Lahontan Regional Water Quality Control Board

EXECUTIVE OFFICER'S REPORT

October 2008

NORTH BASIN

1. ***Status of Local Technical Assistance Grants*** - *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 a summary of recent grant program activities, followed by a table of the 12 local technical assistance projects (totaling over $12 million) that are currently managed by Regional Water Board staff.

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. The State is allocating significant water bond resources for IRWM Planning and Implementation (approximately $380M from Proposition 50 and $1B from Proposition 84.) In the Lahontan Region, two IRWM implementation grants were awarded from Proposition 50 funds in March 2007 ($12.5M to the Tahoe-Sierra IRWM Group and $25M to the Mojave IRWM.) In addition to the Tahoe-Sierra and Mojave IRWM Groups, two other groups in the Region are the Antelope Valley and Mono-Inyo (includes Amargosa.) The Sierra Nevada Alliance (non-profit organization of conservation groups that are based or work in the Sierra Nevada region) has completed some initial launch efforts in the far north parts of the Region with future plans to help establish new IRWM groups that include watersheds in Lassen and Modoc Counties. In August, the four established IRWM groups in the Region met to discuss geographic boundary issues. Neighboring IRWM groups from outside of the Region also participated in the boundary discussion. The next IRWM solicitation to be administered by the Department of Water Resources (with input from State and Regional Water Board staff) is expected to begin with the release of draft Proposition 84 IRWM guidelines in late September. Future new IRWM funding was included in *The Safe, Clean, Reliable Drinking Water Supply Act of 2008* introduced on August 21 by Assembly Members Huffman, Caballero, and Wolk. This includes the issuance of bonds in the amount of $9,805,000,000. Should the voters approve this Act in the November election, it would authorize $1.5B for IRWM projects to be administered by DWR (with $75M earmarked for Lahontan IRWM projects.) More information on the IRWM Program is available at http://www.waterboards.ca.gov/funding/irwmgp/index.html.

Proposition 84 Storm Water Grant Program

The Proposition 84 Storm Water Grant Program (SWGP) will provide $82.35 million in matching grant funds to local public agencies for projects that reduce and prevent pollution of rivers, lakes, and streams from discharges of storm water. Assembly Bill 739 further defines the storm water provisions of Proposition 84 including the appointment of a Storm Water Advisory Task Force (SWATF) by the State Water Board. The SWATF held three public scoping meetings for the SWGP earlier this year. Based on this public input, draft guidelines for the SWGP will be discussed at the next SWATF meeting scheduled for September 15. Project solicitation is expected to begin later this year or early 2009. Future new SWGP funding was included in *The Safe, Clean, Reliable Drinking Water Supply Act of 2008* introduced in August by Assembly Members Huffman, Caballero, and Wolk. If approved by voters in the November election, it would authorize $300M for storm water projects to be administered by the State and Regional Water Boards. Additional information on the SWGP is available at: http://www.waterboards.ca.gov/funding/prop84.html.

Proposition 84 Agricultural Water Quality Grant Program

The State Board will administer approximately $13.7 million in Proposition 84 bond funds to the Agricultural Water Quality Grant Program (AWQGP.) The AWQGP provides grants to public agencies and nonprofit organizations for projects that reduce the discharge of pollutants from agricultural operations into surface waters of the State. The State Board took action on June 17 to approve a list of concept proposals for funding from the AWQGP. The list 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.)* The State Board directed Regional Board staff to complete, within six months, a competitive process and select a grantee for this project. Staff is currently developing the competitive process in order to select a grantee. The main elements of this project are bacterial monitoring in water bodies potentially affected by grazing operations, facilitating the implementation of grazing management practices in affected watershed(s), and additional monitoring to assess effectiveness of the implemented management practices. Staff expects to select a grantee by mid-November.

319 Nonpoint Source Implementation Grant Program

This is the federal grant program for nonpoint source pollution control projects. In April, at the conclusion of the statewide evaluation process, two new projects in the Lahontan Region were selected for funding. Both projects include management practices to help to implement the Tahoe TMDL ($770,489 to the Tahoe Regional Planning Agency for BMP implementation and evaluation; $650,000 to the Tahoe Resources Conservation District for a TMDL Implementation Pilot Study at Homewood.)

The solicitation for new nonpoint source pollution control projects began August 8 with concept proposals due on October 16. Between $4.5 – 5.5 million in grants funds are available. Based on review of concept proposals by USEPA, State and Regional Water Board staff during November, selected applicants will be invited to submit full proposals due in February 2009. Following the statewide evaluation process, final grant awards will be determined in April 2009. Additional information on the program is available at:

http://www.waterboards.ca.gov/water_issues/programs/grants_loans/319h/index.shtml

OTHER GRANT INFORMATION

Web Site and Electronic Mailing List
http://www.swrcb.ca.gov/funding/index.html is the link from the State Water Board's web page for information on current and upcoming grants, including a monthly grants newsletter and overview of statewide grants accomplishments. 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 next meeting is scheduled for October 2.

