## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **MEETING OF APRIL 13-14, 2011**

South Lake Tahoe

ITEM:

SUBJECT: EXECUTIVE OFFICER'S REPORT

8

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

April 2010

Enclosure 1: Discussion of Standing Items

Enclosure 2: Executive Officer's Written Report

Enclosure 3: Notification of Spills

Enclosure 4: Notification of Closure of Underground

Storage Tank Cases (Pursuant to Article

11, Division 3, Chapter 16, title 23, California Code of Regulations)

# ENCLOSURE 1 Discussion of Standing Items

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **REPORT ON STATUS OF STANDING ITEMS**

April 13-14, 2011

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.

| NORTH BASIN   |             |                    |  |  |  |  |
|---|-------------|--------------------|--|--|--|--|
| ISSUE   | FREQUENCY   | DUE DATE           |  |  |  |  |
| Lake Tahoe Nearshore<br>Standards                           | Semi-Annual | EO Report Item # 7 |  |  |  |  |
| Status of Basin<br>Plan Amendments                          | Semi-Annual | Due May 2011       |  |  |  |  |
| Status of Grants  | Semi-Annual | EO Report Item # 7 |  |  |  |  |
| Caltrans Statewide General<br>Permit/Tahoe Basin            | Annually    | EO Report Item # 9 |  |  |  |  |
| Tahoe Municipal Permit                                      | Annually    | Due June 2011      |  |  |  |  |
| Wetland Restoration<br>Mitigation - Mono County             | Annually    | Due May 2011       |  |  |  |  |
| City of Barstow   | Quarterly   | Due May 2011       |  |  |  |  |
| County Sanitation Districts of os Angeles - District No. 14 | Semi-Annual | Due May 2011       |  |  |  |  |
| County Sanitation Districts of                              | Semi-Annual | Due May 2011       |  |  |  |  |
| Status of Dairies   | Semi-Annual | Due May 2011       |  |  |  |  |
| Searles Valley Minerals Operations - Compliance Status      | Semi-Annual | Due May 2011       |  |  |  |  |

# ENCLOSURE 2 Executive Officer's Written Report

# Lahontan Regional Water Quality



### February 2011 - March 2011

#### **NORTH BASIN**

1. Leviathan Mine Project Update, Alpine County - Chuck Curtis

Potential Spring Treatment.

Leviathan Mine Unit staff are monitoring storage pond levels and precipitation amounts at the Leviathan Mine site to determine whether the ponds are expected to overflow this spring absent emergency treatment actions by the Water Board. Above average precipitation at the site (148 percent of normal as of early March, 2011) directly affects the amount of water in the ponds through direct precipitation on the ponds and indirectly affects the rate of acid mine drainage to the ponds through increased groundwater flow to the Pit Underdrain and Adit No. 5.

The Water Board contracted for emergency spring treatment in 2005 and 2006 as a result of above average precipitation in the preceding winters. Staff has contacted the contractor used in 2005 and 2006 to determine the contractor's availability and lead-time needed for mobilization if spring treatment is necessary. Pond 3, which is located below the main storage ponds, would be used as a batch mixing pond if spring treatment is conducted. A small, rotating. cylinder treatment system that efficiently mixes water with lime would be set up at Pond 3, as was done in 2005 and 2006. Dry lime would be mixed with the water in

the pond, and when the appropriate slightly alkaline pH is reached, metals contained in the water would precipitate to the pond bottom. Treated water in the pond would then be discharged to Leviathan Creek, consistent with constituent limits established by the U.S. **Environmental Protection Agency** (USEPA). Additional water from the upper ponds would then be transferred to Pond 3 for the next batch of treatment and discharge. The existing Pond Water Treatment Plant at the site is not suitable for treatment operations in the spring due to the significant efforts necessary for plant setup, difficulty in consumables (diesel fuel, gasoline, lime) delivery, and freezing conditions that can damage the equipment.

**Summer Project Coordination** 

Leviathan Mine Unit staff are also beginning the coordination needed to implement the various projects that will be occurring at the site this summer. In addition to the normal summer pond water treatment operations, a Water Board contractor will be paving the road on the site from near the California gate down to and around Pond 1 (where the Pond Water Treatment Plant is located) and up into the Pit (where the Pit Clarifier is located). Atlantic Richfield Company will be conducting numerous investigation activities throughout the site as part of the Remedial Investigation required by orders

from the USEPA. Those activities include drilling for geotechnical and groundwater investigations, soil sampling, surface water sampling, mapping, etc. These various projects will need coordination due to potential truck traffic conflicts and access limitations associated with some of the projects. Due to Atlantic Richfield Company's surface water sampling and meteorological monitoring activities that it will be conducting as part of the Remedial Investigation, the Water Board will cease monthly stream sampling and meteorological monitoring previously conducted by Water Board staff. Water Board staff requested that the USEPA remove those tasks from the activities required of the Water Board in the USEPA's Administrative Abatement Action order to the Water Board, since the tasks would be duplicated by Atlantic Richfield Company. As a result, limited Water Board staff resources and contract funds can be directed to other tasks.

## 2. Investigation of Tahoe Meadows Domestic Well Contamination – Brian Grey

Tetrachloroethylene (PCE), a common dry cleaning solvent, was detected in domestic wells within the Tahoe Meadows subdivision on Labor Day weekend of 2007 following a resident's complaint of a solvent taste in their drinking water. Water Board staff has performed semiannual groundwater monitoring of select domestic wells within the Tahoe Meadows subdivision every year following the initial complaint. Results of the semi-annual monitoring consistently showed six domestic wells with PCE concentrations above drinking water standards. One of these property owners with PCE concentrations above drinking water standards in its domestic well has chosen to switch to the municipally supplied water. Five additional property owners in the vicinity of the groundwater

contaminant plume have also connected to municipally supplied water even though their wells are not affected.

