

EXECUTIVE OFFICER'S REPORT

November 2001

NORTH BASIN

1. ***Homewood Mountain Resort – Progress on Parking Lot Runoff BMP Retrofit – Robert Erlich***

Homewood Mountain Resort (HMR) finished installation of a stormwater runoff collection, pre-treatment, and infiltration BMP sized to control runoff from a one-inch storm from the north half of the North Base Lodge parking lot. HMR constructed an infiltration gallery at depths of up to five feet below the existing paved parking lot. Runoff which had previously discharged through a culvert under State Route 89, now flows into a six-foot deep concrete box with a sump for storage of coarse sediment, and is routed into a series of interconnected plastic vaults which leach into a four foot layer of gravel. Any overflows from this system would still discharge under State Route 89 and reach Lake Tahoe, but this BMP retained all runoff from the October 29, 2001 storm which produced approximately one inch of rainfall at nearby rain gauges. HMR also installed drip-line trenches to control runoff from some of the buildings at the South Base area.

This is the first significant step by the new ownership and management of HMR to meet their Waste Discharge Report requirements to collect, treat, and/or infiltrate stormwater runoff from impervious surfaces. HMR has not met the compliance time schedule in Board Order No. 6-95-86A1 Amended Waste Discharge Requirements for Ski

Homewood for completing parking lot and roof runoff retrofit projects by October 15, 2001.

Regional Board and TRPA staff are working with HMR to establish a schedule to construct the remaining parking lot and roof runoff retrofit projects within the next two years. Additionally, HMR will be required to install and maintain interim BMPs. The previous owners had requested the extension of the 1997 compliance dates specified in Board Order No. 6-95-86 in order to complete the Master Planning process. There has been little progress on the Master Plan process over the past few years, and Board staff has advised HMR that completion of the parking lot and roof runoff retrofit projects can not wait until completion of the Master Plan. Staff views the completion of the first phase of the parking lot BMP retrofit as a significant step towards compliance by the new HMR ownership and management. Staff will make recommendations to the Board regarding further amendments to waste discharge requirements and/or enforcement actions during 2002.

2. ***Follow Up On Unauthorized Discharge of Acid Mine Drainage at Colorado Hill, Alpine County – John Steude***

I reported last month on an unauthorized discharge of acid mine drainage that occurred in September from an abandoned mine on USFS Humboldt-Toiyabe Forest

lands at Colorado Hill. I requested a spill report and corrective action plan for the incident as well as a report of waste discharge (RWD) for future discharges and activities. Due to the urgency of the situation and the approach of winter, I also provided for a less-formal written report and circumstances under which mine investigation and de-watering activities may proceed, so long as the USFS demonstrates full compliance with applicable laws and requirements, including State involvement and compliance with applicable State standards and regulations.

The USFS responded this month with a report on the previous incident and a draft work plan for RWQCB approval for additional mine de-watering activities planned for the week of December 10, 2001. Staff reviewed the report and draft work plan and found the report to be responsive to our concerns and has requested additional details to be included in the final work plan. The work plan calls for on-site treatment of the wastewater to neutralize the pH and remove metals prior to release into engineered infiltration lines. The plan also includes contingency plans for any potential spills that may occur as part of the de-watering activities, and proposes on-site disposal of sludge residuals from the treatment.

The response from the USFS acknowledged the unauthorized discharge in September and included management measures taken to ensure that unauthorized discharges do not occur in the future. The USFS also expressed its desire to complete a Memorandum of Understanding (MOU) with the Regional Board and to assemble a Technical Advisory Group to review and comment on all future CERCLA activities at Colorado Hill. The USFS requested that

staff nominate additional members for the Technical Advisory Group.

Staff will continue to work closely with the USFS to develop an acceptable MOU and actively participate in the Technical Advisory Group for Colorado Hill.

3. *Status of 2000-2001 Basin Plan Amendments - Judith Unsicker*

On September 20, 2001 the State Water Resources Control Board (State Board) approved two separate sets of Basin Plan amendments previously adopted by the Regional Board: the Heavenly Valley Creek TMDL and implementation program, and the July 2000 amendments to remove the Municipal and Domestic Supply beneficial use from nine naturally impaired waters. Both groups of amendments are now being reviewed by the California Office of Administrative Law (OAL), and could receive OAL approval in December 2001. Following OAL action, both sets of amendments must be approved by the U.S. Environmental Protection Agency. State Board legal staff identified several issues of concern in relation to the other set of July 2000 Basin Plan amendments. (This is the group including changes in the industrial waste discharge prohibition and beneficial uses of ground water near Searles Lake, delegation of authority to local governments to implement some of the Basin Plan's septic system criteria, and delegation of authority to the Executive Officer to grant broader exemptions from prohibitions affecting the Lake Tahoe and Truckee River watersheds.) Assuming that these issues can be resolved, these amendments could go before the State Board in February 2002.

