



# EXECUTIVE OFFICER'S REPORT

December 2007

## NORTH BASIN

### 1. *Conference on Riparian Habitat Conservation and Flood Management in California – Tobi Tyler*

Staff attended the Riparian Habitat Joint Venture (RHJV) Conference in Sacramento in December 2007. The conference provided a forum to present and discuss research, planning, funding, regulations, and obstacles associated with riparian conservation and restoration, floodplain management and flood protection. The focus of this Conference was the levee system in the Sacramento/San Joaquin Valley. The levee system has become a concern among both flood managers, particularly after hurricane Katrina, and resource conservation advocates because of the loss of healthy riparian ecosystems in the Central Valley. The conference featured a plenary session with speakers including: Mike Chrisman, California Secretary for Resources; John McMahon, Brigadier General, Commander, ACOE; and Lester Snow, Director, California Department of Water Resources. The keynote speaker, Donald Gray, University of Michigan Engineering professor, spoke about his research regarding the benefits and liabilities of woody vegetation on levees, and concluded that the benefits of having woody vegetation on levees, despite the increased management required, usually outweigh the liabilities.

The concurrent sessions included presentations on several restoration efforts along the Sacramento and Bear Rivers, private agricultural and rangeland restoration, flood control and fisheries and aquatic wildlife, levee maintenance and vegetation management, and floodplains. Particularly interesting research findings were presented by M.L. Kavvas, Department of Civil and Environmental Engineering at U.C. Davis, who compared the velocity distribution on banks vegetated with sandbar willows with bare soil banks. He showed that willows retarded flow speed close to the ground surface by forming an armor, but did not slow down overall flows in the channel because flows on the surface increased. The reason for this is that as discharge rates increased in the channel, water velocities near the bank/water interface decreased and water surface velocities increased in channels with vegetated banks, while the opposite effects occurred on bare soil banks (i.e., velocities increased near the bank/water interface and water surface velocities decreased as discharge rates increased). This is important because it demonstrates that vegetation along stream banks (habitat) can decrease erosive forces (shear stress) along the stream channel.

A few of the key points taken from the conference are the importance of (1) maintaining or restoring floodplain connectivity with the stream channel by creating bypasses and setback levees to improve flood management, (2) preserving or creating floodplains for ecosystems as well as flood management by providing a spatially- and temporally-variable structure that supports a diversity of species, and (3) taking a multiple-objective approach to floodplain management rather than the historical, single-focus, approach to control flooding by channelizing and straightening.

Another very important topic was climate change. Jeff Price, one of the lead authors of the Intergovernmental Panel on Climate Change Report and co-recipient of the 2007 Nobel Peace Prize, discussed his findings that indicate that impacts to ecosystems, including riparian areas in California, will increase and accelerate if or when the global average temperature increases by more than 2° C. Others discussed the hydrological forecast in terms of significant reductions in annual snow pack and increases in extreme runoff events that will exacerbate flooding and decrease groundwater recharge. Planning for these hydrological changes will be critical if California is to maintain or restore riparian biodiversity, waterway channel stability, flood attenuation, water quality enhancement, as well as protect property values.

## **2. Joint Urban Runoff Task Force/EPA/401 Program Meeting – Tobi Tyler**

On November 28, 2007, staff participated in a joint stormwater (SW)/water quality certification program meeting in Sacramento. Several staff from the USEPA, Region IX San Francisco, along with State Water Board and Regional Water Board Staff

participated in the meeting. The purpose of the joint meeting was to improve the coordination and communication between these two very interrelated and often overlapping programs and to increase communication between USEPA staff and Water Board staff. The previous afternoon, staff participated in a field trip to a housing development project, in Elk Grove. Permitting the housing project required coordination between the SW and water quality certification programs to draft a certification that included conditions such as turbidity and settleable matter receiving water limits, wetland mitigation requirements, and stormwater requirements. Among the several topics discussed at the meeting were: (1) the 401 certification issued for the housing project, (2) the internal draft NPDES Construction Storm Water Permit that the Water Boards have provided comments on and that will soon be out for public comment (see November 2007 EO Report – Alan Miller), (3) an update on USEPA's guidelines in response to the U.S. Supreme Court's decision on Rapanos and some recent jurisdictional determinations made by the U.S. Army Corps of Engineers (ACOE), and (4) the Preliminary Draft Wetland and Riparian Area Protection Policy, which was the topic of a recent Water Board Public Affairs announcement entitled New California Water Board Report Focuses on the Condition of Regulated Wetlands. Additionally, staff discussed ways to improve USEPA/Water Board staff communication and how to improve the success of compensatory mitigation.

<sup>1</sup> "401 program" refers to the Federal Clean Water Act Section 401 Water Quality Certification Program. State Water Quality Certification is required prior to issuance of any Federal Permit. Most certifications are for projects that modify or otherwise cause potential impacts to streams, lakes, wetlands and other waters of the U.S. Certifications can be conditional and indicate to the Federal Agency that the project will not violate any state water quality objectives or prohibitions.

### **3. Bridgeport Valley Grazing Waiver Status, Mono County – Bruce Warden**

The Water Board approved Resolution R6T-2007-0019 "Waiver of Waste Discharge Requirements for Grazing Operations in the East Walker River Watershed (Bridgeport Valley and Tributaries) of the Lahontan Region" in June 2007. Qualifying ranch operations were required to submit grazing waiver applications by December 15, 2007. Water Board staff held a well attended grazing waiver workshop on December 14, 2007, to assist ranchers in complying with grazing waiver application requirements. All of the livestock operators in the Bridgeport Valley and tributary drainages submitted applications by the due date. The Bridgeport Ranchers Organization (BRO), to which all applicants belong, also submitted draft 2007 season volunteer monitoring results for fecal coliform concentrations at 12 sampling stations. Monitoring frequency was every four weeks. Water Board staff will discuss the monitoring results with the ranchers at a future BRO meeting along with changes to the monitoring frequency as requested by ranchers when the waiver was adopted.