Several dry cleaners previously operated in the area of the Village Center (former Crescent V Shopping Center), which is directly up-gradient from the highest groundwater PCE concentrations. Results from recently completed site investigations on the Village Center property indicated minor amounts of PCE contamination in groundwater and soil vapor, but no large residual source of PCE contamination was discovered. No additional investigation activities are being required of the Village Center at this time.

Water Board staff is currently evaluating other potential sources, including the sanitary sewer, for the PCE contamination and is also considering accessing the Cleanup and Abatement Account to perform limited site investigation activities around the affected domestic wells.

#### 3. Former USA Gasoline Station, El Dorado County, South Lake Tahoe - Tammy Lundquist

In the June 2010 Executive Officer report, I reported that Dansk Investments (Dansk), the responsible party for the former USA gasoline station groundwater contamination, remained out of compliance with an August 2009 Notice of Violation. Water Board staff issued a Notice of Violation in response to the unscheduled shutdown of the remediation system in March 2009 due to operational problems, and Dansk's June 2009 statement that it does not have money to pay for additional remediation. Groundwater monitoring was not performed during the second and third quarters of 2009.

Dansk resumed quarterly groundwater monitoring during the fourth quarter of 2009. In early 2010, Dansk provided a time schedule to Water Board staff for continued groundwater remediation. Dansk's consultant designed an ozone pulse oxidation system to replace the current vapor and groundwater extraction system. System installation occurred during the summer and fall of 2010 and is currently in an optimization stage. Staff anticipates the system to be fully operational by the mid-April 2011 and considers Dansk to be in compliance with Water Board directives at this time.

## 4. Clean Water Act Section 303(d)/305(b) Assessment- Judith Unsicker

In November 2010, the U.S. **Environmental Protection Agency** (USEPA) partially approved and partially disapproved a 2010 Clean Water Act Section 303(d) List of impaired water bodies for California. The USEPA proposed some additions to the list approved by the State Water Board, and has not yet approved those additions. The approved November 2010 list is available online at http://www.waterboards.ca.gov/water issu es/programs/tmdl/2010state\_ir\_reports/20 10 combo303d.xls. Entries for the Lahontan Region (Region 6) begin with Row 2731 of the Microsoft Excel file. The total number of listings is 118, including waters with approved Total Maximum Daily Loads (TMDLs) that must remain listed until standards are attained. The USEPA has proposed two additional listings for Total Dissolved Solids in the East Fork Carson River and a segment of Mammoth Creek.

The approved November 2010 list for the Lahontan Region includes 29 new water body-pollutant combinations. These additional "new" listings resulted from the division of some already-listed waters into segments. Waters affected by the new listings include the Mojave River and

several of its tributaries, Littlerock
Reservoir, the Amargosa River, Mammoth
Creek and other streams in the Owens
River watershed, the West Fork Carson
and East Walker Rivers, the Susan River,
and Bidwell and Mill Creeks in Modoc
County. Most of the additional listings are
based on small sample numbers (1 to 4
samples per year), and many involve
pollutants from natural rather than human
sources. These listings may be
addressed through revisions in water
quality objectives rather than development
of TMDLs.

The USEPA removed 13 Lahontan Region water body-pollutant combinations from the previous (2006) Section 303(d) list and recognized that six listings are being addressed by alternatives to TMDLs. The alternative programs include the U.S. Forest Service's High Meadows restoration project (addressing a Total Nitrogen listing for Cold Creek in the Lake Tahoe Basin), and the Lahontan Water Board's Bridgeport Valley grazing waiver (addressing five pathogen listings for streams in the East Walker River watershed).

The next (2012) Clean Water Act assessment process is in progress. Datasets to be assessed include information and data solicited from the public in 2010, Surface Water Ambient Monitoring Program (SWAMP) data, and other internal data. Initial assessment of the data will be done by State Water Board staff. Regional Water Board staff will review and comment on this initial assessment, and prepare recommendations for Section 303(d) listing, delisting, and not listing. The tentative schedule for the 2012 assessment process involves completion of staff recommendations for public review in late 2011, and Regional Water Board actions on recommendations to the State Water Board in early 2012.

## 5. TRPA/Lahontan RWB Forestry Project Coordination - Douglas Cushman

Non-point Source Unit Chief Douglas Cushman met with Tahoe Regional Planning Agency (TRPA) Forestry Program Manager Mike Vollmer to review a list of all vegetation management projects that TRPA permitted in 2010. The TRPA/Lahontan Memorandum of Understanding (MOU) for vegetation management activities in the Tahoe basin requires an annual meeting between TRPA and Lahontan to review past permitted projects. Mr. Vollmer shared a draft annual operations report, developed by the Tahoe Forest Fuels Team (TFFT), which detailed the status of planned and permitted projects. TFFT coordinates funding, planning, implementation, and monitoring of the proposed projects for most Tahoe Basin Fire Districts and nonfederal public land management agencies. Staff has reviewed and retained the report and determined that no significant problems occurred on TFFT projects during the 2010 field season.

