



# EXECUTIVE OFFICER'S REPORT

March 2013

## NORTH BASIN

### 1. Meyers Landfill BMP Winter Repairs, El Dorado County - James Brathovde

#### Background

Meyers Landfill was operated by El Dorado County on US Forest Service (USFS) land between 1946 and 1971. After contaminants were detected seeping into groundwater, the USFS initiated lead agency actions under the Comprehensive Environmental Liability and Compensation Act (CERCLA). After years of litigation, El Dorado County and the USFS consolidated landfill waste and completed landfill cap construction. Off-site stormwater from upland drainages is diverted around the landfill. Before the October 15 grading deadline, the soils surrounding the landfill were sprayed with a tackifier, vegetation on the landfill cap soil was starting to take hold and approximately 5,000 linear feet of straw waddles and fiber-mats were installed.



(Summer 2012) Before



(December 2012) After

#### Event

A severe precipitation event (2.2 inches in one day) occurred in early December 2012, which partly eroded the newly vegetated cap. Stormwater undermined a portion of the southeast drainage channel allowing sand and silt to fill the southeast drainage channel and sedimentation basin (see before and after photos). The channel and basin captured the sediment and prevented it from entering Saxon Creek, a tributary of Lake Tahoe.

In late January 2013, under favorable ground weather conditions, the county mobilized a construction crew to excavate the sediment from the channel and basin. The deposited sediment, consisting mainly of glacial sand and silt, was removed to the practical extent possible by hand labor and a tracked excavator. Approximately 450 cubic yards were excavated and stockpiled in an

internally drained borrow area within the CERCLA boundary. After removing the sediment, the contractor built up the first two check dams with additional rock, thereby increasing the sediment capture capacity.

The County will be conducting site inspections after each rain event thru the remainder of the winter and into spring and will immediately report the inspection results to both the USFS and Water Board. The County and USFS will coordinate with Water Board staff prior to any remedial actions needed to correct damaged BMPs and to prevent discharges to Saxon Creek.

2. **Emerald Bay Asian clam control project update** – *Daniel Sussman*

In October-November 2012, five acres of rubber bottom barriers were successfully placed in and adjacent to the entrance of Emerald Bay. Initial monitoring indicates barrier effectiveness in eradicating Asian clam populations. The barriers were supplemented with woven jute mats placed beneath the barriers to aid in reduction of dissolved oxygen and the maintenance of a low-to-no dissolved oxygen environment, in the dynamic environment of the mouth of the bay. Barriers were placed by a professional diving company aided by an industrial barge operator out of Tahoe City. These same contractors will be employed to remove the barriers in fall 2013.

3. **2<sup>nd</sup> Rangeland Science Symposium and 8<sup>th</sup> Annual California Rangeland Conservation Coalition Summit (Rangeland Summit)** – *Carly Nilson and Cindy Wise*

Along with ranchers, researchers, managers, conservationists and other agency representatives, staff attended the Rangeland Summit on January 24<sup>th</sup> and 25<sup>th</sup>, 2013, at University of California, Davis. The theme of the Summit "Partnerships Among Ranchers, Conservationists, and Scientists Provide the Most Relevant Knowledge for Managing Rangelands" set a venue to

network and to discuss contemporary challenges and opportunities in managing rangelands. Some of the major topics included stewardship for future generations, targeted grazing and individual experiences, invasive weeds, conservation practices for wildlife and water, and collaborative partnerships with agencies and non-profits. To learn more about the Rangeland Summit and to view slides from the presentations, please visit:

<http://www.carangeland.org/calendarevents/2013summit.html>

Of specific interest to staff was information on a current survey being conducted by U.C. Cooperative Extension (UCCE) focusing on how ranchers make management decisions, determine priorities and rank their ranch management goals. This type of information will help staff to better mesh, when possible, water quality protection practices with other types of ranch management practices. Staff also learned how ranchers are exploring ways to capitalize on ranch environmental benefits other than from livestock sales, such as carbon credits, fuels management, and invasive weed control.