### **4. Tahoe Meadows Domestic Well Contamination – Brian Grey**

As a result of a domestic well owner's complaint, Water Board staff collected groundwater samples from two domestic wells in the Tahoe Meadows neighborhood of South Lake Tahoe in August 2007. Most of the approximately 100 homes in the Tahoe Meadows are served by private water wells. Water Board staff sampled more wells in the Tahoe Meadows area over the Labor Day weekend. The analytical results of the sampling events indicated that seven domestic wells in the northeastern portion of the Tahoe Meadows area contained tetrachloroethene (PCE) at

levels unsafe for domestic use. PCE is a common dry cleaning solvent and is also used as a degreaser. MTBE was also detected during the August sampling event, and the concentrations of MTBE were above the Primary Maximum Contaminant Level (MCL) in one well. MTBE was not reported above primary or secondary MCLs during the subsequent Labor Day sampling event.

Following the Labor Day domestic well sampling, Water Board staff conducted additional sampling of wells located down-gradient of suspected source areas, reviewed files from other groundwater contamination cases, and identified properties that previously used or stored PCE. Results of the groundwater sampling and records review indicated that the MTBE may be associated with a small localized release.

PCE detections in Tahoe Meadows wells are most likely related to a release or releases of PCE that occurred years ago upgradient of the Tahoe Meadows community. The basis for this conclusion includes: (1) the distribution of PCE is not localized; (2) PCE was detected upgradient of Tahoe Meadows (around the Highway 50 corridor) in 1985 and subsequently; and, (3) a records review found that a dry cleaner operated in the former Crescent V Shopping Center (now known as the Village Center), directly up-gradient from the highest PCE concentrations detected along Highway 50. I recently issued orders, pursuant to Water Code section 13267, to the former dry cleaners and property owners of the Crescent V Shopping Center requesting information related to PCE use, storage, and disposal. Additional investigation likely will be needed to confirm the source of the PCE contamination.

Water Board staff conducted additional sampling of select domestic wells in December to evaluate seasonal variations in contaminant concentrations. Staff plans to sample select domestic wells again in spring before the majority of property owners return to their properties. Municipal water supply provided by the South Tahoe Public Utility District is available to property owners within the Tahoe Meadows, and to date, one affected property owner has hooked up to the municipal water supply.

**5. Tiered Aquatic Life Uses Workshop –  
Thomas Suk**

A workshop titled "Tiered Aquatic Life Use (TALU) Development in Southern California" was held on November 27, 2007 at the office of the Southern California Coastal Water Research Project (SCCWRP) in Costa Mesa, and was sponsored by the Los Angeles Water Board. Representatives from governmental agencies as well as non-governmental organizations attended the workshop. Attendees included representatives from the USEPA Office of Water (Washington, D.C.), USEPA Region IX (San Francisco), State and Regional Water Boards, and various local governments, permitted dischargers, and environmental organizations.

The goals of the workshop were to inform and educate interested parties about TALUs and to identify hurdles to developing and implementing TALUs in southern California. As described by staff at the Lahontan Water Board's June meeting in Bishop, TALU is a framework promoted by the USEPA for better defining aquatic life beneficial uses (i.e., COLD and WARM) and to assist the Water Boards in interpreting narrative objectives for the protection of aquatic life (i.e., COLD, WARM,

antidegradation). The TALU framework refines aquatic life uses by establishing "tiers" that are accompanied by specific numeric criteria. Once the tiers are established, the Water Boards may designate segments of a river or stream into one of the tiers and expect the applicable criteria to be met. These tiers and accompanying "biocriteria" may be used to protect high quality waters from incremental degradation, to establish realistic expectations for maintenance of aquatic life in already degraded areas (such as streams through urbanized or otherwise impacted areas), and/or to establish restoration expectations for impaired water bodies.

After several background presentations on TALU and the status of an effort to develop TALUs for southern California, attendees worked in "break-out groups" to discuss various issues and challenges related to TALU development in California. Results from this workshop will be summarized in a report that will be released sometime in 2008.

**6. Lane Trust Property, Placer County –  
Lisa Dernbach**

In October, I issued a Cleanup and Abatement Order to the owner of the Lane Trust Property in Kings Beach, for the illegal discharge of chlorinated hydrocarbon products to ground water. A laundry business formerly operated on the parcel, located at 8731 North Lake Boulevard, until the mid-1970. Chlorinated hydrocarbon concentrations, primarily as tetrachloroethene or PCE, adversely affect the drinking water aquifer and threatens Lake Tahoe. The order requires the owner to take cleanup actions for remediating contamination in soil and groundwater, implementing an indoor air quality survey, and submitting remediation status reports.

Following submittal and Board staff's acceptance of a workplan, the Lane Trust implemented the indoor air survey for the on-site building in mid-December. A technical report containing the results of the indoor air survey is due to the Water Board February 1, 2008. Access to buildings on adjacent properties was not granted for conducting indoor air survey at those locations.

The order also requires the owner to implement remediation at the site by February 10, 2008. Remediation has been proposed in the form of air sparge and soil vapor extraction to reduce hydrocarbon concentrations in the subsurface and eliminate the potential threat to public health from vapor migration. Technical reports describing remediation activities and its effectiveness are required quarterly. The Water Board will be kept informed as this cleanup progresses.