#### 6. Status of Local Technical Assistance Grants Activities from October 2010 to March 2011 - Cindy Wise

Regional and State Water Board staff coordinate to implement the Water Boards' financial assistance programs that include loan and grant funding for watershed protection projects, nonpoint source pollution control projects, construction of municipal sewage and water recycling facilities. This is an update of grant/loan program activities in the Lahontan Region, followed by a table of the local technical assistance projects that are currently managed by Regional Board staff (projects total approximately \$5.5M).

## Clean Water State Revolving Fund (CWSRF) Program

The CWSRF program provides lowinterest loans for the construction of wastewater and water recycling facilities, municipal landfill treatment systems, implementation of non-point source projects and programs; and stormwater treatment projects. It is funded by federal grants, state bond funds, local match funds, repayments, and revenue bonds. Ten projects are proposed for \$45.5M in loan funding in the FY 10-11 SRF annual business plan in the Lahontan Region including wastewater treatment plant expansions, regulatory upgrades, stormwater treatment and erosion control projects. Once the project applications are completed and ready for funding, the projects will be managed by State Board staff. In Spring 2011, State Board SRF staff will conduct a series of workshops across the state to inform stakeholders of the CWSRF Program and to solicit potential new projects. Workshop dates and locations are still to be determined.

## Integrated Regional Water Management (IRWM) Grant Program

The IRWM Grant Program provides grants for projects intended to promote and practice integrated regional management of water for both quality and supply. Since the inception of the IRWM program, in the first two rounds of funding, two IRWM regions in Lahontan were awarded grants -- \$14.6 M to the Tahoe-Sierra IRWM and \$25M to the Mojave IRWM. The next round of project solicitation is underway for IRWM planning and implementation, with a portion of implementation funds to be focused on flood water and stormwater management. Water Board staff is assisting State Water Board and CA Department of Water Resources (DWR) staff with project proposal review and evaluation. So far, as part of this review

process, funding for revisions of IRWM plans in order to meet new DWR plan standards will be awarded to two IRWM groups in the Lahontan Region --\$472,919 to Antelope Valley IRWM and \$237,615 to Inyo Mono IRWM. All four of the IRWM groups in the Lahontan Region applied for funds to implement some of the projects identified in their IRWM plans evaluation of these implementation . projects is in progress with funding decisions expected in June. DWR is currently accepting proposals for IRWM projects that focus on stormwater and flood water control. Lassen County and California City/Fremont Valley have begun preparation of materials for DWR approval as new IRWM geographic areas in our Region. To be eligible for IRWM grant funds, newly forming IRWM regions must be approved by DWR. DWR is expected to announce its decision regarding acceptance of new IRWM regions in July.

## Proposition 84 Storm Water Grant Program

The Proposition 84 Storm Water Grant Program (SWGP) will provide \$82.35 million in matching grant funds available to local public agencies for projects that reduce and prevent pollution of rivers, lakes, and streams from discharges of storm water. The final guidelines for the SWGP were adopted by the State Board in February 2009, but solicitations for the Proposition 84 SWGP are on hold pending future sales of state bonds.

## Proposition 84 Agricultural Water Quality Grant Program

The State Board's Agricultural Water Quality Grant Program (AWQGP) includes approximately \$13.7 million in Proposition 84 bond funds. The State Board approved a list of proposals for funding from the AWQGP that included \$1 million for a Lahontan project titled Grazing Management Practice Implementation and Assessment in One or More Targeted

Watersheds in the Lahontan Region (Walker River, Carson River, Susan River and Owens River.) Water Board staff is developing the grant agreement necessary to get this project started within the next three months.

## 319 Nonpoint Source Implementation Grant Program

This is the federal grant program for nonpoint source pollution control projects. Evaluation of potential new projects is underway, with staff participating in the process during the next two months with funding recommendations expected by June. Three projects in the Lahontan Region are being considered as part of this evaluation. As shown in the table below, staff currently manage six 319 Nonpoint Source grants totaling over \$2.9M.

### Staff Assistance to Resources Agency for Grant Evaluations

During the last six months, Water Board staff provided technical expertise to the CA Resources Agency (RA) by helping with the evaluation of projects for potential funding from the RA's grant programs. These grant programs are the responsibility of the Sierra Nevada Conservancy (SNC) and the State Watershed Program/Department of Conservation (DOC). From these two grant programs, 18 new projects are recommended for funding in the Lahontan Region. For the DOC, Water Board staff reviewed and evaluated watershed coordinator grant applications resulting in awards to seven watershed groups in the Lahontan Region (total award approximately \$1,638,000) More detail about these DOC awards can be found at http://www.conservation.ca.gov/dlrp/wp/P ages/Index.aspx For the SNC, Water Board staff reviewed and evaluated projects focused on protecting or restoring rivers, lakes and streams, their watersheds and associated land, water

and other natural resources. This resulted in recommended awards to 11 projects in the Lahontan Region (total award approximately \$2,230,000). More detail about these SNC projects can be found at <a href="http://www.sierranevada.ca.gov/docs/BM2011">http://www.sierranevada.ca.gov/docs/BM2011</a> mar/bm 03 2011.pdf

#### OTHER GRANT INFORMATION

#### **Website and Electronic Mailing List**

http://www.waterboards.ca.gov/water\_issu es/programs/grants\_loans/\_ is the link from the State Water Board's web page for information on current and upcoming grants.

http://www.waterboards.ca.gov/lyrisforms/swrcb\_subscribe.html is the link to subscribe electronically to the grants mailing list to receive notification of new grant information by selected program.