4. **Caltrans Tahoe Basin Stormwater Characterization Monitoring** - Robert Erlich

Caltrans consultants presented the results from its first year of stormwater characterization monitoring at three sites along Highway 50 to the Lake Tahoe Interagency Monitoring Program Tahoe (LTIMP) working group on November 7, 2001. The Final Report for the Caltrans Tahoe Basin Stormwater Monitoring Program (Monitoring Season 2000-2001) was submitted to the Regional Board in August 2001, but this was the first presentation of Caltrans stormwater characterization monitoring data to a wider group of researchers, regulators and agencies that are responsible for monitoring stormwater runoff and constructing BMP projects in the Tahoe Basin. Caltrans involvement and collaboration with LTIMP has increased in the last year, and the Final Report recommends a stronger partnership between the Caltrans Tahoe Basin Stormwater Monitoring Program and LTIMP to coordinate monitoring and share results. LTIMP members seemed eager to use Caltrans expertise in QA/QC methods and information management in other Tahoe water quality monitoring projects.

Caltrans monitored untreated runoff from Caltrans roadways at locations where there was no run-on from adjacent non-Caltrans roads or from adjacent land. Caltrans measured flow and water quality from auto-samplers, and also analyzed precipitation water quality, characterized sediment transported in runoff for particle size and chemical concentrations, and studied the effectiveness of double-barrel sediment traps. Caltrans constituents list included turbidity, chloride, iron, and oil and grease, as well as the approximately 25 conventional

constituents, nutrients, and both total and dissolved metals measured in the other Caltrans statewide highway runoff characterization studies. Although precipitation was only about 50% of normal, Caltrans sampled during approximately ten runoff events, including summer thunderstorms, snowmelt and rain-on-snow events. Caltrans snow removal practices reduced the volume of runoff generated from snowfall or snowmelt.

Mean and median values for electrical conductivity (EC), total suspended solids (TSS), total dissolved solids (TDS), total metals, and total phosphorus were higher in the Tahoe Basin than for the other sites in the Statewide study. Total and dissolved iron values were quite high. The application of sand and salt was likely to have raised the EC, TSS and TDS, and perhaps metals values. Total Kjeldahl nitrogen, nitrate, and dissolved orthophosphate levels were slightly lower in the Tahoe Basin than the statewide study. Untreated highway runoff generally exceeded Tahoe Basin stormwater effluent limits for discharge to surface waters for turbidity, oil and grease, total nitrogen, total phosphorus and total iron. The untreated runoff sometimes met the standards for discharge to infiltration systems, particularly for total nitrogen.

Caltrans sampled sediment trapped in each barrel of the double-barrel sediment traps, and also sampled the effluent from the trap during two runoff events at two stations. For particles that were larger than the smallest (20 microns) screen, most of the sediment mass was trapped in the first barrel, with less mass and generally smaller particles measured in the second barrel and in the effluent. There was no statistical trend in constituents across the grain sizes measured,

and more work on the smaller particle size will be completed in 2002.

For sampling in the 2001-2002 water year, Caltrans will continue sampling at the three south shore locations, and has installed three new sites on the west and north shore. To better understand the actual runoff water quality from Tahoe Basin roads which may need to be treated by BMP retrofit projects, staff has encouraged Caltrans to add sites that include run-on from cut slopes and undeveloped upland areas, as well as commingled flows which include runoff from developed parcels or municipal permittee roads. One of the new sites this year near Snow Creek in Tahoe Vista does receive some runoff from adjacent non-Caltrans roads and parcels. Staff will encourage Caltrans to select additional sites next year which may be more characteristic of the urbanized areas where Caltrans and the municipal permittees are or should be considering stormwater projects to treat commingled flows.

5. *Progress Report for Lake Tahoe Research and Monitoring Program, October 11 through November 10, Tahoe Basin - Bruce Warden*

The scope of work for the Lake Tahoe BCP stormwater monitoring project was agreed on by Lahontan staff, UC Davis, Desert Research Institute (DRI) and private contractors monitoring team. This stormwater monitoring contract is now being developed. Autosamplers for stormwater have been ordered and monitoring sites are being selected. Modeling of surface runoff from intervening zones and ungaged tributaries, and its relationship to land use is a key TMDL component. During this month, efforts were focused on this issue. We expect that during the next month,

decisions on modeling approach and selection of contractor(s) will be made. A contractor for the stream particle size distribution monitoring project has been identified, the scope of work approved, and a contract is being prepared.

Progress has been made on development of the scope of work for the particle study which is part of the BCP program to refine the Lake Clarity Model. This model will be central to the TMDL process. It is anticipated that this work plan will be submitted and sent out for peer review next month.