#### **7. Lake Tahoe TMDL Program Update – Robert Larsen**

As reported at the October 2007 Board Meeting, the Lake Tahoe TMDL Team has completed the analysis of pollutant load sources and has been working to refine our understanding of pollutant reduction opportunities.

During the months of October and November, the team refined pollutant reduction estimates and developed a series of illustrative implementation scenarios reflecting different methods to achieve clarity improvement. These scenarios were presented to agency stakeholders and the Pathway Forum for comment and discussion. The TMDL Team also shared some recommendations to clarify where the largest load reduction opportunities lie.

Based on current information, load reductions from stream channel erosion

and forest upland sources are relatively small when compared to potential reductions from atmospheric and urban upland sources. Current efforts and programs to restore stream channels and treat forest runoff appear cost effective and remain a critical part of all identified implementation scenarios; however, additional measures do not appear to be cost effective to achieve clarity goals. These recommendations were generally welcomed and accepted by stakeholders and the Pathway Forum.

When compared to the stream channel erosion and atmospheric sources, the TMDL Team has identified more significant reduction opportunities from advanced treatments to reduce fugitive dust and remove fine particles from urban runoff. Consequently, these sources have been the subject of much discussion at the stakeholder and Pathway Forum meetings. It is clear that technological innovation will be necessary to achieve necessary fine sediment reductions from these sources. The question that remains is when to initiate such innovation and how to secure funding for innovation. Current analysis suggests implementation measures to halt clarity decline and begin restoration will cost approximately \$2 billion over the next twenty years.

The implementation scenarios and associated stakeholder feedback provide the foundation for the Lake Tahoe TMDL implementation plan and load allocation approach. An additional meeting with the Pathway Forum and a workshop for local jurisdictions, funding agencies, and state highway departments, both scheduled for the month of December, will provide additional context and direction for the TMDL Team as they begin to draft the TMDL document. In the coming months, the team will begin drafting the TMDL

document and working with local jurisdictions, funding agencies, and state highway departments to develop appropriate load allocations. As previously requested the Water Board, a workshop on allocations will be scheduled for the March 2008 Board meeting.

**8. Peer Review and Stakeholder Input on the Truckee River Watershed Total Maximum Daily for Sediment – Bud Amorfini and Anne Holden**

Scientific peer review has been completed for the draft Truckee River Watershed TMDL for Sediment. The State Water Board selected two scientific peer reviewers who had combined expertise in hydraulics, sediment transport, aquatic ecosystems and restoration.

The reviewers supported Water Board staff's conclusions on impairment due to excessive sediment in the river, and the selection of a numeric target for in-stream suspended sediment to protect aquatic life beneficial uses. One of the reviewers suggested technical revisions to the sediment source analysis, and editorial changes to the implementation plan. In general, the peer reviewers found that the data and analysis in the TMDL staff report are appropriate and defensible, and the report supports its scientific conclusions and recommendations.

Water Board staff also conducted a stakeholder meeting on December 12, 2007 in Truckee. With assistance from Truckee River Watershed Council, interested stakeholders were invited to review the draft TMDL and provide input to help refine the document. Approximately 20 stakeholders attended the meeting and discussed several issues: included addressing dam operations relative to sediment loading,

refining the discussion of vegetative cover effects on loading estimates, tracking implementation and monitoring activities, and developing project lists for future grant funding opportunities. Stakeholders were appreciative of the opportunity to provide input and the efforts of staff to answer questions regarding the document.

Water Board staff are revising the draft TMDL report in response to the peer review and stakeholder comments, and plan to circulate it for public review in February 2008. The TMDL is scheduled for Board consideration in May 2008.

## SOUTH BASIN

### 9. **Grass Valley and Slide Fire Debris Removal – Doug Feay**

Lahontan Water Board staff participated in the Debris Removal Multi Agency Coordination (MAC) team with San Bernardino County Solid Waste Management Division. The San Bernardino County Solid Waste Management Division has taken on the task of removing all the fire debris (including the foundation) from residential lots for both the Grass Valley and Slide Fires. These fires occurred during October 2007 in the San Bernardino mountain communities of Arrowhead, Green Valley Lake, and Arrowbear. The Grass Valley fire destroyed 178 structures while the Slide fire destroyed 272 structures. The County has completed removal of household hazardous waste and is currently removing asbestos debris from both fire areas.

San Bernardino County has contracted with a private firm to develop and implement an erosion control plan for the fire debris removal areas for both fires. Water Board staff provided comments to the County while the erosion control plan was being written. Erosion control measures will be implemented before debris removal takes place.

The United States Geological Survey (USGS) released the report "Preliminary Analytical Results for Ash and Burned Soils from the October 2007 Southern California Wildfires" that contained the results of limited sampling of ash in the burn area. The goal of the report was to identify characteristics of the ash and soils that may be of concern for potential adverse affects on water quality, human health, and the environment. Of the 28 samples collected, two samples displayed hazardous characteristics because of high

pH. San Bernardino County Fire Department Hazardous Materials Division will be conducting follow-up sampling to further characterize the debris sites both before and after debris removal and will be implementing erosion control measures to protect the environment during cleanup.