#### **Grants Roundtable Meetings**

This forum continues to meet every few months to discuss grant-related issues. It includes a representative from each Regional Water Board and staff from the State Water Board. The forum last met in

February and mainly discussed new responsibilities for staff grant managers. The next meeting will likely be in May.

#### **Funding Fairs**

The California Financing Coordinating Committee (CFCC) was formed in 1998 and is made up of eight state and federal funding agencies including the State Water Board. The intent of the CFCC is to facilitate and expedite the completion of various types of infrastructure projects by helping customers combine the resources of different agencies. Project information is shared between members so additional resources can be identified. The CFCC conducts free Funding Fairs statewide each year to educate the public and potential customers about the different member agencies and the financial and technical resources available. Five Funding Fairs will be held across the state during March through May. The schedule and locations can be found at http://cfcc.ca.gov/res/docs/Save the Date 2011 Funding Fairs.pdf

#### <u>GRANT PROJECTS CURRENTLY MANAGED BY REGIONAL BOARD STAFF</u>

| Fund                   | Title  | Recipient                                  | Amount      |
|------------------------|--|--|-------------|
| Proposition<br>13      | Palmdale Ditch Resource Management Plan and Program (project completed and waiting final payment before closure) | Palmdale Water<br>District                 | \$1,512,250 |
| 319 Nonpoint<br>Source | Indian Creek Reservoir TMDL Mitigation (project completed and waiting final report)                              | South Tahoe Public Utility District        | \$609,166   |
| 319 Nonpoint<br>Source | Lake Tahoe BMP Implementation and Effectiveness  | Tahoe Regional<br>Planning Agency          | \$770,489   |
| 319 Nonpoint<br>Source | Homewood Watershed Improvement/TMDL Implementation Pilot Study   | Tahoe Resource<br>Conservation<br>District | \$650,000   |
| 319 Nonpoint<br>Source | Reducing Sediment Loads through Residential BMPs – Middle Truckee River TMDL                                     | Sierra Nevada<br>Alliance                  | \$485,000   |
| 319 Nonpoint<br>Source | Coldstream Canyon Floodplain Restoration   | Truckee River<br>Watershed Council         | \$250,000   |
| 319 Nonpoint<br>Source | Squaw Creek Restoration Preliminary Design   | Placer County                              | \$167,961   |

| Fund              | Title   | Recipient                  | Amount      |
|-------------------|---|----------------------------|-------------|
| Proposition<br>84 | Grazing Management Practice Implementation and Assessment in One or More Targeted Watersheds in the Lahontan Region | Sierra Business<br>Council | \$1,000,000 |
| Total of Curre    | \$5,444,866   |                            |             |

## 7. Lake Tahoe's Nearshore Environment - Daniel Sussman

The nearshore zone of Lake Tahoe is the part of the lake which the public interacts with the most. It is the part of the lake that we wade in, and the part in which piers are built. The Water Board has long been aware of nearshore issues, such as increased algae growth, and the public familiarity with the nearshore of Lake Tahoe has heightened public focus on efforts to address these issues in this most accessible zone of Lake Tahoe.

The Lahontan Water Board is not idle with respect to addressing nearshore concerns. The Water Board actively supports efforts to reduce the discharge of nutrients to Lake Tahoe, inputs that promote algae growth. Though sometimes criticized for not directly addressing the nearshore, the Lake Tahoe TMDL will result in reducing nutrient inputs to the nearshore. Additionally, the Water Board actively supports and permits projects to control aquatic invasive species in the nearshore area.

The Basin Plan contains water quality objectives specific to the whole of Lake Tahoe. Some of these objectives may be adaptable to the nearshore. Perhaps the best example is the narrative objective that Biostimulatory Substances not promote aquatic growth that causes nuisance or adversely impacts beneficial use. An objective for Algal Growth Potential links the maximum mean annual algal growth potential to twice that at the limnetic reference station. Given annual

variability, it is difficult to say if the Algal Growth Potential objective provides sufficient protection of the nearshore. To effectively address all concerns with the nearshore environment requires a greater breadth of nearshore specific objectives. Currently the only water quality objective for Lake Tahoe specific to the nearshore is that turbidity not exceed 3 NTU in waters too shallow to measure clarity as determined by vertical extinction coefficient.

It is important for the Water Board to address the lack of nearshore specific water quality objectives precisely because it is the part of the lake which most of the public sees up close. If the public is upset by nearshore degradation, it is an indication that some of the beneficial uses of Lake Tahoe are degraded (e.g. REC-1, REC-2), and others, such as SPWN and COLD, may also be degraded. Though public consternation can be linked to violation of the Biostimulatory Substances objective, without nearshore specific objectives and indicators it is difficult to link the specific cause and effect of pollutants to determine the proper recourse. Similarly, without nearshore specific objectives there is no yardstick with which to measure the status of the nearshore and any progress towards restoring and maintaining Lake Tahoe's nearshore environment. There exists a need to develop water quality standards specifically for the nearshore area.

Water Board staff is not alone in recognizing the need to develop nearshore specific standards and

indicators. Staff continues to participate in the Nearshore Agency Working Group (NAWG). Other agencies in the NAWG include the Tahoe Regional Planning Agency (TRPA), Nevada Division of Environmental Protection (NDEP), and the US EPA. The NAWG is responsible for advising and managing the Nearshore Science Team (NeST) that is working to fulfill a grant funded by the Southern Nevada Public Lands Management Act (SNPLMA) and scheduled to last through May 2012.