Staff and Dr. Reuter of UC Davis continue cooperating with the California Air Resources Board (CARB) by providing technical review of the latest CARB proposal for their study on atmospheric deposition to Lake Tahoe, critical for nutrient and particle loading estimates and Lake Tahoe TMDL development. Also, technical discussions and review of new data was carried out for a number of areas including state-of-the-art phosphorus removal from stormwater by chemical and biological treatment, atmospheric deposition of phosphorus and fine-sediment, BMP effectiveness, nearshore turbidity, and basin-wide discussions on EIP project priorities. Efforts are being made to assemble an external peer-review panel of national water quality and watershed experts to review and provide additional expert input on Lake Tahoe research and monitoring projects.

6. *Meeting with Nevada Division of Environmental Protection Regarding the Lake Tahoe TMDL - Chuck Curtis*

On September 28, 2001, members of my staff and I met with management of the Nevada Division of Environmental

Protection (NDEP) regarding the Lake Tahoe TMDL and the roles of the Regional Board and NDEP in this project.

We informed NDEP of our plans and schedule for developing the Lake Tahoe TMDL, including our plans for assessing sediment and nutrient loading from the entire Lake Tahoe Basin, including that portion that is in Nevada. Our schedule includes development of a Technical TMDL in 2004 and completion of the entire TMDL including the implementation plan and Basin Plan amendment(s) by 2007. I expressed my desire that the State of Nevada play an active role in the TMDL development. NDEP staff indicated they would like to participate, but with their limited resources they were not sure how much they would be able to devote to the project. Since the meeting, NDEP has identified an NDEP staff person to be the contact with the Regional Board on the TMDL.

I also brought up the issue of identifying Lake Tahoe as impaired on Nevada's Section 303(d) list. I indicated that development and implementation of the Lake Tahoe TMDL would likely be less difficult if the apparent contradiction regarding Nevada's and California's listings were resolved. California has listed Lake Tahoe as impaired by sediment and nutrients that result in our clarity standards (among others) being violated. Nevada currently has listed only Lake Tahoe at Sand Harbor as impaired by nitrogen, and they have footnoted that listing by indicating the impairment is probably localized. We pointed out to NDEP that years of data from the UC Davis Tahoe Research Group show Nevada's lake-wide standards are being violated. NDEP staff requested copies of this data so that they could independently determine if it supported the listing of Lake Tahoe or

Nevada's 303 (d) list. At our request, the Tahoe Research Group provided NDEP with the relevant water quality data.

On the whole, I feel the meeting was a success. We have identified the need to work together on issues regarding our bi-state waters, and a foundation of cooperation was laid. We plan to have additional discussions regarding TMDLs, water quality standards and water quality problems on our bi-state waters such as the Truckee River, Carson River, and Walker River, in addition to Lake Tahoe.

7. ***Prosser Lakeview Estates Septic System Update – Scott Ferguson***

Mr. Kenn Rieders addressed the Board at the public forum during the November 2001 Regional Board meeting regarding potential threats to ground water quality from existing septic systems in the above-referenced subdivision. Mr. Rieders pointed out that he and his wife Julie had contacted staff in May 2001, but had not heard anything since that time. Staff had begun to investigate the situation, but did not complete the investigation nor contact Mr. Rieders.

Since the November 2001 Board meeting, staff has ascertained significant information about the situation described in Mr. and Mrs. Rieders' May 2001 letter. We have been in contact with the Truckee Donner Public Utility District (TDPUD), the Nevada County Department of Environmental Health, and the Truckee Sanitary District (TSD). According to TDPUD, the Prosser Lakeview Estates drinking water wells have never tested positive for bacteria. Prior positive bacteria samples were from the stored water after it had been pumped from the ground. The Prosser Lakeview Estates water system did not include disinfecting

when installed. In order for TDPUD to assume ownership of the system it was required by the state to add disinfection.

The County stated that the Rieders' septic system had failed, and a new system was installed at an appropriate site on the property. The new system used innovative technology and malfunctioned soon after it was installed. The previous septic system was re-attached last summer, and the manufacturer of the new system will inspect the Rieders' new system this spring. The County noted that 15 failures, (approximately 5%) occurred in the Prosser Lakeview Estates over the previous 21-year period, which is not an unusual percentage for septic systems. County regulations require that an adequate backup area be designated on each parcel approved for septic use to account for the fact that septic systems eventually fail over time.

TSD will complete its installation of a new sewer line that crosses the Truckee River this spring with the completion of the Highway 267 Truckee Bypass. That pipeline is eventually scheduled to provide service to the subdivision, but there are no plans yet to extend the line beyond the bypass bridge. (Approximately two miles to Prosser Lakeview Estate.)