### 10. **Molycorp's Supplemental Environmental Projects – Christy Hunter**

The June 2004 Consent Judgment between Molycorp and the State of California required Molycorp (now Chevron Mining Inc.) to fund \$1,000,000 in Supplemental Environment Projects (SEPs). The Water Board approved funding for six SEPs in February 2005. The final cooperative agreements for all six SEPs have been signed by their respective project managers and the Water Board Executive Officer. The project proponents and projects are: 1) California State University, San Bernardino/Hydrogeologic study of the Mountain Pass area, 2) ENSR/Groundwater Flow Model for the Ivanpah Valley Groundwater basin, 3) San Bernardino County/litter abatement and illegal dumping eradication, 4) U.S. Geological Survey/Chromium/Nitrate occurrence in the unsaturated zone and water table - El Mirage area, 5) U.S. Geological Survey - Defining Arsenic distribution in groundwater, Antelope Valley, and 6) U.S. Bureau of Land Management - Horse Thief Springs Riparian Restoration and Public Safety Protection.

San Bernardino State University - Hydrogeologic study of the Mountain Pass area

On December 4, 2007 Dr. Erik Melchiorre, lead investigator, provided a preliminary presentation to Water Board staff. This

study involves the detailed geologic mapping and geochemical sampling and analysis of fault mineralization of the major fault systems at the Mountain Pass Mine. These faults cut the rare earth ore body and mine site that is currently operated by Chevron Mining Inc. (formerly MolyCorp Inc.). Preliminary results indicate that these fault systems have acted as the major conduits for fluid flow and that post fault mineralization may have been imprinted with the local pre-mining groundwater chemistry. Mapping of this area also identifies 'upper' and 'lower' fault mineralization profiles that may indicate old or pre-modern groundwater tables. This work could lead to a better understanding of how the area's groundwater geochemistry evolved as well as provide hints of current groundwater flow. The final report is expected to be complete by September 1, 2008.

#### USGS – Chromium/nitrate occurrence, El Mirage area

John Izbicki, lead investigator, presented preliminary results of this study to Water Board staff on November 8, 2007. In this study, the USGS is attempting to determine if high levels of hexavalent chromium in the groundwater near the El Mirage area are derived from: 1) leaching from naturally occurring chromium in the vadose zone by infiltrating washwater or irrigation water from surface dairy or agriculture operations; 2) from contaminated groundwater coming from offsite sources. At present drainage from the vadose zone does not appear to be delivering high-chromium laden water to the water table. High-chromium concentrations are associated with high-salinity water present in the vadose zone. Although data analyses results are not complete, preliminary results suggest that high levels of chromium are not present in the vadose zone at this site and that the source of the hexavalent chromium in the groundwater is anthropogenic. The final

report is expected to be completed by September 30, 2008.

#### USGS – Arsenic distribution – Antelope Valley

The USGS has completed three of the four tasks proposed in this project. This study is attempting to identify specific aquifer zones of high arsenic concentrations in the Lancaster area. Combined with well flow data and water quality analyses, zones of naturally occurring, arsenic-laden groundwater have been identified in three wells for this study. These data have been incorporated into an existing three-dimensional geologic model of the Antelope Valley. Sources of much of this high-arsenic groundwater are the aquifer or clay layers beneath an extensive, thick lacustrine clay layer. One capability of this updated geologic model is the ability to estimate the areal distribution and thickness of this lacustrine clay. In addition this data will be used to develop an integrated wellbore model that simulates flow and transport in a water supply well and aquifer system. This model will be used to predict the effectiveness of sealing off of well casing perforations that were performed for the purpose of reducing arsenic concentrations in produced drinking water. The final report is expected to be completed by January 5, 2008.

To date, \$534,230.95 has been paid or is in the process of being disbursed from this SEP fund.

#### **11. Results of December 2007 Residential Well Sampling in Barstow – Joe Koutsky**

The City of Barstow completed its 4th Quarter 2007 private domestic well sampling of residences in the Barstow Soapmine Road neighborhood, located north of the Mojave River and east of Interstate 15 within the city limits of Barstow. The City sampled forty private drinking water wells, between December

3, and December 4, 2007, as required by Cleanup and Abatement Order No. R6V-2007-0017 (CAO).

The CAO requires the City of Barstow to provide uninterrupted replacement water to residences in the Soapmine Road area where groundwater concentrations of nitrate (as N) are equal to, or higher than, 5 milligrams per liter (mg/L). The City provided bottled water to 23 of 40 residences since May 26, 2007.

The results of the 4th Quarter 2007 domestic well sampling event show that nitrate (as N) concentrations range from 0.54 mg/L to 21 mg/L and that 19 wells exhibited nitrate (as N) concentrations exceeding 5 mg/L. While there were no new wells that exceeded the 5 mg/L nitrate (as N) concentration, the City will continue to supply bottled water to the 23 residences whose wells were identified earlier in the year. The City is continuing to develop a plan to further delineate the extent of the groundwater plume.

**12. County Sanitation District No. 20 of Los Angeles County (District No. 20), Palmdale Water Reclamation Plant – Mike Coony**

As required under the waste discharge requirements, the District submitted the 2008 Crop Plan for the Effluent Management Site and the work plan for the storage reservoir groundwater monitoring. The District submitted both reports by the required due date. Staff is reviewing both reports.

A compliance summary table for the Clean Up and Abatement Order, and Cease and Desist Order, is included at the end of this report. The compliance status table has been revised to reflect the amended Cease and Desist Order adopted on November 29, 2007.

**13. County Sanitation District No. 14 of Los Angeles County (District No. 14),**

**Lancaster Water Reclamation Plant, Los Angeles County – Curt Shifrer**

The status of items required by Waste Discharge Requirements and the 2007 Cease and Desist Order issued to District No. 14 is included in a table at the end of this report.