The Sierra Business Council (SBC) and UCCE, our partners in the "Rivers and Ranches" Proposition 84 Agricultural Water Quality Grant, also attended the Rangeland Summit. The SBC participated in the Summit's poster session to distribute materials soliciting ranchers to participate in implementing grazing management practices to protect water quality on their property on a cost-share basis with funding from the grant. As a result of this effort, the SBC will be meeting onsite with several ranchers in March that are interested in participating in the Rivers and Ranches program.

4. **Anticipated Progress with Lake Tahoe Nearshore Issues** – *Daniel Sussman*

The Nearshore Science Team (NeST) continues to work towards a final nearshore report for the *Evaluation of Nearshore Ecology and Aesthetics* grant (nearshore grant). The contents of the report are highly anticipated, and will be used to inform future monitoring plans and management strategy for Lake Tahoe's nearshore areas by the Water Board, Tahoe Regional Planning Agency, and Nevada Division of Environmental Protection.

The nearshore grant has, unfortunately, been plagued by delay. The conversations between the Nearshore Agency Working Group (NAWG) and the NeST that were prompted by these delays should result in a stronger final product. Grant deliverables include a standardized definition of the nearshore, an annotated bibliography of all nearshore research and historical mention of nearshore conditions, an assessment of current nearshore standards and indicators, including their usefulness to tracking and managing nearshore conditions, a conceptual model and indicator framework of lake processes influencing nearshore conditions, a monitoring plan framework, and recommendations for nearshore specific standards, indicators, and management actions.

The NAWG anticipates meeting with the NeST and with agency executives to review the nearshore final report in spring 2013. After report finalization, staff and management will consult with our sister agencies to strategize how best to address water quality and resource management in Lake Tahoe's nearshore. Staff will also prepare a briefing for the California Legislature as requested in the 2011-2012 Budget Bill. The Bill requires that within 180 days of receiving the final report, Lahontan will report to the Legislature, a rough strategy and timeline for addressing the nearshore, based on the report's implications and

recommendations. Staff anticipates such a report reaching the Legislature by fall 2013.

For additional information, please see Executive Officer Reports from December 2011 and April 2012, and the October 2012 Board minutes

5. **Upper Truckee River Marsh Restoration** – *Laurie Scribe*

During the February Board meeting Staff noted that there are several Upper Truckee River restoration projects in the planning and design stages. Staff received a draft Environmental Impact Report (EIR) for the Upper Truckee River and Marsh Restoration Project. This project proposes restoration of the Upper Truckee River between Highway 50 and Lake Tahoe in the City of South Lake Tahoe. The California Tahoe Conservancy is the lead agency for this project. The draft EIR describes five different alternatives, with no preferred alternative selected. The preferred alternative will be defined following evaluation of public comments and included in a final EIR. Staff are reviewing the draft EIR and will submit comments to the lead agency. Staff anticipates permitting this project in 2014. Water Board issued permits and authorizations will likely include an NPDES construction stormwater permit, a Cleans Water Act section 401 Water Quality Certification, and Basin Plan Prohibition Exemptions.

## SOUTH BASIN

### 6. **Caltrans Highway 58 Expansion Project, San Bernardino County -**

*Lisa Dernbach*

The California Department of Transportation (CALTRANS) is proposing to widen a portion of State Route 58 (SR-58) from a two-lane conventional highway to a four-lane expressway for approximately 2.8 miles through the unincorporated community of Hinkley, in San Bernardino County, west of Barstow. The expressway would include constructing two interchanges: one at Hinkley Road and the other at Lenwood Road. The project is needed to relieve traffic congestion and improve public safety.

A Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) prepared for the project was released in January 2013 for public comment. The DEIR/EIS tells why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The initial schedule shows the DEIR/EIS being adopted in 2014 and project construction starting in 2015.

Water Board staff attended a public meeting at the Hinkley School in January, put on by Caltrans concerning the Highway 58 expansion alternatives being considered. The preferred alternative involves building a four-lane expressway one-half mile south of the current location. This preferred location goes through one of the Pacific Gas and Electric Company's (PG&E) in-situ remediation areas for chromium cleanup in groundwater. Water Board staff and Caltrans had communicated in the past about chromium contamination to groundwater and ongoing cleanup efforts.