GRANT PROJECTS CURRENTLY MANAGED BY REGIONAL BOARD STAFF

Fund	Title	Recipient	Amount
Proposition 13	Pesticide Residues in Frogs and Amphibians Declines in the CA Cascades & Sierra Nevada	Sierra Nevada Alliance	$190,000
Proposition 13	Palmdale Ditch Resource Management Plan and Program	Palmdale Water District	$1,512,250
Proposition 13	Early Implementation of TMDLs in the Truckee River Watershed (Gray Creek Acquisition)	Truckee River Watershed Council	$800,000
319 Nonpoint Source	Revegetation and Erosion Control for Ski Areas	Sierra Business Council	$473,145
319 Nonpoint Source	Early Implementation of TMDLs in the Truckee River Watershed (BMP & LID workshops)	Truckee River Watershed Council	$359,000
319 Nonpoint Source	Indian Creek Reservoir TMDL Mitigation	South Tahoe Public Utility District	$609,166
319 Nonpoint Source	Lake Tahoe BMP Implementation and Effectiveness	Tahoe Regional Planning Agency	$770,489
319 Nonpoint Source	Homewood Watershed Improvement/TMDL Implementation Pilot Study	Tahoe Resource Conservation District	$650,000
Proposition 40	Perazzo Meadows Acquisition and Restoration	Truckee River Watershed Council	$2,000,000
Proposition 40	Evaluating Lake Use Practices in Sierra Nevada Watersheds and Their Impacts on Water Quality	Sierra Nevada Alliance	$925,000
Proposition 40	Lake Tahoe Watershed Improvement Project	Tahoe Resource Conservation District	$3,003,779
Proposition 40	Polaris Creek/Wetland/SEZ Restoration for Tahoe TMDL, BMP Efficiency, Habitat Enhancement & Outreach	Tahoe Resource Conservation District	$852,958
Total of Current Projects:			**$12,145,787**

2. ***Update of Summer Activities at Leviathan Mine*** *- Laurie Scribe and Lisa Scoralle*

The summer field season at the Leviathan Mine site is coming to a close. The Water Board's summer treatment of acid mine drainage (AMD) contained in the evaporation ponds at Leviathan commenced on July 21, 2008. DECON Environmental, the Water Board's new contractor, concluded treatment on September 17, 2008, having successfully treated approximately three million gallons of AMD. Treated effluent will continue to discharge to Leviathan Creek until approximately September 26, 2008. DECON Environmental typically operated the treatment system Monday thru Friday during daytime hours. This contrasts with prior contractors who ran the system 24-hours per day, seven days per week. Another change from prior year's operations was the contractor's use of dry lime which was diluted and mixed on-site, as opposed to using lime slurry delivered to the site in tanker trucks. Preliminary results of effluent monitoring show that all discharges were in compliance with US Environmental Protection Agency (USEPA) discharge criteria.

Other field activities at Leviathan Mine included site maintenance and on-going surface water monitoring. Repairs were completed on many sections of the barbed-wire fence that encircles most of the disturbed area of the mine. This fence requires annual maintenance due to damage caused by downed trees, heavy snowfall, and wildlife. Staff continued monthly surface water quality monitoring of eleven stations in the Leviathan Creek watershed. A new multi-year contract with the US Geological Survey for flow monitoring was executed in August 2008. Implementation of this contract is currently halted due to the Governor's executive order which temporarily suspended many contracts. The Leviathan project's other contracts for pond water treatment and laboratory services were not subject to the suspension order. A detailed summary of field activities, including monitoring results, will be presented in the Water Board's year-end report due to USEPA in early 2009.

USEPA issued an Administrative Order to Atlantic Richfield Company (AR) in June 2008 that directs AR to prepare and perform a Remedial Investigation and Feasibility Study (RI/FS) at the Leviathan Mine Site. AR conducted a scoping meeting in late August with USEPA, Water Board staff, and trustees to receive early input regarding the Data Quality Objectives (DQO) process for the RI/FS. AR is to produce a DQO report by October 22, 2008 and a RI/FS Work Plan within 60 days of USEPA's approval of DQO report. We expect to have approximately 30 days to review and comment on the DQO report once it is submitted to USEPA. The DQO report will provide details on the conceptual site model, including human health and ecological risk assessment, and present rationale for additional data collection needs for the RI/FS.