We have contacted Mrs. Rieders to convey the information gathered to date. Staff will continue to keep both Mr. and Mrs. Rieders informed on any progress regarding this situation.

8. ***Strategic Plan adopted by the State Water Resources Control Board – Alan Miller***

On November 15, 2001, the SWRCB adopted an updated *Strategic Plan*. The

State and Regional Boards completed a strategic plan in 1995 and revised it in 1997. The current strategic planning process was initiated after the release of the Cal/EPA *Strategic Vision* in October 2000, using the Cal/EPA document and the previous strategic plan as reference points to ensure that the plan helps achieve the goals of the *Strategic Vision*. The *Strategic Plan* identifies the key issues the SWRCB and Regional Boards must address over the next five years. The Plan updates our mission, vision, values, operating principles, and identifies agency objectives and performance measures. The core of the strategy is highlighted by six goals and 27 key strategic projects, which serve as the implementation plan.

The *Strategic Plan* sets forth a vision for “a sustainable California made possible by clean water and water availability for both human uses and environmental resource protection.” Key values to foster this vision are protection, service (to the public as a whole), integrity, leadership, and professionalism. The six strategic goals are listed below:

Goal #1: The Boards' organizations are effective, innovative and responsive.

Goal #2: Surface waters are safe for drinking, fishing, swimming, and support healthy ecosystems and other beneficial uses.

Goal #3: Groundwater is safe for drinking and other beneficial uses.

Goal #4: Water resources are fairly and equitably used and allocated consistent with public trust.

Goal #5: Individuals and other stakeholders support our efforts and understand their role in contributing to water quality.

Goal #6: Water quality is comprehensively measured to evaluate protection and restoration efforts.

The *Strategic Plan* focuses on Total Maximum Daily Loads and Watershed Management Initiatives to implement and integrate point and non-point source pollution controls. It calls for a "new approach" to doing the work of protecting California's vital water resources. The entire text of the *Strategic Plan* can be viewed on the worldwide web at the following address: <http://www.swrcb.ca.gov>. (Expect color copies printed for distribution in the near future).

9. ***Nonpoint Source Pollution Conference Combats Water Pollution - Cindy Wise***

The State Water Resources Control Board, the nine Regional Water Quality Boards, the U.S. Environmental Protection Agency, and the Coastal Commission teamed up to present the first ever California Nonpoint Source Conference on October 23-25, 2001. Staff from all these agencies attended the conference along with watershed coordinators, water quality specialists, nonprofit organizations, landowners and others to share experiences and to learn about curbing polluted runoff. The conference included more than 40 speakers who are implementing on-the-ground nonpoint source pollution control projects throughout California funded with Clean Water Act 319 funds. The conference focused on the importance of developing community and agency partnerships, and provided opportunities for networking with new partners. Because of the keen interest in this first conference, a second conference is planned for 2003.

10. ***Three Watershed Coordinators Funded in the Lahontan Region -Cindy Wise***

The California Legislature chose Resource Conservation Districts (RCD) to implement

its pilot Watershed Coordinator Grant Program this fiscal year. The goal of the program is to improve watersheds by coordinating conservation efforts throughout the state. This grant program is funding three Watershed Coordinator positions in the Lahontan Region. The Surprise Valley Watershed Group, the Truckee River Watershed Council and the Tahoe RCD now have Watershed Coordinators. Regional Board staff is working with the new Watershed Coordinators to further watershed improvement.

11. ***New Land Trust for Inyo and Mono Counties -Cindy Wise***

The Eastern Sierra Conservancy is a newly incorporated land trust serving Inyo and Mono Counties. Its mission is to protect and enhance vital lands in both counties for their scenic, recreational, agricultural, botanical, historical and wildlife values. Over the next several years, the Eastern Sierra Conservancy will be working with county and Regional Board staff to develop watershed management plans for three major watersheds within Mono County.

The Conservancy hopes to assist Inyo and Mono counties and other parties in planning conservation easements on some lands owned by the City of Los Angeles Department of Water and Power (LADWP) within the Owens Valley and Mono Basin. The LADWP and the Wildlands Conservancy proposed conservation easements on more than 300,000 acres of LADWP property in March 2001. This original proposal failed to obtain sufficient political momentum and was withdrawn, but the general concept has widespread support. The Eastern Sierra Conservancy plans to foster that support to develop a conservation easement strategy that can be implemented.

12. *South Tahoe Public Utility District is Developing a Master Plan for Recycled Water Reuse and Disposal, Alpine County*
– Robin Mahoney

The South Tahoe Public Utility District (District) must have a reliable recycled water reuse and land application (disposal) system to accommodate the flows generated by the residents and visitors of South Lake Tahoe. The existing District reuse and application system facilities in Alpine County are approaching their capacity 21 years after the adoption of the District's current Wastewater Master Plan. A summary of the elements that the Master Plan is addressing includes: not enough land available to apply future recycled water flows; water recycling contracts that may be terminated by any party in 2008; improving the capacity and location of the emergency storage facilities; problems with Indian Creek Reservoir water quality; lack of District control over the entire system; and delivery systems that are inadequate and unreliable.