In February, Water Board staff submitted comments on the project to Caltrans citing areas of known soil and groundwater contamination that might be encountered during project construction. The comments stated that disturbance or destruction to PG&E's monitoring well network and/or remediation system will likely need to be replaced so that monitoring and cleanup actions can continue. In addition, Caltrans was made aware of areas of nitrate pollution from Hinkley dairies. Caltrans was also reminded to comply with state general permits, such as for construction and stormwater.

Water Board staff will follow the project to ensure that water quality is protected and ongoing and future cleanup actions can continue.

### 7. **State Water Board Nitrate Report to the Legislature, February 20, 2013 -**

*Mike Plaziak*

The State Water Resources Control Board (State Water Board) released its nitrate report entitled "*Recommendations Addressing Nitrate in Ground Water*" to the Legislature on February 20, 2013. The report examines the impact of nitrates on community access to safe, affordable drinking water. In its report, the State Water Board makes 15 specific recommendations to address the issues associated with nitrate contaminated groundwater.

Recommendations are grouped into four main categories: 1) providing safe drinking water, 2) monitoring, assessment, and notification, 3) nitrogen tracking and reporting, and 4) protecting groundwater.

## Background

The report is a result of legislation SBX2 1 passed in 2008 to set up "pilot projects" intended to help improve understanding of the causes of groundwater contamination due to nitrate in the Salinas Valley and Tulare Lake Basin. As a first step in the development of the pilot projects, the State Water Board contracted with the University of California, Davis in 2010 to conduct an independent study on these nitrate pilot projects.

## Recommendations

The most critical recommendation in the report is that a new funding source be established to ensure that all Californians, including those in disadvantaged communities, have access to safe drinking water, consistent with AB 685 (Chapter of 524 Statutes of 2012). Other recommendations include identification of nitrate high-risk areas and subsequent Water Board coordination with California Department of Food and Agriculture to convene a task force to evaluate the efficacy of a nitrogen mass balance tracking system in nitrate high-risk areas. It also addresses, on a more global level, the need for a greater look at regional groundwater contamination issues that serve as a barrier for safe drinking water for some state residents.

Many recommendations in the report will fall into existing programs and funding sources, but the increased level of effort to implement some of these recommendations will require augmentation of funding sources. Moreover, some recommendations such as the provision of safe drinking water to disadvantaged communities will require a new funding source(s) in order to meet the intent of AB 685 which specifies the State's policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking and sanitary purposes.

Lastly, the report recommends the Water Boards evaluate all existing Waste Discharge Requirements to determine whether existing regulatory requirements at regulated facilities is protective of nitrate groundwater quality.

## Conclusion

The UC Davis investigation of nitrate in the Salinas Valley and the Tulare Lake Basin found that traditional groundwater remediation of nitrate to be infeasible in the study area. The recommendations of the State Water Board recognize the remediation challenges of nitrate groundwater pollution and focus its 15 recommendations on the provision of safe drinking water and prevention of further nitrate groundwater contamination.

### 8. **Groundwater Summit and Rapid Improvement Event Meeting at Edwards Air Force Base** - *Cindi Mitton*

The Air Force held a two-day *Groundwater Summit and Rapid Improvement Event* meeting among senior-level representatives of the Air Force, USEPA, Department of Toxic Substances Control (DTSC), State Water Resources Control Board, and Lahontan Water Board.

The meeting was well attended and included a one-day field tour. The tour provided for a better understanding of those sites where the Air Force has been able to implement active cleanup and other sites where complete cleanup may not be possible. The tour also let people see the magnitude of the plumes (many are over a mile long) and the challenging hydrogeology at certain sites. The meeting was held February 20 and 21, 2013.

For the certain sites at Edwards Air Force Base complete cleanup of groundwater may not be technically feasible. For these sites, the Air Force may request that the regulatory oversight agencies grant a technical impracticability waiver/containment zone designation.

