on April 15, 2015.

Overall, staff sampled 42 residential wells. The analytical results were provided to the owners, including a letter stating which, if any, results exceeded drinking water standards.

The preliminary results from 34 of the 42 wells sampled indicate that there are nitrate concentrations above the drinking water standards in nine residential wells. Maximum concentration of nitrate-nitrogen was 32 mg/L (drinking water standard is 10 mg/L). For the nine well owners, five are receiving bottled water from dairy owners, two have no residents, and two

are responsible for their own drinking water.

Staff is compiling the results and uploading to State Board's Groundwater Ambient Monitoring Assessment. A summary of our findings will be shared with Board Members and presented to the Hinkley Community Advisory Committee meeting by July 2015.



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ENCLOSURE 3

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EO's Monthly Report
March 16, 2015 - April 15, 2015
Unauthorized Waste Discharges*

COUNTY: LOS ANGELES

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
Ca Dept of Corrections/California State Prison, Los Angeles County CS	Lancaster	South	Yes	4/6/2015	350 gallons	Sewer main blockage resulted in 350-gallon raw sewage discharge to retention basin.	Debris-rags created blockage causing sewage to discharge to retention basin. No surface waters affected.	Blockage cleared, and affected area disinfected.

COUNTY: MONO

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
Mammoth Water District/Mammoth Cwd CS	5300 E. Bear Lake Road, Mammoth	South	Yes	4/1/2015	600 gallons	Sewer main blockage resulted in 600-gallon raw sewage discharge to curb, gutter and catch basin.	Temporary sewer main plug failed, creating a blockage at unplanned location, causing sewage to discharge from manhole to paved surface, curb, gutter. No surface waters affected.	Blockage cleared, 600 gallons recovered, debris removed, and area disinfected.

*All discharges to surface waters are included in the report.
 Discharges to land of less than 100 gallons are not included in the report.

EO's Monthly Report
March 16, 2015 - April 15, 2015
Unauthorized Waste Discharges*

COUNTY: SAN BERNARDINO

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
Victorville City/Victorville SD CS	Grant St. and Lambert Lane, Victorville	South	Yes	3/26/2015	214,445 gallons	Sewer main blockage resulted in a 214,445-gallon raw sewage discharge to soil and drainage channel/ephemeral wash.	Grease deposition created blockage causing sewage to discharge from a manhole to soil and drainage channel/ephemeral wash.	Blockage cleared, 3,000 gallons recovered, soil scarified, debris removed and affected area disinfected.

*All discharges to surface waters are included in the report.
Discharges to land of less than 100 gallons are not included in the report.

EO's Monthly Report
February 16, 2015 - March 15, 2015
Unauthorized Waste Discharges*

COUNTY: EL DORADO

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
Aramark Cruises/Tahoe Queen Paddle Wheeler	Ski Run Marina, South Lake Tahoe	North	No	3/5/2015-3/6/2015	4 gallons	Communications failure resulted in 4-gallon hydraulic fluid (mineral oil) discharge into Lake Tahoe.	Aramark Cruises staff was instructed to perform routine weeking engine startup activities on the Tahoe Queen, without being informed that Aramark's contractor had been working on hydraulic lines that were temporarily capped. Starting the engines resulted in the improperly capped hydraulic lines to discharge mineral oil, which flowed into Lake Tahoe.	Aramark staff upon notice on 3/6/2015, deployed absorbant booms and pads to recover the mineral oil on the water. Staff also cleaned contaminated sand on the beach. Aramark is preparing procedures to ensure that proper communication between staff and contractors occurs in the future.

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Discharges to land of less than 100 gallons are not included in the report.

EO's Monthly Report
February 16, 2015 - March 15, 2015
Unauthorized Waste Discharges*

COUNTY: SAN BERNARDINO

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
Lake Arrowhead Community Service/Lake Arrowhead Csd CS	27625 Alpen Drive, Lake Arrowhead	South	Yes	3/3/2015	160 gallons	Sewer main blockage resulted in a 160-gallon raw sewage discharge to pavement and soil.	Root intrusion created a blockage within the sewer main, causing discharge from manhole. No surface waters affected.	Blockage cleared, 100 gallons recovered, and affected area disinfected. Damaged pipeline replaced, and impacted soils outside the wash were excavated.
Molycorp Minerals LLC/Onsite Evaporation Ponds	Disposal Facility	South	Yes	3/2/2015	10,000 gallons	Unauthorized 10,000-gallon mining process wastewater mixture to soil and Wheaton Wash.	Discharge caused by heavy equipment damaging pipeline. Surface waters affected.	Impacted soils within the heavily vegetated wash were left in place.