Because the District's facilities for recycled water reuse and application are nearing their planned capacities, it's current Wastewater Master Plan needs to be revised to ensure proper recycled water reuse and/or application through 2020.

The District has chosen a programmatic Environmental Impact Report (EIR) approach for the Master Plan, in which many individual project components will be evaluated and will be grouped into alternative sets prior to project-level review. In addition to the No Project alternative, the EIR will generally evaluate the impacts of: 1) Expanding California Operations; 2) Expanding Recycled Water Application to

Nevada; and 3) Creating Wetlands (i.e., for multiple uses and nutrient uptake).

The District submitted a draft Initial Study (IS) for the Master Plan EIR to the Regional Board on August 31, 2001. Regional Board staff supplied the District with comments to the draft IS and support them in their effort to accommodate for projected growth, operate the recycling system in ways that protect public health and safety, and promote wise uses of water resources. Completion of a draft EIR is the next step; the EIR is expected to be finalized sometime in 2002.

13. *Squaw Valley Public Services District's Future Groundwater Development and Utilization Feasibility Study, Placer County*
– Tammy Lundquist

At the October 2001 Squaw Valley Public Services District (SVPSD) Board meeting, the SVPSD consultant presented the *Future Groundwater Development and Utilization Feasibility Study* results. The study focused on quantifying the Squaw Valley area groundwater basin's sustainable yield with a computer model, identifying procedures to protect the groundwater from known contamination sources, and evaluating alternatives to meet future water demand.

Current groundwater demand is about 873-acre feet per year with the projected buildout demand of 2,262-acre feet per year. Three acre-feet of water are equal to around one million gallons. The groundwater model predicted that the groundwater basin may only be able supply approximately 80% of the buildout demand. The existing supply wells could only supply up to 60% of the buildout demand; any additional new supply wells would require groundwater treatment because of naturally-occurring high concentrations of arsenic and manganese. If

additional supply wells were installed, the study recommended using the lowest cost alternative (pressure green sand filtration process) to remove the arsenic and manganese with a price tag of about \$3.5 million dollars, which is the estimated capital needed that does not include operation and maintenance costs.

14. ***Four ACL's Issued to Caltrans, Interstate-80 Rehabilitation Boca/Floriston Project – Eric Taxer***

The 2001 construction season for the Interstate-80 Rehabilitation, Boca/Floriston project resulted in numerous water quality problems affecting the Truckee River east of the Town of Truckee. Staff has coordinated closely with Caltrans throughout the construction season to ensure that a reasonable and effective approach to water quality protection was maintained. Staff participated in Caltrans-sponsored training to its contractors last July to help educate field personnel of the importance of water quality protection and in effective uses of best management practices. Staff has also conducted numerous site inspections throughout the construction season.

There have been several incidents involving discharges of sediment-laden water to the Truckee River, discharges of earthen materials to ephemeral drainages, and discharges of petroleum products to the ground, some near surface waters. Staff responded to the first few incidents by consulting with Caltrans to identify the cause of the discharges, to discuss how to mitigate the impacts of the discharges when possible, and to discuss how to prevent similar incidents. Despite Staff's efforts, discharge incidents continued to occur.

Staff began to escalate its enforcement activity on this project beginning with its response to conditions observed during a July 30, 2001 site inspection. A Notice of Violation was issued to address an earlier discharge of debris to an ephemeral drainage and to address an ongoing hydraulic oil leak. Staff has since found it necessary to issue four Administrative Civil Liability (ACL) Complaints for the discharge of sediment-laden water to the Truckee River during five different discharge incidents (August 1, 2001, August 2, 2001, July 10, 2001 and September 12, 2001 [same site], and September 19, 2001). These discharges could have been prevented with adequate site inspection by Caltrans or its contractors, and by implementing BMPs specified in Caltrans' Storm Water Pollution Prevention Plan (SWPPP) or required by the Caltrans Storm Water Task Force representative. The liability amounts specified in the Complaints total \$50,000 (the maximum amount allowed for the five discharge events).