The meeting provided an opportunity for management staff of the Air Force and the regulatory agencies to network and brainstorm ways to move as expeditiously as possible to reach decisions about the amount of cleanup appropriate for the most challenging sites. While there are many competing issues and priorities associated with cleanup of these sites, the meeting focused on finding areas of mutual agreement among the parties and discussing next steps to continue to move forward. Issues such as what data are required to support cleanup decisions, the costs associated with activities already implemented, what is needed to show technical infeasibility, and applicable laws and requirements were discussed.

An outcome of the meeting was the formation of three subcommittees made up of Air Force and agency staff. Each subcommittee will address one site or unit with the goal of developing an Action Plan for gathering the necessary information to ultimately develop a Record of Decision. For many of these sites, additional field work will be needed to gather the necessary information.

9. **Searles Valley Minerals, Compliance Status** - *Omar Pacheco*

**Spill Events**

Searles Valley Minerals (SVM) did not have any significant spills at any of the three plants during this reporting period. Good housekeeping practices and conscientious operation effectively eliminated spills during this period.

**Effluent Quality**

Monitoring data from the Trona, Argus, and Westend Plants indicate compliance with the waste discharge requirements throughout the annual reporting period with two exceptions. A daily effluent sample collected from Argus's end of pipe discharge on April 26, 2012, contained a concentration of total recoverable petroleum hydrocarbon (TRPH)

at 10.10 milligrams per liter (mg/l) above the limit of 8.5 mg/l. On a separate occasion, a daily effluent sample collected from Argus's injection well contained a concentration of TRPH at 10.3 mg/l above the effluent limit of 8.5 mg/l. As corrective action, the plant best management practices, plant operations, and spill log incidents were inspected and found no evidence that identified the cause for the exceedance for both incidents. Subsequent sampling results showed the discharge to be in compliance. Board staff reviewed the magnitude of the exceedance and SVM's response actions, and are satisfied that the response was appropriate. No Further Action is recommended for these violations. Additionally, the company is implementing the projects required by the Administrative Civil Liability Order.

