Lahontan Regional Water Quality
Control Board

EXECUTIVE OFFICER'S REPORT

October 2002

NORTH BASIN

1. ***Bagley Valley Restoration Review, Alpine County -*** *Bud Amorfini*

   Staff organized a field trip on September 16th to assess the results of a wetland/stream restoration project conducted by the USFS in Bagley Valley. Bagley Valley is located in a watershed immediately south of Heenan Lake (off Monitor Pass Road in Alpine County) and is tributary to the East Fork Carson River. The hydrology of the watershed has been severely damaged by stream down-cutting and loss of wetland habitat due to an approximate 100-year history of human impacts, including grazing and road construction, in combination with drought and flood events.

   The $2 million of work completed to date focused on addressing impacts in the upper and lower thirds of the site. Additional work may be required to address impacts in the middle third of the watershed. Staff invited various experts in the fields of hydrology, geology, fluvial geomorphology and aquatic biology to help assess the results of work completed to date and evaluate future challenges for the restoration project. Attendees (approximately 20) critiqued specific elements of the project and discussed conceptual approaches for completing restoration of the entire watershed. Attendees also discussed potential management strategies for maintaining and protecting improvements made in the project area, including whether motor vehicle access by the public would damage restoration efforts completed to date. Staff requested that attendees with relevant expertise provide a brief written assessment of the project and offer any suggestions for further restoration and management of the area.

2. ***Markleeville Creek Day, Alpine County -*** Alan Miller

   The Alpine Watershed Group will sponsor the third annual Markleeville Creek Day on September 28, 2002. The Markleeville Creek Day is conducted with assistance from the Sierra Nevada Alliance (a conservation organization), other sponsors, and local volunteers and organizers. Planned hands-on activities include planting native vegetation for erosion control, cleaning up litter along the stream bank, and a trout release. Opportunities to learn about water quality, aquatic insects, and watershed restoration will take place with assistance from Regional Board staff. Free native plants will be available for landowners and a free lunch and T-shirts will be provided to participants. Judging by past years, community participation has been outstanding, and this year's event is expected to be well-attended and enjoyed by all. The Alpine Watershed Group has made excellent progress since its formation several years ago and will soon receive a $199,000 State grant to perform watershed assessments and develop GIS watershed maps using Proposition 13 funds.

3. ***Leviathan Mine Discharge Successfully Treated -*** *Chris Stetler*

   Regional Board staff successfully neutralized all acidic drainage contained in evaporation ponds at Leviathan Mine for the second year in a row. Leviathan Mine is an inactive sulfur mine covering approximately 250 acres that was listed as a federal Superfund site in May of 2000. The State of California acquired Leviathan Mine in 1984 to cleanup and abate water quality problems caused by historic mining.

   Constructed ponds at the site receive a continuous flow of acidic drainage from remnant underground tunnels. The tunnel drainage is an acidic solution containing elevated concentrations of iron, aluminum, arsenic, nickel, and copper. Without treatment, the ponds would fill and overflow into Leviathan Creek, a tributary to the East Fork of the Carson River in Nevada. Since 1999, the Regional Board has been treating pond water during the summer months in an effort to minimize the potential for pond overflow. This year's work resulted in the complete evacuation of the pond system for the second year in a row, and thereby maximized pond storage capacity and minimized the potential for pond overflow. The ponds have not overflowed since Board staff commenced pond water treatment in 1999.

   In addition to pond water treatment, Board staff continue to: 1) implement an extensive monitoring program that includes monthly water quality sampling and continuous flow recording at locations above, inside, and below the mine site, 2) conduct infrastructure assessments and site facilities maintenance, and 3) revegetate disturbed areas. Regional Board staff and contractors are planning to re-assemble and operate the treatment system again during the 2003 field season.

4. ***Update on Squaw Valley Public Services District's Water Supply Well #3 and the Opera House UST Diesel Contamination, Placer County -*** *Douglas F. Smith*

   The Squaw Valley Public Services District (SVPSD) is working with the Squaw Valley Ski Corporation (Ski Corp) on the logistics of implementing a testing program to re-activate SVPSD's Municipal Water Supply Well No. 3. SVPSD shut down Well No. 3 in 1998 when diesel (TPHd) contamination in groundwater was detected nearby during removal of an underground storage tank on the Ski Corp's Opera House site.