Caltrans also failed to adequately winterize the project site prior to storm conditions, as required in a written variance to the October 15th soil disturbance deadline. Caltrans was permitted to continue earth-disturbing activities through November 1, 2001, provided that Caltrans winterize the site in the event of a storm. Staff inspected the project during a storm event on October 30, 2001. Even though the storm had been predicted for approximately one week prior to the inspection, many of the disturbed slopes were not winterized as required, and material (shoulder-backing material containing petroleum product) was observed to be stockpiled in a drainage-way and discharging runoff with an oily sheen. A backhoe was also observed disturbing stable ground on a steep slope directly above the

Truckee River. An additional grading variance request was denied based on Caltrans' inability to properly winterize its activities for predicted storm events. An inspection conducted on November 7, 2001 noted that the project had still not been winterized and that earth-disturbing activities were still occurring, in direct violation of permit requirements. The entire project site was not completely winterized until November 21, 2001. Staff is considering issuing another ACL Complaint for an amount that is significantly greater than those specified in the first four Complaints.

15. ***23rd Biennial Groundwater Conference and 10th Annual Meeting of the Groundwater Resources Association of California***—
Tammy Lundquist

This two-day joint conference, held at the end of October in Sacramento, provided concurrent presentations on policy issues and technical issues regarding groundwater quality and quantity in California. The conference was well attended by consultants, water agencies, professors, county, state, and federal employees.

Policy Issues were divided into four sessions: 1) Groundwater Quality, 2) Groundwater Quantity, 3) New Tools for Groundwater Management, and 4) Watershed Effects on Groundwater. Each session had five separate topic presentations. One notable topic was conjunctive use of water. The concept of diverting surface water for recharge into a groundwater basin is not something new in California but it is playing a much larger role in water management today. There is an ongoing effort to implement conjunctive operations in areas where such operations have not been tried before.

Technical Issues were also divided into four sessions: 1) Emerging Contaminants, 2) Development of Groundwater In Impaired Water Areas, 3) Groundwater Treatment and Remediation: From Research to Practical Application, and 4) GIS For Hydrologic Applications.

The session on Emerging Contaminants showed that many "new" contaminants are coming from everyday products discarded in the waste stream. A great number of compounds, such as caffeine, steroids, and suntan lotion ingredients, occur in sewage treatment plant influent and effluent that are not considered to be priority pollutants, and are not monitored under the NPDES permit system. Many of these compounds are not listed as analytes under current EPA Methods, and some are being detected for the first time. This raises concerns of the safety in areas where municipalities are planning conjunctive use by recharging a water supply aquifer with treated wastewater effluent.

16. ***Preparation of Administrative Civil Liability Complaint against Pacific Bell Telephone Company for the discharge of sediment laden water to Lake Tahoe*** —
Robert Larsen

Manual Brothers, Inc. was contracted by Pacific Bell Telephone Company (Pacific Bell) to replace a failing telephone conduit in the Tahoe Keys. To limit soil disturbance, the City of South Lake Tahoe required the contractor to use horizontal drilling methods rather than conventional open trenches. On October 26, 2001 the contractor drilled through an eight-inch water line, discharging water into the street. Flow from the water line break washed excavated soil directly into nearby storm water drop inlets that drain to Lake Tahoe.

Regional Board staff responded to the incident and photographed sediment deposition in the street, in the drop inlets, and the resulting sediment plume. The contractor had placed approximately five cubic yards of excavated soil directly in the curb and gutter and had not implemented appropriate best management practices (BMPs). Although the project was covered under existing Waste Discharge Requirements (WDRs) for underground line installation and maintenance, Pacific Bell failed to obtain a variance to the October 15 grading deadline. Staff asked the contractor to clean all remaining sediment from the drainage path, remove sediment from the drop inlets, fill all excavations, and cease work until a variance could be issued.

In addition to initiating maintenance activities involving soil disturbance after October 15 without a variance, Pacific Bell did not inform the Regional Board office of its intent to perform maintenance work nor did they inform their contractor of applicable WDRs and associated best management practices. Consequently, Manual Brothers, Inc. did not take appropriate measures to protect water quality and sediment was discharged to Lake Tahoe. Such discharge violates WDRs and prohibitions contained in the Water Quality Control Plan for the Lahontan Region.

Anthropogenic inputs of sediment and nutrients have been directly tied to clarity loss at Lake Tahoe and the discharge of such materials is considered a serious violation. Furthermore, Pacific Bell has a history of similar violations. I issued a Notice of Violation to Pacific Bell on August 30, 1999 for threatened discharge of sediment during trenching activities on Ski Run Boulevard in South Lake Tahoe. No erosion control

measures had been implemented to control runoff and thunderstorms resulted in significant sediment discharge to storm water conveyances. Similar to the current violation, Pacific Bell's contractor was not made aware of permit requirements and failed to implement appropriate best management practices.

Due to these factors, I intend to issue an Administrative Civil Liability Complaint to Pacific Bell for the discharge of sediment-laden water to a storm water conveyance and thence to Lake Tahoe.