**Bird Mitigation Project**

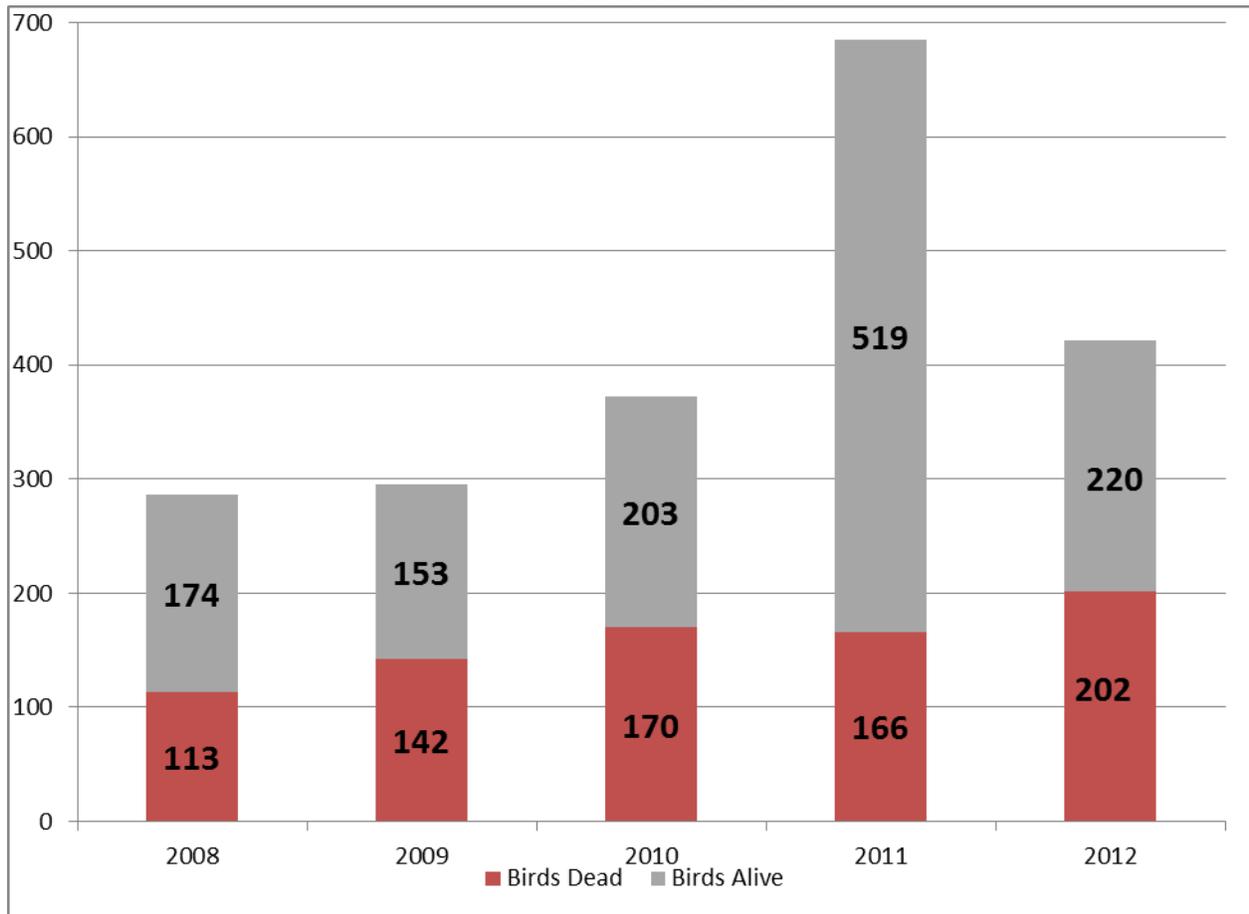
The off-site Bird Mitigation Project located at Owens Lake continued operation. The Project consists of three ponds, one 80 acre pond, one 15-acre pond, and one 35-acre pond. Operation and management activities are performed by the Dirty Socks Duck Club. These activities include well operation and maintenance, repair strategies for berms and roads, and water management for the benefit of waterfowl and vegetation. Searles Valley Minerals contributes resources to restore bird habitat and to further mitigate avian mortality. Operation and maintenance costs are being met yearly by Searles Valley Minerals. Vegetation planted along the edges of the ponds is healthy and growing. The vegetation along the shore line has been fully established with a variety of plants. The shoreline continues to be wetted and maintained. Pond water levels have been maintained at the maximum water level for over four years. Birds are using the ponds and nesting along the shore line. Current operation and management practices are expected to maintain a long-term preservation of a well-developed bird habitat.

## **Bird Report**

SVM continues daily bird monitoring, hazing, rescue, and rehabilitation activities with the assistance of personnel from Flys Free Wildlife Rescue. Bird mortality did not exceed the annual California Department of Fish and Wildlife's (DFW) take permit. The total for birds alive (rescued and released) is below the previous year presumably because of a lower number of migrating birds. The bird mortality total is above last year's bird mortality total. However, the average five-year bird mortality total, beginning in 2008, did not exceed DFW's average five-year bird mortality limit.

A graph showing historical bird data is provided at the end of this report.

### SVM BIRD DATA



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## Lahontan Regional Water Quality Control Board

### Status of Actions For PG&E Hinkley Chromium Contamination February 2013

#### Enforcement

1. **Supplemental Environmental Project (SEP):** The ACL settlement adopted by the Board on March 14, 2012 allows PG&E to spend at least \$1.8 million to update the drinking water system at the Hinkley School by the end of 2017. PG&E continues to make progress on the water system completion as reported in the February quarterly report. Since the Barstow Unified School District voted to close the Hinkley School, the Water Board will plan to meet with the District and PG&E to consider next steps. The settlement requires PG&E to pay any unexpended funds to the State Water Board if the project is not completed.
2. **Cleanup and Abatement Order for Whole House Water Supply:** Revised Order (R6V-2011-0005A2) issued on June 7, 2012.
  - a. PG&E has installed and started operating whole house water (WHW) systems on two properties. The ion exchange systems were removing hexavalent chromium from well water but the reverse osmosis system was showing hexavalent chromium in water at sinks. The WHW systems have been installed on a few other properties but are not operating.
  - b. PG&E submitted a request to have the monitoring program for the WHW system revised to reduce the number of samples collected so as to reduce the inconvenience to residents. PG&E submitted another request to suspend WHW system requirements for 90 days while the replacement water options are re-evaluated following public complaints. The Water Board is asking for public comments on PG&E's two requests **by March 20, 2013**. PG&E's letter can be found on the "PG&E Hinkley Chromium Cleanup" page on the Water Board's website at [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan).
3. **Cleanup and Abatement Order for Plume Delineation:** Amended Order (R6V-2008-0002A4) issued on January 8, 2013 requires PG&E to delineate the extent of the chromium plume in groundwater and determine threats to domestic wells. PG&E has petitioned the CAO to the State Water Board. Until the State Water Board makes a decision, PG&E is obligated to comply with tasks and deadlines in the CAO.