The goal of this grant is to develop standards for the nearshore waters of Lake Tahoe. Once complete, the TRPA, NDEP, and the Water Board staff will move towards adopting water quality objectives for the nearshore, so that this valuable and high profile resource can be regulated and protected consistently lake wide. This is an anticipated Basin Planning need that staff will incorporate into a future workplan.

In addition to water quality standards, the SNPLMA grant products include a standardized definition for the "nearshore" of Lake Tahoe, developing a conceptual model of the processes that affect the nearshore, and developing a monitoring and evaluation plan so that the TRPA, NDEP and the Water Board can best assess and manage the nearshore for compliance with the water quality standards.

#### 8. Caltrans - Alan Miller/Bud Amorfini

Information to update the Water Board on over the last year with regard to Caltrans Storm Water Management Programs includes the following:

Update of Caltrans Municipal Permit -The State Water Board has renewed the effort to reissue the 1999 Caltrans statewide storm water permit, more than six years overdue for reissuance. A draft permit was released for public review on January 7, 2011, with comments due March 14, 2011. A public hearing is expected in July 2011.

A key feature of the draft Caltrans permit is removing current NPDES permit coverage for construction activity disturbing an acre or more of land; Caltrans would instead be required to comply with the Statewide General Storm Water Permits for Construction Activity (or the Tahoe General Construction permit for activities in the Lake Tahoe Basin) and pay required fees to support the construction storm water program. With this change, the Caltrans permit would regulate only discharges associated with operation of "municipal separate storm sewer systems" or MS4s, including roadways, maintenance facilities and other transportation facilities (e.g., fleet parking). Water Board staff provided comments on Lahontan region-specific requirements, including information concerning implementing the Lake Tahoe Total Maximum Daily Load (TMDL) that is pending final approvals, and the approved Truckee River TMDL.

Because the Caltrans permit would regulate discharges from Caltrans facilities at Lake Tahoe, it serves as the primary means to regulate Caltrans discharges to meet the Lake Tahoe TMDL. At this time, the draft permit cannot include a wasteload allocation under the TMDL because the TMDL is not yet fully approved. I have required Caltrans and the other CA Phase I MS4s at Lake Tahoe (Placer County, El Dorado County, and the City of South Lake Tahoe), independent of any permits, to produce a technical report with a baseline assessment of fine particle and nutrient loads. I have required this information by September 1, 2011. This information will be used in developing revised NPDES

permits for the three MS4s and for inclusion in the Statewide Caltrans Permit.

Caltrans Truckee Area Construction
Projects - Projects in the Truckee area include the Donner 1 and 3 Project covering the west and east bound lanes of I-80 from Donner Pass east through the Town of Truckee, the Truckee River Canyon Project covering the west and east bound lanes of I-80 from approximately Floriston to the state line, the Boca area water quality improvement projects on I-80, and the slope stabilization projects on Highway 267 from Northstar to Brockway Summit in Placer County.

Donner 1 and 3 include installation of extensive water quality improvements as part of the roadway rehabilitation project. Improvements include sand vaults, storm water basins, and drainage structures. Donner 1 is scheduled to be completed early this spring and Donner 3 is scheduled to be completed by the end of the 2011 construction season. The Truckee River Canyon Project also includes storm water controls and treatment structures and is scheduled to be completed by the summer of 2011.

Caltrans committed to a three-phased water quality improvement project to address storm water runoff from a previous roadway improvement project along I-80 in the Boca area. The first phase was completed in the spring of 2010 and two additional phases are in the early project development phase. Caltrans is planning on mapping the area consistent with the Natural Environmental as Treatment (NEAT) study completed for the Tahoe Basin to determine where treatment is needed and focus resources where storm water treatment would be most beneficial.

The project on Highway 267 includes cutting back and stabilizing slopes and installing drainage improvements. The project involves cutting around 200 trees to clear area for cutting slopes back to reduce slope angles adjacent to the roadway. Work on the project is scheduled to begin in May 2011 and will be completed in either 2011 or early 2012.

**Caltrans Tahoe Area Construction Projects** – Projects in the Lake Tahoe watershed area include Highway 89 from Luther Pass to Highway 50 in Meyers, Highway 28 from Tahoe City to Kings Beach, and Highway 267 from Stewart Way to the junction with Highway 28 in Kings Beach. The projects on Highways 89 and 28 have been under construction the last two years and are scheduled to be completed by the end of the 2011 construction season. A portion of the planned treatment systems on Highway 28 could not be implemented due to design flaws with private driveways, which were too steep to accommodate the original curb and gutter design. An additional project will need to be developed to address the areas where storm water treatment could not be implemented in the original project. The project on Highway 267 was completed in 2010 and is functional.

Two projects are scheduled to begin in spring 2011, including the Echo summit Rockwall Replacement and Trout Creek to Ski Run projects on Highway 50. The rock wall replacement project includes some drainage improvements, but significant water quality improvements are not expected from this project because of the relatively low level of hydrologic connectivity to surface waters in most of the area. Significant water quality improvements are anticipated from the Trout Creek to Ski Run Project within the City of South Lake Tahoe, which will include installation of two Delaware sand

filters, infiltration basins and bioswales, and sand vaults.

Additionally, two water quality projects are scheduled to be listed for bidding in 2011. They include Highway 89 from the Placer County line to Tahoe City and Highway 50 from Ski Run to Wildwood. The Highway 89 project will include sand vaults. infiltration basins, bioswales and infiltration galleries. The Ski Run to Wildwood project will address runoff from an approximate 1,000-foot segment east of Ski Run that currently does not receive treatment and an approximate 1,500-foot segment west of Ski Run that is not addressed by the Trout Creek to Ski Run project. This project involves installing innovative drainage conveyances to carry runoff to the existing Wildwood storm water basins.