<b>SCHEDULE OF TASKS</b>		
<u>Lancaster Water Reclamation Plant (LWRP)</u>		
<u>County Sanitation District No. 14 of Los Angeles County (District)</u>		
<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
<b>Required by: Waste Discharge Requirements</b>		
<b>Board Order R6V 2002-053</b>		
<b>Board Order R6V 2002-053A1</b>		
<b>Chlorine Toxicity</b>		
II.B.1.a. – Submit a plan to achieve compliance with free residual and chlorine effluent limits	May 1, 2003	Submitted
II.B.1.b. - Begin implementation of the plan	December 1, 2003	Submitted
II.B.1.c. - Achieve full compliance	August 25, 2005	Met
<b>Ammonia Toxicity</b>		
II.B.2 a. – Achieve interim ammonia effluent limits	August 25, 2005	Met
II.B.2.b – Achieve final ammonia limits	When SSO goes into effect	
<b>Abandoned Wells (Treatment Plant Site)</b>		
II.B.3. – Submit work plan to identify and destroy abandoned wells	January 1, 2003	Submitted
<b>Nuisance Condition</b>		
II.B.4. - Complete project to eliminate nuisance condition created by effluent induced overflow from Piute Ponds to Rosamond Dry Lake	August 25, 2005	Extended to November 1, 2010 according to CDO
<b>Groundwater Monitoring (Treatment Plant Site)</b>		
II.B.5.a. - Submit workplan to install additional monitoring wells and piezometers	August 1, 2003	Submitted
II.B.5.b - Complete installation of wells, collect initial samples and submit draft report	August 1, 2004	Submitted Phase I
II.B.5.c - Submit final report that establishes if, and to what extent, percolation from unlined ponds affects groundwater and propose appropriate remediation measures	January 31, 2005	Phase I final report submitted
<b>Annual Compliance Reports</b>		
II.E.3. - Submit annual self monitoring report compliance and monitoring summary, including actions taken or planned to bring discharger into compliance	April 1st of each year	Submitted
<b>Required by: Waste Discharge Requirements</b>		
<b>Board Order R6V 2002-053A3</b>		
<b>Engineering Reports (Tertiary Treatment Plants)</b>		
II.B.1. – Acceptance of engineering report for 18-mgd tertiary treatment plant by Executive Officer.	Before discharging from plant	
II.B.2. – Acceptance of engineering report for MBR tertiary treatment plant with UV disinfection by Executive Officer.	Before discharging from UV system	
<b>Farm Management Plan (Agricultural Site)</b>		
II.C.1. – Submit farm management plan for Fields 7 & 8, and 11 - 20	Submit report nine months before irrigation in fields	

PERFORMANCE TASK	DUE DATE	STATUS
<b>Vadose Zone Monitoring (Agricultural Site)</b>		
II.D.1. – Submit vadose zone monitoring plan (if an alternate plan is proposed) for Fields 1 - 6, 9 & 10	June 14, 2007	Met
II.D.1. – Implement vadose zone monitoring plan for Fields 1 - 6, 9 & 10	March 14, 2008	
<b>Groundwater Monitoring (Agricultural Site)</b>		
II.E.1. – Complete groundwater sampling for data needed to calculate existing water quality for Fields 1 through 8	June 30, 2007	Met
II.E.1. - Submit results of calculations for determining existing water quality for Fields 1 through 8	October 30, 2007	Met
II.E.2.a. - Submit workplan for installing additional monitoring wells for Fields 9 through 12	April 20, 2007	Met
II.E.2.a. - Complete installation of additional monitoring wells for Fields 9 through 12	June 15, 2007	Met
II.E.2.b. – Complete groundwater sampling for data needed to calculate existing water quality for Fields 9 through 12	September 30, 2007	Met
II.E.2.b. - Submit results of calculations for determining existing water quality for Fields 9 through 12	January 30, 2008	Met
II.E.3.a. - Submit workplan for installing additional monitoring wells for Fields 13 through 20	Submit report one year before irrigation in fields	
II.E.3.b. - Submit results of calculations for determining existing water quality for Fields 13 through 20	Complete before irrigation in fields	
<b>Abandoned Wells (Agricultural Site)</b>		
II.F. – Submit report demonstrating that destruction of abandoned wells have been completed for Fields 13 - 20	Submit report three months before irrigation in fields	
<b>Run On and Run Off Controls (Agricultural Site)</b>		
II.G.1. – Submit report demonstrating that run on and/or run off controls have been implemented for Fields 1 - 6	Submit report one month before irrigation in fields	Met
II.G.1. – Submit report demonstrating that run on and/or run off controls have been implemented for Fields 7 - 20	Submit report one month before irrigation in fields	
<b>Required by: Waste Discharge Requirements Board Order R6V 2006-0051</b>		
II.A. - Submit workplan for installing additional monitoring wells for the proposed storage reservoirs	April 9, 2007	Submitted 16 days late
II.B.1 - Submit the final design for the proposed storage reservoirs	Before constructing the reservoirs	Submitted
II.B.2 - Submit a construction QA/QC program for the proposed storage reservoirs	Before constructing the reservoirs	Submitted
II.B.3 - Submit certification that proposed reservoirs were constructed as proposed	Before use of the reservoirs	