Staff member Laurie Scribe attended a two-and-a-half day introductory training on Risk Assessment Guidance for Superfund in early September. This training will assist Water Board staff when evaluating risk assessment work plans and reports for the site.

3. ***Semiannual Status Report on Basin Plan Amendments -*** *Judith Unsicker*

The following are summaries of the status of recently adopted and in-progress amendments to the Lahontan Basin Plan.

Revised Sodium-Related Standards for Surface Waters of the Carson and Walker River Watersheds (Alpine and

Mono Counties). These amendments replaced water quality objectives for "Percent Sodium" with new objectives for Sodium Adsorption Ratio. The amendments are in effect following state approvals, but they are still under review by the U.S. Environmental Protection Agency.

Revised Standards for Surface Waters of the Antelope Hydrologic Unit (Los Angeles, Kern, and San Bernardino Counties) These amendments revised designated beneficial uses and established site-specific water quality objectives for ammonia toxicity for various water bodies. State Water Board action is tentatively planned for November 2008.

Truckee River Sediment Total Maximum Daily Load (Placer, Nevada, and Sierra Counties). The administrative record for the Total Maximum Daily Load (TMDL) adopted in May 2008 is now being reviewed by State Water Board staff.

Lake Tahoe TMDL (Placer, El Dorado and Alpine Counties). An "Integrated Water Quality Management Strategy Project Report" was completed in March 2008. This report will be used in development of the TMDL implementation program. Two public scoping meetings pursuant to the California Environmental Quality Act (CEQA) were held in July 2008, and an opportunity was provided for written comments. Related documents are available online at http://www.waterboards.ca.gov/lahontan/water_issues/programs/tmdl/lake_tahoe/index.shtml. Response to comments are being prepared. The TMDL is being finalized for peer review anticipated to begin in late 2008.

Lake Tahoe Shorezone Amendments. The Governing Body of the Tahoe Regional Planning Agency (TRPA) may adopt revisions to TRPA's shorezone ordinances in the near future. Information on TRPA's shorezone program is available at: http://www.trpa.org

Some Water Board staff time has been allocated during this fiscal year to develop draft revisions to the shorezone provisions of Basin Plan Chapter 5 to make them consistent with TRPA's revised ordinance language. These amendments are tentatively planned to come before the Board in late 2009.

Additional Revisions to Basin Plan Chapter 5. In 2009, staff will begin revisions to Basin Plan Chapter 5. When revised, this chapter is expected to function as the implementation program for the TMDL. The amendments are expected to come before the Water Board in 2010.

Natural Sources Exclusion Amendments (Regionwide). This project involved the update of existing Basin Plan language regarding violations of water quality objectives due to natural sources of pollutants. Water Board staff reviewed natural sources exclusion language in other states' standards and developed conceptual plan amendments for discussion with State Water Board and USEPA staff. Further work on these amendments has been suspended for the present due to issues raised by State Water Board legal staff.

Miscellaneous Basin Plan Amendments (Regionwide). Staff time has been allocated during this fiscal year for work on plan amendments that would make the exemption criteria for waste discharge prohibitions affecting 100 year flood plains in the Truckee River watershed consistent with the exemption criteria for the flood plain prohibitions for the Lake Tahoe Basin. These amendments would also update language on forest management activities in Basin Plan Chapters 4 and 5 to address current

issues such as fuel reduction. Work will begin on these amendments this fall.

Revision of Coliform Bacteria Objective (Regionwide). Staff time has been allocated during this fiscal year for work on revision of the narrative water quality objective for coliform bacteria. This project may affected by the State Water Board's proposed bacteria policy (see the next paragraph).

Statewide Standards Activities. The State Water Board has issued a CEQA scoping notice for proposed revisions to the State Implementation Policy for the California Toxics Rule. The revisions would adopt statewide water quality objectives for cadmium based on the USEPA's national water quality criteria. More information is available on the State Water Board's web page at: http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/index.shtml. The State Water Board also began CEQA scoping for a new water quality policy that would adopt statewide bacteria objectives for inland surface waters designated for the Water Contact Recreation beneficial use.