**United States Environmental** Protection Agency (USEPA) Audit of Caltrans Facilities - Caltrans has been the subject of an enforcement action by the USEPA, which issued an Administrative Order to Caltrans in October 2010. Under its NPDES oversight authority, USEPA audited several of the northern CA Caltrans Districts and their associated construction sites (not in Lahontan Region) for compliance with current State Water Board permit requirements. The enforcement action followed the audit, which disclosed a variety of compliance issues that Caltrans must address on a statewide basis, including construction site issues, and maintenance and operation waste disposal issues. Lahontan Water Board staff will be assisting USEPA in evaluating Caltrans' response addressing projects or sites in the Lahontan Region. Compliance assessment and enforcement activities by USEPA are expected to broaden to encompass Southern CA Caltrans Districts over the coming year. The State Water Board staff is reviewing the issues

raised in the Administrative Order to determine if changes in the reissued Statewide Caltrans MS4 Permit are needed.

Caltrans District 9 has also been cited by the US Army Corps of Engineers for violations of Clean Water Act section 404 requirements concerning unauthorized work in wetlands and/or other waters of the U.S. in the Lahontan Region. The Corps has indicated its intent to coordinate with water Board Staff on any action needed to resolve the citation.

9. Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer and Qualified SWPPP Practitioner Exams as Required by Renewed General Construction Storm Water National Pollutant Discharge Elimination System Permit - Dale Payne

The Statewide General Construction Stormwater NPDES Permit regulates storm water runoff from construction sites with one acre or greater of soil disturbance. It was renewed by the State Water Board in September 2009.

The previous General Permit did not require that qualified personnel prepare SWPPPs or conduct inspections. However, to ensure that water quality is being protected, and to be concurrent with USEPA, the General Permit now requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer.

USEPA regulations define qualified personnel as "a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the

quality of storm water discharges from the construction activity."

A Qualified SWPPP Developer must possess one of nine certifications and/or registrations specified in the General Permit, and effective two years after the adoption date of this General Permit, must have attended a State Water Boardsponsored or approved Qualified SWPPP Developer training course, and passed a certifying exam. The trainings are provided by outside vendors in coordination with State or Regional Water Board staff, and the exams are provided by the State Water Board and often proctored by Regional Water Board staff.

A person with the following certifications may be qualified to attend the State Water Board-sponsored training and subsequent exam: Professional Civil Engineer, Professional Geologist, Professional Engineering Geologist, Landscape Architect, Professional Hydrologist, Certified Professional in Erosion and Sediment Control, Certified Instructor of Sediment and Erosion Control, Certified Erosion, Sediment, and Storm Water Inspector, or Certified Professional in Storm Water Quality.

Currently for the Lahontan Region an exam is scheduled for March 22 (at the Town of Truckee Council Chambers) and two exams are tentatively scheduled for April 20 and 21 (at the Water Board office in South Lake Tahoe). Exams are noticed on the Water Board Academy website.

#### **SOUTH BASIN**

10. Victor Valley Wastewater Reclamation Authority – Mojave River Sewage Spill – Keith Elliott

The Victor Valley Wastewater
Reclamation Authority (VVWRA)
collects, treats and disposes sewage
from four member entities: the cities of
Victorville and Hesperia, the town of
Apple Valley and San Bernardino
County Service areas (Oro Grande
and Spring Valley Lake-one combined
entity).

A breach of the main interceptor sewer line resulted in the discharge of an estimated 42.9 million gallons of raw sewage into the Mojave River at a rate of about 2.8 million gallons per day (mgd) beginning on December 25, 2010 and lasting until the completion of a temporary bypass on January 10, 2011 (15 days).

In response to the discharge, VVWRA employed over 20 contractors, placed 5000 feet of temporary pipe and spent more than \$2.5 million dollars to construct a temporary by-pass around the damaged sewer line.

Water Board staff issued an Investigative Order to VVWRA requiring it to evaluate the effect of the discharge on the local public and private water supply wells, the groundwater aquifer and the beneficial uses of the Mojave River. The Order requires VVWWRA to assess the spill, provide preliminary and final water quality information and submit a work plan and schedule for the repair for the breached pipeline.

The Order required VVWRA to collect and analyze samples from the Mojave

River at locations 300 ft., 630 ft., 0.5 mile, 1 mile, 1.5 miles, 3 miles, 5 miles, 7 miles and 10 miles downgradient of the discharge along with samples upstream of the discharge. VVWRA was also required to collect and analyze samples from groundwater supply wells. As would be expected, constituents indicative of raw sewage were detected in surface and ground water samples.

Water Board staff are reviewing the data submitted and most likely will request additional information to determine the full impact of the discharge on the environment.

The VVWRA Board of Commissioners discussed four alternative options for repairing the Upper Narrows interceptor sewer line breach during it's regular meeting of March 17, 2011. The discussions centered on the process and funding that could be obtained from FEMA and the State Revolving Fund for the proposed alternatives. The Commissioners asked several clarification questions primarily on procedures and funding to be answered prior to voting on the proposed alternatives. Water Board staff submitted a letter supporting removing the sewer line from the Mojave River. The vote was tabled until the April 21, 2011 Board of Commissioners meeting.