   Although TPHd contamination has never been detected in SVPSD's Well No. 3, the TPHd contamination in the groundwater continues to threaten the municipal well. TPHd concentrations in the groundwater below the Opera House UST site have ranged from 73 to 380 μg/L; the taste and odor threshold for TPHd is 100 μg/L.

   Ski Corp has agreed to perform a rigorous sampling and analysis program at the SVPSD Well No. 3, as the well is re-activated. The monitoring program will rapidly identify whether the well has been affected by petroleum hydrocarbon contamination as it is started back up and will allow SVPSD to ensure that the well's water meets drinking water standards before providing it to customers. Re-activation and water testing is planned for late September or early October 2002.

   The SVPSD General Manager concurred with Regional Board Staff that a semi-annual Executive Officer report would be sufficient once Well No. 3 has been re-activated. Therefore, the reporting for this item will change from quarterly to semi-annually and the next report is scheduled for the March 2003 Board meeting packet.

5. ***Meyers Beacon Gas Station, El Dorado County -*** *Chuck Curtis*

Using funds from the State Board's Emergency, Abandoned and Recalcitrant Account, the Regional Board's contractor, Secor International, installed six offsite extraction wells to capture and remove MTBE-affected groundwater in a detached plume from the Meyers Beacon Gas Station. The contaminated groundwater is pumped 2,400 feet to the existing treatment system at the gas station. Due to the State budget delay, and the associated delays in paying for work completed at the site or any additional work, Secor ceased startup work on the newly installed offsite wells. Now that the State budget has been approved, work to optimize pumping from the new offsite wells will resume. An amended contract to continue corrective actions at the site is being processed. The amended contract will include installation of a soil vapor extraction system near the underground storage tank system to remove residual soil contamination.

In a related action, the El Dorado County Department of Environmental Management has revoked the operating permit for the gas station following the operator and/or owner's failure to comply with the County's permit conditions.

6. ***Site Cleanup Requirement Issued to Big Tree Cleaners to Improve Cleanup of the PCE Groundwater Plume -*** *Richard Booth*

On August 16, 2002, I issued Region 6's first Site Cleanup Requirement (SCR) to the responsible parties of the Big Tree Cleaners in Tahoe City. The SCR has the same format and effect as a Cleanup and Abatement Order (CAO), it only has a different name. The SCR requires the responsible parties to continue the current groundwater treatment and monitoring activities while installing a new groundwater treatment system to replace the current system. The current treatment system is not adequate to restore groundwater quality in a timely manner.

A site investigation conducted in August 1997 found tetrachloroethene (PCE) in shallow soils and groundwater beneath the site. PCE is a chlorinated solvent used in dry cleaning operations. Since the discovery of PCE contamination, the responsible parties have conducted site investigations and remediation activities, including soil excavation and groundwater treatment. The current pump and treat system extracts groundwater at a rate of two gallons per minute. This rate is inadequate to fully contain the PCE plume from migrating, albeit slowly, towards Lake Tahoe, less than 400 feet downgradient. The responsible parties proposed and the SCO requires the installation of a new treatment system consisting of three components: 1) a dual-phase extraction system to remediate soil and groundwater in the shallow zone, 2) a vacuum extraction system to extract contaminated soil gas from the intermediate zone, and 3) an air sparge system to remediate groundwater in the lower zone. The SCR requires the responsible parties to have the dual-phase extraction system operational by April of 2003 and the remaining components operational by November 2003.

I decided to issue the SCR instead of a CAO to diminish the stigma attached to an enforcement action since the responsible parties have not been recalcitrant. The San Francisco Bay Regional Board initiated the use of SCRs instead of CAOs, when appropriate. They have reported greater acceptance by responsible parties because the perception of recalcitrance is eliminated. By re-naming the enforcement mechanism, I hope to assuage the concerns of compliant responsible parties so we can all concentrate on the primary issue of water quality restoration.

SOUTH BASIN

7. ***Mojave River/El Mirage Dairy Issues -*** *Steve Fischenich*

Regional Board staff provided comments to the Mojave Water Agency's (MWA) on its Phase I Regional Water Management Plan (RWMP). The MWA plans to finalize the Phase II RWMP by April 2003, with monthly meetings scheduled until that time. The RWMP is an update of the 1994 Plan. The RWMP will be used by MWA to guide efforts in addressing the ground water overdraft condition that exists in that exists in this area.