SOUTH BASIN

17. *U.S. Borax Meeting* – Kai Dunn

Board staff met with U.S. Borax to discuss the Owens Lake Trona Processing project on November 2, 2001. U.S. Borax proposes to file for Waste Discharge Requirements (WDRs) to discharge waste associated with the installation and operation of an ore processing facility located at the site of current mining activities being conducted on Owens Lake by U.S. Borax. Board staff discussed potential effects on water quality associated with the proposed project and provided information on alternate processes to reduce possible impacts on water quality.

18. *IMC Chemicals, Inc. (IMCC), Trona* – Kai Dunn

Improving Technology

IMCC and its consultant completed the study for the analytical methods to support site-specific analytical monitoring and compliance testing as required in the WDRs and submitted a report to the Regional Board. The IMCC plant laboratory has been certified by California Department of Health

Services to perform analysis for its effluent. Board staff will be requiring periodic outside laboratory verification to ensure compliance with Board Orders. A technical report of process and source control alternative study also was submitted to the Regional Board. This report screens and evaluates the candidate process alternatives to minimize hydrocarbon discharges for the IMCC Trona boric acid manufacturing process. Board staff is reviewing these reports and will provide comments.

Compliance with Board Order

Daily reporting data from IMCC shows that interim effluent limitations set forth in the WDRs have not been exceeded during the month of October 2001. Thirty-four bird deaths were reported during the same period. As part of the WDRs (Board Order No. 6-00-52A1), IMCC has submitted the Argus Plant Best Management Practices (BMPs) Implementation and Conceptual Design Plan to the Regional Board. IMCC proposes to increase inspection and follow-through with necessary repairs and maintenance to reduce oily discharge from the process equipment.

Basin Plan Beneficial Uses

IMCC submitted a Report of Comparison of Searles Dry Lake Ephemeral and Process Pond Brine Composition to the Regional Board. The information IMCC developed in the report will be instrumental in evaluating appropriate beneficial uses for surface water of Searles Lake.

19. *Yucca Mountain Moves Another Step Closer to Licensing* - Tim Post

On October 26, 2001, the Nuclear Regulatory Commission (NRC) announced that it had signed off on changes to the

suitability guidelines proposed by the Department of Energy (DoE). The proposed changes involve the 1984 Geologic Repository Standards that specified the mountain's natural geologic features must contain the high-level radioactive waste. The revised guidelines proposed by DoE depend on engineered barriers and storage containers for waste containment rather than an effective geologic barrier.

The State of Nevada and environmental groups are strongly opposed to these changes charging they are inconsistent with the 1984 Standards. They also charge that if the revised guidelines are adopted, it will make it easier for Yucca Mountain to be found suitable as a repository. Nevada also charges that this is just one more change, in a litany of changes, DoE has proposed over the years whenever a technical problem is encountered with Yucca Mountain that cannot be overcome without changing the rules for siting.

DoE is expected to finalize its revised guidelines within a month. After a review of the guidelines by the Office of Management and Budget, Secretary of Energy would decide whether to recommend the site to the President for approval. If the site is approved, the NRC will begin reviewing DoE's license application to operate the facility.

20. *Hinkley Sampling Events Detect High Nitrates* - Patrice Copeland

As part of a joint effort between the Regional Board, the California Department of Health Services and the California Air Resources Board, Board staff from the Victorville office performed water sampling

to measure hexavalent chromium in the Hinkley area during August 2001. In addition to hexavalent chromium, the suite of analytes for this sampling event included general inorganics such as chloride, nitrate as nitrogen, sulfate, and total dissolved solids.

Analytical results detected high nitrate as nitrogen levels (at 62 mg/L), in the Hinkley area. Elevated nitrate levels (55 mg/L) were again detected during a confirmation sampling round in September 2001. The state drinking water standard for nitrate as nitrogen is 10 mg/L. A nearby dairy and agricultural operation are a possible source of the nitrate problem.

I issued a 13267 letter to Mr. Paul Ryken (owner/operator) the nearby dairy operation requesting a technical report regarding waste disposal practices. The requested information has been received. Regional Board staff has met with the dairy operator and is requesting that the dairy operator submit a work plan for ground water monitoring. The dairy operator is cooperative.