SOUTH BASIN

4. ***Proposed North Los Angeles/Kern County Regional Recycled Water Project, Los Angeles and Kern Counties –*** *Curt Shifrer*

   Antelope Valley agencies have teamed up to implement recycled water uses throughout the valley. In early September 2008, staff attended a workshop hosted by the County of Los Angeles Department of Waterworks District 40 for a Draft Program Environmental Impact Report (PEIR). Los Angeles County Waterworks District 40 as the Lead Agency prepared a Draft PEIR in cooperation with the following agencies: City of Lancaster, City of Palmdale, Rosamond Community Services District, Los Angeles County Sanitation Districts Nos. 14 and 20, Palmdale Water District, Antelope Valley-East Kern Water Agency, and Quartz Hill Water District. The proposed project is a primary backbone system for distributing recycled water to end users in the Antelope Valley. The regional recycled water distribution system will include approximately 70 miles of conveyance pipelines, storage reservoirs, and pump stations. Recycled water end uses would include municipal and industrial applications, agricultural irrigation, cooling water for power plants, and groundwater recharge. Staff is currently reviewing the Draft PEIR.

5. ***Gold Mining Projects in the South Lahontan Basin –*** *Jan Zimmerman*

   As the price of gold soars, the prospects of activating defunct gold mines is becoming more of a reality, and processing even the lowest grade ores is proving to be more profitable than ever before. For instance, open-pit mining and cyanide heap-leaching at the Briggs Mine near Trona ceased in 2004 as economical reserves had been exhausted. However, with the price of gold on the rise and innovative technological advances on the forefront, rinsing of the existing leach pads at the Briggs Mine has continued over the years and in May 2008 alone, over 181 ounces of gold were recovered and sold. With the market price of gold now over $800 per ounce, plans are underway to resume production at the Briggs Mine and load new ore onto the leach pads beginning first quarter 2009. Staff is evaluating existing Waste Discharge Requirements (WDRs) to see if they are adequate for the proposed operations of the Briggs Mine.

   Staff anticipates increased requests to resume production at closed or inactive gold mines within the Lahontan Basin. These requests will result in issuance of new and/or revised waste discharge requirements. Arsenic is a common constituent in accessory minerals normally found in association with gold deposits. Naturally high concentrations of arsenic are common in groundwaters where the geologic materials contain abundant arsenic-bearing minerals. The mill and leaching processes that mobilize gold into solution also liberate arsenic. In solution, arsenic is highly mobile and is persistent, once in groundwater. Surface waters can be impacted as tailings become mobilized by either wind or water, and hazardous constituents move offsite as air borne particles and/or migrating dunes or become entrained in stormwater runoff. Engineering solutions to keep the discharge contained and in-place mitigation measures to keep tailings on site will continue to be a priority as we regulate these facilities.

6. ***Desert Knolls Wash –*** *Cindi Mitton*

   San Bernardino County Flood Control has submitted plans to control flows in Desert

Knolls Wash in Apple Valley. Desert Knolls Wash is a major drainage that leads to the Mojave River. The wash is an ephemeral wash that over time has been surrounded by residential and business development. The proposed project is part of a three-phase project. Phase I is already complete and consists of a fully lined concrete channel. The remaining wash areas at the head and toe of the concrete lined segment are currently natural. The existing concrete channel causes high velocity flows and scouring downstream where it joins the Mojave River. The original County plans called for straightening the channel and lining it with concrete for all three phases.

Upon review of the project, staff asked that the County evaluate alternatives that would minimize impacts caused by concrete lining the channel, in compliance with the process required by the Basin Plan and state and federal regulations. Water Board staff met with representatives from San Bernardino County Flood Control and the Lewis Center last month to discuss alternatives the County may consider.

The Lewis Center is a private school that owns property crossed by the wash. The Lewis Center uses portions of its property in the area where the wash joins the River for student projects, including wetlands monitoring, and is concerned about flood control projects that would concentrate flows, thereby causing downstream erosion and potential damage to the wetlands.

During the meeting, staff and the County discussed the factors that should be quantified and considered in the alternative analysis that is being prepared by the County. The meeting was productive and the County expects to complete its analysis in the near future.

7. Chevron Mining Inc. (Formerly Molycorp Inc.) Mountain Pass Mine and Mill – New Owner/Operations Startup – *Christy Hunter*

Transfer of all Water Board Waste Discharge Requirements, formerly held by Molycorp Inc., was completed in October 2007. Chevron Mining Inc. (CMI) has acknowledged their liability under the four Cleanup and Abatement Orders (CAOs) that were issued to Molycorp Inc. in 1997 and 1998 for groundwater pollution. Impacted groundwater extraction/treatment is continuing at the mine site.

In 2000, due to record lows in the rare earth elements market, mining operations were temporarily curtailed at the Mountain Pass Mine and Mill, and stockpiled product was packaged for sale. In 2005, Molycorp Inc. was acquired by ChevronTexaco. Chevron Mining Inc. (CMI) was created in 2007 when the parent company (ChevronTexaco) merged its mining operations (the former Pittsburg & Midway Coal Mining and Molycorp Inc.) into one unit. In 2007, after a multi-year hiatus in operations, CMI started reprocessing ore and is currently extracting the rare earth elements out of a supply of previously stored ore at the mine site. An agreement to sell the Mountain Pass Mine and Mill to Rare Earth Acquisitions, LLC, was signed by CMI in June 2008, and the sale is expected to close by early September 2008.