PERFORMANCE TASK	DUE DATE	STATUS
<b>Required by: Cease and Desist Orders</b> <b>Board Order R6V-2004-0038</b> <b>Board Order R6V-2004-0038A1</b>		
I.A. – Divert 24 MG of effluent and discharge to an alternative legal disposal point (e.g., Apollo Park) other than Piute Ponds	Between December 1, 2004 and March 31, 2005	Less than 24 MG diverted
II.A. – Divert 192 MG of effluent that would otherwise be discharged to Piute Ponds and dispose of this volume at an alternative legal point of disposal.	Between Apr 1 and Oct 31 of each year	Expected to meet
II.B. – Divert the effluent volume (calculated as specified in CDO) that would otherwise be discharged to Piute Ponds and dispose of this volume at an alternative legal point of disposal. Calculated volume equals 137 MG minus an adjustment if there is above-average rainfall.	Between Nov 29, 2007 and March 31, 2008	Expected to meet
II.B. – Divert the effluent volume (calculated as specified in CDO) that would otherwise be discharged to Piute Ponds and dispose of this volume at an alternative legal point of disposal. Calculated volume equals 156 MG minus an adjustment if there is above-average rainfall.	Between Nov 1 and March 31 of each subsequent year	Expected to meet
III. – Eliminate the effluent-induced overflows from Piute Ponds to Rosamond Dry Lake	November 1, 2010	Expected to meet
V. – Submit quarterly status reports until final compliance achieved	Feb 1, May 1, Aug 1, and Nov 1 of each year	Ongoing

**SCHEDULE OF TASKS**  
**PALMDALE WATER RECLAMATION PLANT (PWRP)**  
**COUNTY SANITATION DISTRICT NO. 20 OF LOS ANGELES COUNTY (DISTRICT)**

<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
<b>Required by Cease and Desist Order R6V-2004-039</b>		
<b>II. Interim Corrective Measures — Limit Excess Nitrogen at the Effluent Management Site:</b>		
» In 2007	Feb 1, 2008	
» In 2008	Feb 1, 2009	
» In 2009	Feb 1, 2010	
» In 2010	Feb 1, 2011	
<b>III. Achieve final compliance by June 18, 2010</b>		
» Irrigate crops at the Effluent Management Site during the 2010 summer season that do not exceed the water or agronomic rates; and		
» completing storage impoundments, force man, and pump station facilities		
<b>V. Submit quarterly status report</b>		
» Reports must include analysis towards completing facilities		
	Feb 1, 2008	
	May 1, 2008	
» Report must include an Excess Nitrogen statement for 2009	Aug 1, 2008	
	Nov 1, 2008	
	Feb 1, 2009	
	May 1, 2009	
» Report must include an Excess Nitrogen statement for 2010	Aug 1, 2009	
	Nov 1, 2009	
	Feb 1, 2010	
	May 1, 2010	
» Report must include an Excess Nitrogen statement for 2011	Aug 1, 2010	
	Nov 1, 2010	
	Feb 1, 2011	
<b>Required by Cleanup and Abatement Order R6V 2003-056</b>		
<b>Plume Delineation</b>		
1.1.1 – Submit a plan to delineate the nitrate plume to background levels	Feb 16, 2004	Submitted
1.1.2 – Complete plume delineation	Aug 15, 2004	Not Completed — In progress
<b>Plume Containment</b>		
1.2.2 - Submit a final plan (including extraction well locations and pumping rates) and time schedule for containing the plume	Sept 15, 2004	Submitted
1.2.3 – Achieve plume containment	Sept 30, 2005	Not met
<b>Plume Remediation</b>		
1.3.1 - Submit a plan describing the proposed plume remediation describing how ground water will be restored to background or propose alternative cleanup levels pursuant to SWRCB Resolution 92-49	Sept 15, 2004	Submitted
1.3.2 – Implement the proposed plan for ground water extraction and agricultural irrigation (or an equally acceptable alternative)	Sept 15, 2005	Not met — In progress
<b>Abatement</b>		

<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
2.1 – Submit a plan describing proposed abatement actions	March 31, 2004	Submitted
<b>Reporting</b> 3.2 – Submit quarterly status reports until remediation is complete including actions completed in the last three months and expected in the next three months report		
	Jan 15, 2005	Submitted
	Apr 15, 2005	Submitted
	July 15, 2005	Submitted
	Oct 15, 2005	Submitted
	Jan 15, 2006	Submitted
	Apr 15, 2006	Submitted
	July 15, 2006	Submitted
	Oct 15, 2006	Submitted
	Jan 15, 2007	Submitted
	Apr 15, 2007	Submitted
	Jul 15, 2007	Submitted
	Oct 15, 2007	Submitted
	Feb 1, 2008	
	May 1, 2008	
	Aug 1, 2008	
	Nov 1 2008	
	Feb 1, 2009	
	May 1, 2009	
	Aug 1, 2009	
	Nov 1, 2009	
	Feb 1, 2010	
	May 1, 2010	
	Aug 1, 2010	
	Nov 1, 2010	
	Feb 1, 2011	
<b>Required by Waste Discharge Requirements 6-00-57, -A01, -A02, -A03</b>		
Provision II.B.1. – Submit Corrective Action Plan (CAP)	Jan 31, 2001	Submitted
Provision II.B.2. – Submit Effluent Disposal Plan (EDP)	Jan 31, 2001	Submitted
Provision II.B.3. – Submit Farm Management Plan (FMP)	Jan 31, 2001	Submitted
Provision II.B.4 – Implement CAP, EDP, FMP	June 14, 2003	Submitted
Provision II.B.5 – Submit reports on the status of implementing the CAP, EDP, and FMP until completed	Jan 31, 2005	Submitted
	July 31, 2005	Submitted
Provision II.F – Submit work plan and time schedule for destroying abandoned wells in Section 15	May 30, 2004	Submitted
Provision II.D – Submit a report describing leased area and alternative disposal plan	Apr 29, 2005	Submitted
Discharge Specification I.B. – Submit well destruction report Sections 14 & 16	Aug 1, 2005	Submitted
Discharge Specification I.C. – Submit revised vadose zone monitoring plan	Aug 15, 2005	Submitted
Discharge Specification I.C. – Submit report documenting vadose zone installation	Dec 15, 2005	Submitted
Discharge Specification I.C. – Submit report documenting actual vadose zone installation and testing	March 23, 2007	Submitted