21. ***United States Geological Survey (USGS) Proposes Study to Evaluate Naturally Occurring Total and Hexavalent Chromium Underlying the Sheep Creek Fan, San Bernardino County - Jehiel Cass***

The USGS proposes a three-year study to evaluate the occurrence and concentration of chromium, arsenic and other trace elements in ground water along a flow path from recharge areas in the San Gabriel Mountains to discharge areas near El Mirage Dry Lake (Sheep Creek fan). These elements can occur at high concentrations in varied pH conditions in ground water situations. Geochemical and chromium isotopes will be used to distinguish between natural and

anthropogenic sources. The USGS reports that preliminary data collected in the western part of the Mojave Desert show that chromium is present in naturally occurring concentrations as high as 28 ug/L in ground water and that 80 percent of chromium is in the form of hexavalent chromium (Cr VI). As a result of aquifer geochemistry, chromium, arsenic and other trace elements sorbed on surface coatings of mineral grains are soluble and may be present in water at high concentrations relative to respective drinking water standards. The USGS believes that the ratio of the ⁵³Cr to ⁵⁴Cr isotope is very small in nature and may shed light on the amount of Cr VI that is naturally occurring. Board staff met in early November with the USGS, Department of Toxic Substances Control staff and Ducommun Aerostructures (formerly Aerochem). Both agencies expressed an interest in participating in the study. The USGS also invites participation in the study by State Water Project water purveyors (Mojave Water Agency and Antelope Valley-East Kern Water Agency) and other drinking water purveyors so the study can be expanded to include other regions of the High Desert.

22. ***Treatability Study Site 282, Operable Unit No. 5, Edwards Air Force Base, Kern County - Elizabeth Lafferty***

A Treatability Study for Site 282 has been completed to determine the most economical and feasible methods to remediate a mix of contaminants including rocket propellants such as: hydrazine and ammonium perchlorate; solvents such as tetrachloroethylene (PCE), trichloroethylene (TCE), freon, carbon tetrachloride (CCl₄) and methyl ethyl ketone isopropyl alcohol; and fuels such as diesel, leaded and unleaded gasoline, and JP-4 that were released to soil and ground water. The

four remedial technologies evaluated were: natural attenuation, in-situ chemical oxidation, enhanced in-situ bio-remediation, and dual vapor extraction combined with above-ground treatment. A no action alternative was also evaluated.

The enhanced in-situ bio-remediation was determined to be the most economical and technically feasible alternative to implement ground water cleanup to nondetect levels. This innovative technology employs extraction of solvent-impacted ground water, addition of nutrients (canola oil or oleate, a fat) and bacteria to the extracted water, and re-injection of the amended ground water to promote the anaerobic degradation of solvents and perchlorate. Canola oil is added to provide electron donors to extracted ground water in order to stimulate the microorganisms to metabolize the target contaminants.

Four pairs of ground water extraction and re-injection wells are proposed to circulate water through the treatment process for approximately six months. Ground water models were used to identify the most effective locations for the extraction and reinjection wells based upon the highest TCE, CCl₄ and perchlorate concentrations. After the six-month test period, the technology's effectiveness will be evaluated and changes made if necessary. Assuming the system is effective, it will continue operating until the site cleanup is complete.

23. *Main Stop Property Underground Storage Tanks (USTs) Status – Joe Kenny*

The Main Stop Property Inc., the responsible parties (RP) for the Main Stop Property removed four gasoline USTs in 1994. The site investigation was overseen by Inyo

County from 1994 to 1996. The site was referred to Regional Board by the County as a ground water case in 1997. Since 1997, the Regional Board has been overseeing the ground water cleanup and reviewing monitoring data from the three onsite and three offsite wells. Monitored natural attenuation was chosen for the remedial method. A decreasing trend was noticed from ground water monitoring for benzene, toluene, ethylbenzene, xylenes and total petroleum hydrocarbons. However, concentrations of benzene remain slightly above the maximum contaminant level in one monitoring well (MW-2) located near the northeast corner of the site where the infrastructure of utility lines and sidewalks prevented full removal of contaminated soils.

In June 2001, the RP wrote to the Executive Officer, the State Water Resources Control Board (SWRCB) and the Governor's office for assistance on site closure, after the Regional Board staff denied site closure. The RP's letter included chronology of the communication that occurred between January 2000 and July 2001 related to the site closure. The RP is under the impression that everything requested has been fulfilled to allow site closure. The facts of the case are contrary and do not support site closure. Not mentioned was the fact that after the request for site closure, quarterly monitoring ceased for one year.

In a letter to the RP, Regional Board staff described why site conditions do not justify site closure and that quarterly monitoring is to be resumed with a technical report due December 15, 2001. The last sampling report dated August 2001, shows that the benzene level in MW-2 is still above the maximum contaminant level. The chief of the Division of Clean Water Programs of the SWRCB responded to the RP's letter on September

28, 2001, indicating that if the Regional Board determines that the site is not ready for closure, the RP can petition the SWRCB staff for site closure.

Regional Board staff intend to review the results of the next quarterly monitoring report due by December 15, 2001 to see if there is a further decreasing benzene trend. Regional Board staff will suggest that the RP use a conceptual model to estimate the time for natural attenuation to remediate the contaminants in the ground water to achieve water quality objectives. If it can be demonstrated that benzene remediation will occur in a reasonable time, then Regional Board staff will close this site.