Mountain Pass Mine and Mill – Groundwater Investigations

A CAO was issued in 1998 requiring Molycorp Inc. to implement a groundwater and soil investigation and response program after groundwater pollution was

detected at the Mountain Pass Mine. The Mine and Mill generates wastes and rare earth element products that historically have been discharged into both lined and unlined waste piles, landfills, surface impoundments and tailings ponds. Delineation of pollution east (Wheaton Wash plume) and west of the property (Western Wash plume), onto U.S. Bureau of Land Management (BLM) property, has been partially completed. An interim extraction system is operating on mine property to extract polluted groundwater until the site investigation is complete and a groundwater remedy is determined (expected by late 2009).

Additional delineation is required for the plume in Wheaton Wash, which is the eastern drainage. Regulatory agencies (BLM, National Park Service [NPS], and Water Board staff) met with CMI in July 2007 to discuss possible approaches for further delineation and CMI's proposal to begin a feasibility study. Currently, Water Board staff is reviewing agency comments on the feasibility study work plan.

Old Ivanpah Evaporation Ponds

In 1980 and 1981, Molycorp Inc. constructed the Old Ivanpah Evaporation Ponds (OIEPs) on a 140-acre site located in the Ivanpah Valley, about 10 miles east of the Mountain Pass Mine, to dispose of wastewater generated at the Mine site. The OIEPs were operated from 1980 to 1987. In 1985, Molycorp Inc. detected wastewater-related impacts to the groundwater. Consequently, the New Ivanpah Evaporation Ponds were constructed about 3 miles north on the Ivanpah Dry Lake and wastewater was diverted here beginning in 1988. The OIEPs were closed in 1991. In March 1998, I issued a CAO requiring submittal of a site investigation and a feasibility study for corrective action. Impacted groundwater at the OIEPs appears to be limited to the upper zone in the aquifer within the immediate footprint of the ponds. Detected contaminants in groundwater beneath the OIEPs include total dissolved solids, nitrate, strontium, barium, and radium at levels that exceed their respective maximum contaminant levels. Residual strontium and lanthanide metals above background levels have impacted soils within the closed ponds near the former effluent pipe discharge points.

In October 2007, Water Board staff requested CMI to revise/update cleanup standards proposed for groundwater and feasibility study for the OIEPs. A work plan has been submitted for completing a radiological survey and health risk assessment and developing soil cleanup levels (August 2008). Water Board staff, along with other federal and state agencies are reviewing these plans.

New Ivanpah Evaporation Ponds

Wastewater discharges from 1988 to 1998 created a groundwater mound and high levels of nitrate (above maximum contaminant levels) in the upper part of the Ivanpah basin aquifer beneath the New Ivanpah Evaporation Ponds (NIEPs). Sediments within the pond basins also contain lanthanides and radio-nuclides. CMI recommends: 1) closing ponds in-place by capping with soil, 2) maintaining long-term groundwater monitoring, and 3) implementing a "Strategic Aquifer Management Plan," which includes restricting groundwater access and contingencies for water supply offset. Water Board staff are currently developing a response that will request an update to CMI's feasibility study to address groundwater pollution and soil cleanup, and a revised report of waste discharge.

Status of Wastewater Pipeline Removal

In 1996, approximately 230,000 gallons of wastewater were spilled in seven separate locations along the 13-mile wastewater pipeline from the Mountain Pass Mine and Mill facility to evaporation ponds on Ivanpah Dry Lake Playa. The spills occurred during maintenance operations on the pipeline. Wastewater and pipe scale, containing elevated levels of barium, uranium, thorium and radium, were discharged to lands owned by the NPS and the BLM. I issued a CAO to Molycorp, NPS, and BLM during April 1997, requiring investigation of the pipeline spills and cleanup of pipe scale and contaminated soils. Subsequent investigations revealed two additional historical pipeline release locations, not associated with the 1996 spills, which were added to the scope of remedial activities. Most of the spill-related materials were removed from the spill locations by the fall 2000. However, segments of the pipeline containing scale remain undisturbed below grade and are awaiting removal. CMI is currently working with BLM, NPS, and other federal and state agencies to remove these remaining pipeline materials. Work began this summer and is expected to resume this fall as soon as CMI receives approval from the NPS and the CA Department of Fish and Game for land disturbance.