<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
<b>Required by Board Order 6-00-57-A04 (Storage Reservoirs)</b>		
Provision II.A.1. – Submit work plan for groundwater monitoring system	Nov 30, 2007	Submitted
Provision II.A.2. – Submit site hydrogeologic investigation report and work plan for groundwater compliance monitoring well installation	Dec 31, 2008	
<b>Required by: Monitoring and Reporting Program 00-57-A01, -A02, -A03, -A04</b>		
A01/II.A.1 & A02/2 – Submit a Sampling and Analysis Plan	March 31, 2004	Submitted
	June 1, 2004	Submitted
II.A.3. – Submit a Wind Speed Monitoring Plan	March 31, 2004	Submitted
I.E.4. – Report Completion of Removing Old Vadose Zone Monitoring System	Jan 1, 2006	Submitted
I.G.1. – Submit an Annual Cropping Plan	Nov 15, 2005	Submitted
	Nov 15, 2006	Submitted
	Nov 15, 2007	Submitted
	Nov 15, 2008	
	Nov 15, 2009	
	Nov 15, 2010	
I.G.2. – Submit Effluent Management Site Monitoring Report	Jan 15, 2005	Submitted
	Apr 15, 2005	Submitted
	July 15, 2005	Submitted
	Oct 15, 2005	Submitted
	Feb 1, 2006	Submitted
	May 1, 2006	Submitted
	Aug 1, 2006	Submitted
	Nov 1, 2006	Submitted
	Feb 1, 2007	Submitted
	May 1, 2007	Submitted
	Aug 1, 2007	Submitted
	Nov 1, 2007	Submitted
	Feb 1, 2008	
	May 1, 2008	
	Aug 1, 2008	
	Nov 1 2008	
	Feb 1, 2009	
	May 1, 2009	
	Aug 1, 2009	
	Nov 1, 2009	
Feb 1, 2010		
May 1, 2010		
Aug 1, 2010		
Nov 1, 2010		
Feb 1, 2011		
G.3. – Submit Recycled Water Treatment and Use Report	Monthly	Ongoing
II.B.1 – Begin submitting Monthly Reports for - Facility Influent Monitoring - Facility Effluent Monitoring - Operation and Maintenance - Biosolids Disposal	Monthly	Ongoing

PERFORMANCE TASK	DUE DATE	STATUS
II.B.2 – Begin submitting Quarterly reports for Groundwater Monitoring      Effluent Management Site Monitoring Vadose Zone Monitoring      Effluent Management Site Operations Chemical Use Monitoring		
	Jan 15, 2005	Submitted
	Apr 15, 2005	Submitted
	July 15, 2005	Submitted
	Oct 15, 2005	Submitted
	Feb 1, 2006	Submitted
	May 1, 2006	Submitted
	Aug 1, 2006	Submitted
	Nov 1, 2006	Submitted
	Feb 1, 2007	Submitted
	May 1, 2007	Submitted
	Aug 1, 2007	Submitted
	Nov 1, 2007	Submitted
	Feb 1, 2008	
	May 1, 2008	
	Aug 1, 2008	
	Nov 1 2008	
	Feb 1, 2009	
	May 1, 2009	
	Aug 1, 2009	
Nov 1, 2009		
Feb 1, 2010		
May 1, 2010		
Aug 1, 2010		
Nov 1, 2010		
Feb 1, 2011		
II.B.3. – Begin submitting Annual Reports for Operations & Compliance Summary      Certified Operator status Health and Safety Compliance      Chemical Use Monitoring Federal Biosolids Report		
	March 1, 2005	Submitted
	March 1, 2006	Submitted
	March 1, 2007	Submitted
	March 1, 2008	
	March 1, 2009	
	March 1, 2010	
March 1, 2011		
<b>Required by Resolution No. R6V-2005-0010</b>		
A. - Discharger should initiate cleanup project to reduce nitrate concentrations in groundwater to less than 10 mg/L as N, as soon as possible	As soon as possible	<b>In Progress</b>
B. - Discharger should submit an evaluation for additional options for remediation of groundwater after the 10 mg/L as N level is achieved. Focus should be on less than 2 mg/L as N (background), which will be used to establish the final cleanup standard	Apr 13, 2006	Submitted