The owners of the Meadowbrook Dairy in El Mirage are proceeding with the installation of a ground water monitoring well as required in their Waste Discharge Requirements (WDRs). The Dairy is also in the process of upgrading its waste management system by installing an anaerobic digester. The digester will provide the dairy with a means of treating their wastewater while providing supplemental energy to the facility.

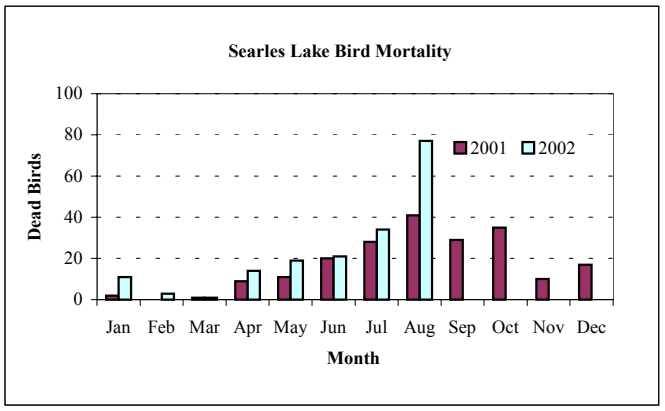
The A&H Dairy in El Mirage is also in the process of installing two monitoring wells which will be used to determine if ground water has been impacted by dairy operations. If sampling suggests that ground water impacts from dairy operations has occurred, additional investigation will be required.

The installation of three ground water monitoring wells is scheduled for September 2002 at the Desert View Dairy (Hinkley). Two of the wells will be located to determine if past dairy operations have impacted ground water and one well will be located to determine background conditions.

8. ***IMC Chemicals Inc., (IMCC) -*** *Kai Dunn*

Compliance Status

Results from daily sampling of effluent show that the Argus plant effluent exceeded the interim effluent limit for total recoverable petroleum hydrocarbons (TRPH) four times during the month of August 2002. The cause was a total power outage that resulted in a major plant upset. Once power was restored, IMCC personnel brought the plant back to normal operation in two days. In August, a large number of dead birds were found in Searles Valley during a period when the area experienced high temperatures. A total of 90 birds were collected in August 2002, seventy-seven were dead. Historically, the number of non-water bird deaths were very low. This year, and specifically in August, the number of non-water bird deaths is increasing. The total birds recovered in the year 2002 up to the month of August were 275 with 194 dead and 81 alive.



Improving Technology

IMCC completed the preliminary Argus skimmer design work and submitted a proposed design report. Board staff is reviewing the removal efficiency of the design. Additionally, IMCC submitted the final report regarding the analytical studies. Staff will use the report to continue to work with IMCC to establish appropriate reporting limits. Both reports were prepared in support of work required by the Administrative Civil Liability (ACL) settlement.

Searles Lake Basin Plan Amendment

Regional Board staff met with IMCC representatives to discuss options for this amendment. Draft amendments and a Functional Equivalent Document (CEQA document) are expected to be circulated this winter.

9. ***Caltrans Supplemental Environmental Project -*** *Doug Feay*

Caltrans submitted a report outlining its completed Supplemental Environmental Project (SEP). The SEP consists of improvements to the stormwater system at its Lee Vining Maintenance Station such that the system collects and treats 85 percent of the stormwater runoff for the town of Lee Vining along with runoff from the Maintenance Station. The system provides treatment of both hydrocarbon and sediment contaminants. The treated stormwater runoff is discharged to Lee Vining Creek. Board staff inspected the completed project and determined Caltrans satisfactorily implemented the SEP, which provides improvement of the stormwater quality entering Lee Vining Creek. Maintenance for the stormwater treatment system will be performed by Caltrans. Board staff will conduct follow-up inspections to ensure the SEP is adequately maintained and functioning properly.

10. ***Molycorp Cleanup and Abatement Order (CAO) Compliance Status Update -*** *Curt Shifrer*

Revised WDRs require Molycorp to stop the Mill discharge to the North Tailings Pond (P-16) by November 6, 2002 and begin closure. To dispose of the Mill discharge after this date, the Discharger is proposing a New Waste Management Unit (New WMU) at a location other than the P-16 site. Staff described the status for closure of P-16 and permitting for the New WMU in my April 2002 Executive Officer's Report. The status has not changed since then.