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Discharges to land of less than 100 gallons are not included in the report.

EO's Monthly Report
February 16, 2015 - March 15, 2015
Unauthorized Waste Discharges*

COUNTY: SAN BERNARDINO

Discharger/Facility	Location	Basin	Regulated Facility?	Discharge Date	Discharge Volume	Description of Failure	Additional Details	Status
San Bernardino Cnty Special Districts/CSA 64 CS (Spring Valley Lake)	Spring Valley Lakes	South	Yes	2/27/2015	500 gallons	Sewer main blockage resulted in 2,000-gallon raw sewage discharge to stormwater channel tributary to Mojave River.	Rock, PVC pipe, and other debris (vandalism) created blockage causing discharge from manhole directly to concrete stormwater channel. Discharge did not reach Mojave River.	Blockage cleared, approximately 1,800 gallons recovered, and affected area disinfected.

*All discharges to surface waters are included in the report.
Discharges to land of less than 100 gallons are not included in the report.

ENCLOSURE 4

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**Summary of
No Further Action Required Letters Issued
February 16 - March 15, 2015
April 2015 EO Report
State of California
Lahontan Regional Water Quality Control Board**

The Executive Officer finds the release of petroleum products at the following sites poses a low threat to human health, safety, and the environment. Therefore, these cases were closed in accordance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure (Resolution 2012-016). The Policy recognizes contaminant mass often remains after the investment of reasonable remedial effort and this mass may be difficult to remove regardless of the level of additional effort and resources invested. The establishment of the Policy is an effort to maximize the benefits to the people of the State of California through the judicious application of available resources.

Date Closure Issued	Site Name	Site Address	Case Number	Additional Information
February 24, 2015	Former USA Gas No. 7	1140 Emerald Bay Road South Lake Tahoe, El Dorado County	6T0011A	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601700091
February 24, 2015	Education Capital Solutions LLC / Former Visco Financial Insurance	244 East Avenue K-4, Lancaster, Los Angeles County	6B1920020T	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000006314
March 2, 2015	Site 5 UST T5-20, AF Plant 42	2501 Avenue P East Palmdale, Los Angeles County	T10000002905	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000002905
March 13, 2015	Bundte Residence	1321 Mineral Springs Place Alpine Meadows, Placer County	6T0405A	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000006092

Additional links:

General Policy information: http://www.swrcb.ca.gov/ust/lt_cls_plcy.shtml#policy081712

Copy of Policy: http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0016atta.pdf

Implementation Plan http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/110612_6_final_ltcp%20imp%20plan.pdf

**Summary of
No Further Action Required Letters Issued
March 16 - April 15, 2015
May 2015 EO Report
State of California
Lahontan Regional Water Quality Control Board**

The Executive Officer finds the release of petroleum products at the following sites poses a low threat to human health, safety, and the environment. Therefore, these cases were closed in accordance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure (Resolution 2012-016). The Policy recognizes contaminant mass often remains after the investment of reasonable remedial effort and this mass may be difficult to remove regardless of the level of additional effort and resources invested. The establishment of the Policy is an effort to maximize the benefits to the people of the State of California through the judicious application of available resources.

Date Closure Issued	Site Name	Site Address	Case Number	Additional Information
April 14, 2015	Meyers Landfill - Southern Infiltration Basin	1 Garbage Dump Road South Lake Tahoe, El Dorado County	T6S006	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T1000000216
April 14, 2015	Former Chevron Bulk Plant #100-1647	16928 D Street Victorville, San Bernardino County	6B360038	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004387

Additional links:

General Policy information: http://www.swrcb.ca.gov/ust/t_cls_plcy.shtml#policy081712

Copy of Policy: http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0016atta.pdf

Implementation Plan http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/110612_6_final_ltcp%20imp%20plan.pdf