<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
<b>Required by recent letters from the Executive Officer</b>		
Submit Addendum to Vadose Zone Monitoring Plan (Requested on 6-24-04)	July 23, 2004	Submitted
Grant Extension Request for submitting Abatement Report Addendum (Request on 7-20-04)	Aug 2, 2004	Submitted
Provide an updated Sampling and Analysis Plan for use of Low Flow Purging (Requested on 8-6-04)	Sept 15, 2004	Submitted
Provide a Work Plan to evaluate effects on unlined oxidation pond leakage on ground water (Requested on 8-16-04)	Sept 24, 2004	Submitted
Submit Wind Speed Study Results (Requested on 5-21-04)	Oct 1, 2004	Submitted
Provide a Response to comments in the 3 <sup>rd</sup> Quarter 2004 CAO Status Report (Requested on 9-22-04)	Oct 15, 2004	Submitted
Submit Tree Farm Vadose Zone Monitoring Plan (Requested on 10-26-04)	Dec 6, 2004	Submitted
Submit Delineation Report Addendum (Requested on 11-10-04)	Dec 31, 2004	Submitted
Submit Work Plan to Investigate or Abandoned Wells (Airport only) (Requested on 12-6-04)	Jan 7, 2005	Submitted. Airports documented destruction of wells in a Nov 06 report
Submit Work Plan and schedule for unlined ponds (Requested on 12-2-04)	Jan 7, 2005	Submitted
Submit time schedule to complete an Addendum to the Containment and Remediation Plan (Requested on December 28, 2004)	Jan 12, 2005	Submitted
Submit an Addendum to the Containment and Remediation Plan (Committed to by District staff on 1-21-05)	March 1, 2005	Submitted
Submit a detailed proposal to delineate the nitrate plume on Air Force Plant 42.	Apr 30, 2005	Submitted
Submit information regarding over-application of effluent to Section 15 during January to March 2005 in violation of waste discharge requirements (Requested May 27, 2005)	June 30, 2005	Submitted
Submit an assessment of whether the District expects to achieve compliance with a 12-month average total nitrogen effluent limit by November 1, 2005 for the prior 12 months (Requested May 27, 2005)	June 30, 2005	Submitted
Submit a response to Board staff comments on the Annual Cropping Plan (Requested June 13, 2005)	July 20, 2005	Submitted
Indicate if the District made no effort between September 2004 and March 2005 to gain access to Air Force Plant 42 (requested August 15, 2005)	Sept 15, 2005	Submitted
Propose a method for using both soil sample and vadose zone moisture data to establish total nitrogen concentrations in water lost by deep percolation. (Requested August 10, 2005)	Oct 21, 2005	Submitted
Submit Interim Measures and Monitoring Plan and address comments (Requested August 22, 2005)	Sept 30, 2005	Submitted
Submit technical Report describing options if Airport terminates Section 9 Lease (Requested September 6, 2005)	Oct 14, 2005	Submitted
Unauthorized Release of Secondary Treated Sewage (Requested September 7, 2005)	Oct 1, 2005	Submitted
Containment, Remediation Plan, Supplement No. 2, and Groundwater Monitoring Plan (Requested November 18, 2005)	Dec 15, 2005	Submitted
Order to submit Technical Report in accordance with Section 13267 of the California Water Code (Requested December 5,	Jan 10, 2006	Submitted

<b>PERFORMANCE TASK</b>	<b>DUE DATE</b>	<b>STATUS</b>
2005)		
Request corrected tables and text for the 2006 Annual Cropping Plan (Requested January 5, 2005)	March 1, 2006	Submitted
Request field work to begin on installing new groundwater extraction wells (Requested February 15, 2006)	March 15, 2006	Submitted
Request additional vadose zone monitoring stations be installed in Section 14 (Revised plan accepted March 24, 2006)	Dec 15, 2005	The District submitted the as-installed stations report on March 23, 2007. Water Board staff has prepared a MRP revision reflecting these stations
Submit information describing the overapplication of effluent to crops above agronomic rates (Notice of Violation November 7, 2006)	Dec 15, 2006	Submitted
Complete Ammonia Volatilization Study	(none)	Submitted
Complete data objective analysis to justify groundwater monitoring locations and depths (June 20, 2007 letter that conditionally approved installation of new monitoring wells).	July 20, 2007	Submitted

**EO'S Monthly Report**  
**10/16/07 - 11/15/07**  
**Unauthorized Waste Discharges**

COUNTY: SAN BERNARDINO

Discharger/Facility	Location	Basin	Regulated Facility	Substance Discharged	Spill Date	Discharge Volume	Description of Failure	Discharge To	Status
Chevron Mining Inc. / Mountain Pass Mine & Mill	67750 Bailey Rd Mountain Pass, CA 92366	S	Y	Sodium Hydroxide	10/20/2007	220 Gallons	Pipeline leaked. Solution flowed down road ditch.	Ground	Contaminated soil and pipeline to be excavated or neutralized. Cause of leak under investigation. Pipeline will be replaced with HDPE pipeline. Issued NOV 10/24/2007. Final cleanup report submitted 12/19/2007. Clean up complete.
City of Hesperia / Sanitary Sewer System	8809 C St. Hesperia, on a private property.	S	Y	Raw Sewage	10/20/2007	2,000 Gallons	Blockage of grease and debris caused sewage to overflowed from manhole on private property to a dry well.	Ground	City cleared blockage and flushed area with disinfected water. City put disinfectant down dry well. No further action recommended.
City of Hesperia / Sanitary Sewer	Sultan St west of Marble Ave Hesperia	S	Y	Raw Sewage	10/29/2007	7,440 Gallons	Vandalism resulted in spill	Natural drainage	Spill contained in a wash. Blockage cleared. Debris removed from line. Line flushed with water and a disinfectant. No further action recommended.
Southern Logistics Trucking / Interstate Highway 15	North bound I 15 between Mountain Pass and Nipton Rd Baker	S	N	Motor Oil in barrels.	10/31/2007	1,000 Gallons	A Southern Logistics Trucking truck rolled over and spilled barrels containing motor oil. Substance spilled to ground and to a dry natural drainage.	Ground and drainage	Cleanup has been completed. Cleanup report due by 1/31/2008.

**CASE CLOSURE REPORT**  
**November 2007**  
 State of California  
 Lahontan Regional Water Quality Control Board

Date Closure Issued	Site Name	Site Address	Case Number	Case Type	Remaining Groundwater Concentrations above Water Quality Objectives (in ug/L)	Remaining Soil Concentrations (in mg/Kg)	Distance from Site to Nearest Receptor	Remedial Methods Used
No closures issued from November 16-December 15								

**Notes:**

TPHd = Total petroleum hydrocarbons quantified as diesel  
 TPHg = Total petroleum hydrocarbons quantified as gasoline  
 TRPH- Total Recoverable Petroleum Hydrocarbons  
 NS-Not sampled