11. Mountain View Acres Storm Drain Public Meeting – Jan Zimmerman and Patrice Copeland

The County of San Bernardino (County) invited Water Board staff to attend a public meeting with residents

of Mountain View Acres regarding the County's plans to improve stormwater drainage through this unincorporated County area in the Victor Valley. Recent development in the area has resulted in concentrated stormwater flows through this community, and the County is considering a number of project alternatives to relieve street and residential flooding. Potential alternatives include: an earthen (rock lined) trapezoidal channel; a concrete lined trapezoidal channel; or an underground concrete box culvert, with a rock lined outlet structure and energy dissipaters with associated water and sewer main relocations and street improvements (paving). The project will run from the existing culvert under Palmdale Road to the northeast corner of the intersection of Cobalt and Seneca Roads.

The purpose of the meeting was to present the project alternatives to community residents and to discuss their concerns regarding the project. Property owners who attended this meeting appeared to agree that the alternative they supported was the covered box culvert, as this alternative has the least impact to the property owners. The installation of concrete or earthen channels would require easements (bisecting some parcels), increased amount of property acquired by the county, and chain-link fencing along the channel perimeters. Additional concerns raised by property owners included safety issues with the channel alternatives, as well as the unattractive fencing. Water Board staff suggested that the County investigate the possibility to have a pervious-bottomed box culvert, such as was used to line a portion of the Amargosa Creek in the Antelope

Valley. Such a modified culvert would allow water to infiltrate to recharge the local aquifer.

Water Board staff asked if the County had considered installing a basin or series of basins upstream of this location, as such basins could function to slow storm flows, increase aquifer recharge, attenuate flooding, enhance water quality, and could be designed to take advantage of natural landscape and serve as a recreational use and create habitat. County staff informed attendees that basin installation upstream was not a viable option. Water Board staff cautioned that these remedies need to be analyzed for the area as a whole. This site appears to be another example of where upstream development without adequate stormwater controls results in increased runoff that exercerbates flooding problems along with increased erosion and scour. This project has the potential to reduce infiltration and increase flow velocities thereby creating downstream problems that will need correction in the future. Mitigation was briefly discussed, and Water Board staff stressed the importance of avoiding and minimizing impacts to the environment as a first course of action.

## 12. 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 Endeavor
Elementary School in Victorville in
March 2011. Ms. Bergen spoke to
approximately 70 students between
the ages of 5 and 7, as well as
approximately 10 parents and

teachers. 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 included measures and suggestions that all of us may take to help keep water clean and continue to improve water quality. Ms. Bergen also reviewed some of the problems that we encounter if our water is not kept clean, using our watershed playground tool, the 'Enviroscape.' Ms. Bergen demonstrated other 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 areas in the Lahontan Region. Immediate positive feedback was received from parents, teachers, and students alike, indicating that they now have a better understanding of water quality and what it means to work for a Regional Water Quality Control 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.

13. Antelope Valley Integrated Regional Water Management Plan and Salt/Nutrient Management Plan Meetings – Jan M. Zimmerman

Beginning in May 2006, member agencies of the Antelope Valley Regional Water Management Group (RWMG) have met and developed an Integrated Regional Water Management Plan (IRWMP). The purpose of the IRWMP is to develop a watershed-based approach for addressing water supply, water quality, flood control, land use, and environmental resource management

as related to the Antelope Valley. The Antelope Valley IRWMP was adopted in December 2007 and January 2008. The Antelope Valley RWMG was originally formed through a Memorandum of Understanding (MOU) among 11 public agencies for development and implementation of the IRWMP. The MOU is necessary to sustain the IRWMP and assist the group with their plans to apply for grant funding of water-related projects in the Antelope Valley.

Water Board staff attended a meeting of the Antelope Valley RWMG in March 2011. During this meeting, David Rydman, County of Los Angeles, Department of Public Works, provided an update on Proposition 84 and Proposition 1E grant funding. Mr. Rydman informed the stakeholders that the group's proposal for Proposition 84 planning grant funds was accepted by the Department of Water Resources (DWR) and was awarded \$472,919.

The group will also be submitting an application for Proposition 1E grant funds, which will focus on securing funding for the Upper Amargosa Recharge Project (Palmdale Water District). The deadline for submitting the Proposition 1E grant application is fast approaching (April), and Palmdale Water District is working closely with the United States Geological Survey to finalize the feasibility study for the project and develop project costs for implementation.

Also during the meeting, Mr. Robert Large, a resident of Lake Los Angeles and member of the IRWMP advisory panel, presented to the group a discussion on climate change focusing on greenhouse gas (GHG) emissions and the exponential impact that anthropogenic sources have on climate change. An astonishing 19% of California's energy consumption is used for moving and treating water. As mandated in the 2009 California Climate Adaptation Strategy, regional and local water resources management must integrate efforts to plan for and mitigate the impacts of climate change. The IRWMP update, which is being funded in part through the recently awarded implementation grant funds, will include a climate change component that will focus on developing tools to quantify GHG emissions and on identifying specific land use planning strategies to evaluate GHG emissions at the project level.

The Salt/Nutrient Management Plan coordinators gave an update on the progress of the water quality assessment portion of the plan. The plan coordinators provided the group with an overview of current and future projects within the Antelope Valley and presented a table of current and future projects that have the potential to contribute to salt and nutrient impacts. The table listed the project information including: type (i.e. groundwater banking/recharge and irrigation/impoundment), project proponent, project name, expected implementation date, and water quantity projection (in acre feet per year) through the year 2035. As expected, preliminary water quality projections show that groundwater banking/recharge and irrigation/impoundment projects that utilize recycled water sources will contribute the highest mass of TDS and nitrates to the system.