Molycorp currently operates systems that capture P-16 leakage. Almost all of the leakage is occurring through drainage of free liquid from tailings solids discharged to the pond between 1967 and April 2000. In March 2001, I issued an amended Cleanup and Abatement Order (Amended CAO) establishing a performance goal for capturing leakage. Molycorp has improved the existing systems and they are currently meeting the performance goal specified in the Amended CAO.

Molycorp installed a monitoring well (NIEP-12) north of the New Ivanpah Disposal Ponds to delineate the limits of the ground water affected by previous wastewater disposal operations. Due to the low recharge rate of the well, only limited sampling data is presently available. Preliminary data shows a total dissolved solids (TDS) concentration of 110,000 mg/L at that well, notably higher than concentrations in monitoring wells near the center of the playa. Molycorp will submit additional data from this well in its next quarterly ground water monitoring report due October 15, 2002.

11. ***Town of Mammoth Lakes (Town) Memorandum of Understanding Update -*** *Cindi Mitton*

The Town recently prepared and mailed over 140 copies of a Fact Sheet outlining *Site Winterization Requirements – Erosion and Sediment Control Measures.* It was sent to owners of all active construction sites involving land disturbance within the Town. The notice advised site owners that by October 15 of each year, sites must be adequately protected for the duration of the winter and that Best Management Practices (BMPs) must be maintained to ensure effective control whenever runoff occurs. The Fact Sheet contains examples of BMPs that could be used and a checklist for site owners to use for winterization. Board staff will hold a workshop in Mammoth Lakes on October 8, 2002 dealing with

stormwater and winterization plans and BMP implementation.

12. ***Antelope Valley Aquifer Storage and Recovery Project -*** *Christy Hunter*

Los Angeles County Department of Public Works (LADPW) released a *Draft Environmental Impact Report, Antelope Valley Aquifer Storage and Recovery Project* on May 17, 2002. The Department is proposing to construct and operate 15 dual-use injection/extraction wells at five locations within the Lancaster Hydrologic Area of the Antelope Hydrologic Unit. The proposed Project would inject treated water from the State Water Project for later recovery during droughts or periods of high demand. LADPW estimates that, on a yearly average, 6,843 acre-feet of water could be injected and 13,282 acre-feet of water could be extracted. However, water would not be extracted every year. LADPW proposes to operate this project so that it will not contribute to overdraft of the basin.

A Pilot Project, performed between 1995 and 1998, to assess the viability of recharging the Principal aquifer determined that total trihalomethanes (THMs) formed during the treatment process and after the water had been injected into the subsurface. During the Pilot Project, more ground water was extracted than injected to ensure that THMs were removed from the ground water. In spite of excessive ground water removal, trace amount of THMs in the ground water persisted.

The Environmental Impact Report (EIR) assessed nanofiltration, coagulation/sedimentation, and granular activated carbon (GAC) treatment technologies to determine if the dissolved organic carbons (DOC) and chlorine could be removed before the water is injected. LADPW determined that treatment by GAC was the most economical and effective and is planning to install a GAC treatment system at the Quartz Hill Water Treatment Plant. GAC is capable of reducing DOC to within the target range of 0.5 to 1.0 parts per million and thus reduce the formation of THMs to a great extent.

In summary, Board staff provided comments on the Draft EIR indicating that it did not provide sufficient information or analysis to allow the Regional Board to determine whether the degradation caused by the project could be allowed consistent with State Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Water in California). Additionally, Board staff requested that LADPW submit a report of waste discharge (RWD).

On August 27, 2002, Board staff met with the project Lead Manager and project Engineer from the LADPW. Board staff indicated at this meeting that additional information would be needed to either continue injection under the current pilot project WDRs or alternatively, amend same WDRs through Regional Board approval. LADPW is currently finalizing its response to Board staff comments discussed at the August 27 meeting as well as the Board staff comments on the Draft EIR. As indicated during the meeting, LADPW staff fully intends to address Board staff comments before this project proceeds.

LADPW was anticipating adopting a Final EIR at the end of October 2002; however, now realizing that this time schedule is probably not realistic. If our comments are adequately addressed, Board staff may bring this project to the Board February 2003. Depending on the information provided by LADPW, Board staff may recommend limited degradation be allowed in conjunction with this project provided LADPW prepares an adequate degradation analysis and it is shown that some degradation is in the best interest of the people of the State.