As required in the CAO, PG&E submitted a workplan for conducting additional investigations to define the extent of chromium in groundwater. The workplan will be discussed at a public meeting to be held at the Hinkley School on **March 14 at 6:00 PM**. The CAO also requires that beginning March 15, 2013, PG&E must conduct monthly sampling of domestic wells threatened by the plume for six months to evaluate potential for increasing chromium concentrations. The domestic well monitoring results and full plume delineation findings are due in a report by October 30, 2013.

### **Investigative and Reporting Orders**

- 1. Chromium Plume Boundary:** The fourth quarter 2012 chromium plume map is posted on the Water Board website at: [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan), on the "PG&E Hinkley Chromium Cleanup" page, at the bottom of page.
- 2. Chromium Plume Containment**  
Pursuant to the March 2012 Settlement Agreement, PG&E submitted the monthly Plume Capture Report on February 15, 2013 evaluating chromium capture at Thompson Road. The report shows plume capture in groundwater is being achieved in compliance with Water Board orders.
- 3. Manganese Plume Investigation & Cleanup**
  - a. Investigative Order (R6V-2012-0060)** was issued to PG&E on December 21, 2012 to implement manganese testing in monitoring wells near the in-situ remediation zones (IRZ) and to submit a workplan to install monitoring wells to close perceived gaps along the IRZ boundaries. In compliance with the Investigative Order, PG&E submitted the workplan proposing additional investigations. The workplan will be discussed at a public meeting to be held at the Hinkley School on **March 14 at 6:00 PM**.
  - b. Investigative Order (R6V-2013-0001)** was issued to PG&E on January 11, 2013 to submit (1) information by January 31 about its proposed bottled water testing program and start date, (2) an amended report by March 1 with information about the whole house water replacement supply program for houses using filter treated water, and (3) a report by March 12 evaluating the cause(s) of hexavalent chromium detections in the reverse osmosis systems. PG&E has complied with the first directive.
- 4. Community Complaints of Manganese in Domestic Wells**  
In response to community complaints about black water coming from domestic wells, a Manganese Working Group was formed to attempt to resolve the problem. The Group has met three times since December 2012. Water Board staff, along with members in the Working Group, will be holding a public information meeting on **March 14 at 6:00 PM** in the Hinkley School to discuss the preliminary findings and offer suggestions to reduce the public's exposure to manganese in well water.

### **Status of Environmental Impact Report and Actions for Comprehensive Cleanup**

Water Board staff are finalizing the EIR, including written responses to comments. The final EIR will be circulated for 30 days during April and May 2013.

**May 8, 2013:** Water Board meeting in Barstow to consider certifying Final EIR and providing direction concerning a general permit.

**Summer 2013:** Water Board staff will develop draft site-wide General Permit and a new Cleanup and Abatement Order for comprehensive cleanup of chromium in groundwater, based on the alternatives and analysis in the final EIR. The draft Permit and Cleanup Order will be circulated for a 30-day public review and comment period.

### **Status of Revised Chromium Background Study**

Water Board staff, members of the CAC and its IRP, PG&E and its consultants, and Dr. John Izbicki of the US Geological Survey (USGS) continue to meet to discuss moving forward on the revised chromium background study. Dr. Izbicki provided recommendations on data collection and analyses. Water Board staff are working with PG&E, the USGS, and the State Water Board to put in place contracts and agreements for PG&E to fund the USGS to aid in developing and implementing the revised background study. Progress on this topic will be reported as it develops.