During the March 2011 Board meeting. Board members asked for clarification with respect to the feasibility of the Upper Amargosa Recharge Project and the potential for a fault controlled system. Faults often act as barriers or impediments to groundwater flow and siting of a recharge project downgradient of such a structure would be the most favorable location to optimize recharge potential. The United States Geological Survey (USGS) is lead on the feasibility study for the Upper Amargosa Recharge Project. Preliminary studies had suggested the potential for a series of parallel faults transecting the Amargosa Creek in the vicinity of the proposed recharge site.

The USGS intends to drill at least one additional well to investigate this potential for fault-influenced groundwater flow in the vicinity of the project site. The results of the feasibility study will be considered during project siting and final design.

#### 14. Edwards Air Force Base, First FiveYear Review – Tim Post

This year, Edwards Air Force Base will complete a Five-Year Review on Operable Unit 6, National Aeronautics and Space Administration – Dryden Flight Research Center. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires that where there are hazardous substances, pollutants, or contaminants remaining at the base, the Air Force must complete a Five-Year Review of the Record of Decision (ROD).

The purpose of the Five-Year Review is to evaluate the implementation and performance of the agreed-to remedy. The review must also make the determination that the remedy is still protective of human health and the environment. Evaluation of the remedy and the protectiveness determination will be based on the monitoring and other data collected since the time the ROD was signed.

The remedy approved in the September 2006 ROD consists of injecting chemical oxidation reagents into the groundwater in the areas of highest concentration to degrade the chlorinated solvents. The proposed injections of oxidants have occurred on schedule. Additional monitoring wells to better define the extent of contamination have also been installed.

As part of the review, Water Board staff participated in a Site Inspection with Air Force personnel and its environmental consultant. The sites inspected included the locations where the chemical oxidants had been injected, a summary presentation showing how the chemical oxidants were effective in the source areas, and how the plume geometry had changed over the five-year period.

The Five-Year Review Report is due in September 2011 and will summarize whether the remedy is functioning as intended; whether the exposure assumptions, cleanup levels, and remedial action objectives are still valid; and list any recommendations, including follow-up actions to ensure protectiveness.

## **ENCLOSURE 3**

Notification of Spills (Unauthorized Waste Discharges)

#### EO'S Monthly Report 2/16/11 - 3/15/11 Unauthorized Waste Discharges

| COUNTY FOR Y  | XGENES                                   |       |           |                         |            | 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  |              |   |
|---|--|-------|-----------|-------------------------|------------|---|--|--------------|---|
| Discharger/Facility                                 | Location                                 | Basin | Regulated | Substance<br>Discharged | Spill Date | Discharge<br>Volume                     | Description of Failure   | Discharge To | Status  |
| City of Lancaster /<br>Utility Services<br>Division | 1102 W.<br>Oldfield Street,<br>Lancaster | S     | Y         | Sewage                  | 2/28/2011  | 430 Gallons                             | Grease caused a blockage in an 8-inch sewer pipeline, which created an overflow from a manhole.  | Ground       | Wastewater did not enter catch basins or storm drains. Sandbags were used to control the spill. Material was removed with a vacuum truck. The area was cleaned and disinfected. No further action recommended.  |
| City of Palmdale /<br>Sewer Collection<br>System    | 38161 Pioneer<br>Street, Palmdal         |       | Ÿ         | Sewage .                | 2/28/2011  | 1609 Gallons                            | Grease and a broomstick caused a sewer blockage and sewage overflow in a residential area. Some sewage flowed into two dry wells. The remainder of the sewage entered an earthen lined storm water retention basin southwest of the Palmdale Blvd and 65th St. E intersection. No one notified Discharger for 16 hours. City stopped overflow in 40 minutes. |              | Discharger hydro-jetted the sewer and cleared the blockage. Discharger rinsed dry wells and removed rinse water. Discharger removed surface water in the retention basin. Because of the 16 hr duration between occurrence and Discharger notification, Discharger could not protect dry wells and retention basins from receiving sewage. Cleanup complete, no further action. |

## **ENCLOSURE 4**

## Notification of Closure of Underground Storage Tank Cases

## CASE CLOSURE REPORT April 2011

State of California Lahontan Regional Water Quality Control Board

| Date<br>Closure<br>Issued | Site Name                  | Site Address                   | Case<br>Number | Case Type | Remaining Groundwater Concentrations above Water Quality Objectives (in ug/L) | Remaining<br>Soil<br>Concentrations<br>(in mg/Kg) | Distance<br>from<br>Site to<br>Nearest<br>Receptor        | Remedial<br>Methods<br>Used | Comments  |
|---------------------------|----------------------------|--------------------------------|----------------|-----------|---|---|---|-----------------------------|---|
| March 8, 2011             | Former Gas Service Station | 1001 East Main Street, Barstow | 6B3601033T     | UST       | 2,700 TPHg (up-<br>gradient source)   | 130 TPHg  | Municipal well<br>is located<br>~2,000' down-<br>gradient | Excavation                  | Remaining groundwater contamination is associated with up-gradient source |

#### Notes:

TPHg - Total petroleum hydrocarbons quantified as gasoline TPHd - Total petroleum hydrocarbons quantified as diesel TPHmo - Total petroleum hydrocarbons quantified as motor oil

ug/L - micrograms per liter mg/kg - milligrams per kilogram

NA-Not Applicable NT- Not Tested

Receptor- surface water, private drinking water wells and municipal supply wells, etc.

UST-Underground Storage Tank SCP-Site Cleanup Program