

EXECUTIVE OFFICER'S REPORT

March 2002

NORTH BASIN

1. ***Bridgeport Reservoir TMDL Status:
Background and Meeting of February 25,
2002 - Dale Payne***

Bridgeport Reservoir is located in the Bridgeport Valley (East Walker River Hydrologic Unit #603.300) at the town of Bridgeport. Private ranching is the prevailing land use in the area. The Bureau of Land Management and USDA Forest Service also have land holdings in the watershed and manage these lands for public use. In addition, the Walker River Irrigation District owns land in the valley and manages the reservoir water level for irrigation in Nevada. Bridgeport Reservoir and the East Walker River downstream of the reservoir are renowned for trophy trout fishing, which is an important component of the local economy.

The Bridgeport Reservoir was 303(d)-listed in 1994 for nutrients, sediment, and siltation. It was added to the 303(d) list as a result of excessive algae growth within the reservoir. Over abundance of nutrients in the reservoir is being attributed as the cause for this nuisance condition. The TMDL will address nitrogen, phosphorous and, potentially, sediment and silt, since they may act as a transport mechanism for these nutrients. The desired condition of the reservoir is a productive, but not overly-productive, water body (mesotrophic, but not eutrophic) that will support the fishery and recreational

beneficial uses. This equates to reduced amounts of algae and improved water quality and habitat for aquatic species and water-based recreation.

Sources of nutrients in the Bridgeport watershed may include livestock manure, fertilizers, irrigation return, septic systems, sewage spills or leaks and/or wastewater disposal, atmospheric deposition and natural sources such as geothermal input and wildlife. Sources of sediment and silt may include stream bank erosion, construction or cleaning of irrigation ditches, irrigation return, erosion from grazed uplands and erosion from roads.

An informational meeting for the Bridgeport Reservoir Total Maximum Daily Load (TMDL) project was held on February 25, 2002 at the Regional Board office in South Lake Tahoe. The agenda covered a summary of the TMDL process, known facts about the Bridgeport watershed, information needs, and current and planned TMDL activities. Dr. Alex Horne of UC Berkeley presented initial findings of a limnological study conducted under contract with the Regional Board. Additional information was provided by Dale Payne, Regional Board project lead for the Bridgeport Reservoir TMDL. Present at the meeting were members of the ranching community of Bridgeport, researchers from UC Berkeley, and staff from the US Geological Survey, USDA Natural Resources Conservation Service, Walker River

Irrigation District, UC Davis Extension, UC Cooperative Extension, and California Department of Water Resources. The meeting set the stage for the TMDL and gave attendees a briefing on what should be expected throughout the TMDL process. Each group had an opportunity to ask questions and voice expectations or concerns regarding the TMDL.

The technical TMDL and conceptual implementation plan is scheduled for completion in 2004. The final TMDL and implementation plan is scheduled to come before the Regional Board for adoption in July 2005.

2. ***Caltrans District 10 Traction Sand Specifications – Bud Amorfini***

Staff has sent a memo regarding that Caltrans District 10 evaluate the characteristics of traction sand used on roads located in the West Carson River watershed and consider revising its sand specifications to help protect water quality. The request was prompted by the proposed addition of the West Fork Carson River to the Clean Water Act section 303(d) impaired water body list. The West Fork Carson River does not meet the water quality objectives for total phosphorus in the segment from its headwaters to Paynesville. Caltrans applies significant quantities of traction sand along the Highway 88/89 corridor adjacent to the river and it may be possible to significantly reduce the phosphorus load to the river by minimizing possible sources.

I understand that Caltrans District 10 has already performed a preliminary analysis of traction sand sources and quality, and found that there are cost-competitive sources of materials with relatively lower total phosphorus content. Results of work

performed by Caltrans District 3 (Deicer Report for Fiscal Year 1999/00, Caltrans District 3) indicate that material sources on the east slope of the Sierras have significantly less total phosphorus content than material sources on the west slope of the Sierras. Several of the low-phosphorus sources are located in the Carson Valley/Reno area, and the Woodfords Maintenance Station from which road deicing activities for the Highway 88/89 corridor are based.

Staff requested that Caltrans provide information on sand currently used in the West Carson River watershed, evaluate the feasibility of using alternative sources with lower total phosphorus content, and provide a schedule for implementing any revised sand specifications determined to be appropriate. I look forward to working with Caltrans in this matter such that there is sufficient time to prepare for the 2002/2003 winter conditions.

3. ***Update on aquatic pesticides—Eurasian watermilfoil in Lake Tahoe and Dept. of Fish & Game rotenone use – Jason Churchill***

The Regional Board heard an item at the January 2002 meeting regarding a proposal by the Tahoe Keys Property Owners' Association (TKPOA) to apply aquatic herbicides in the Tahoe Keys, for control of the invasive weed Eurasian watermilfoil, and requested periodic updates on this matter. Since the January Board meeting, we have not been contacted by the TKPOA regarding this matter and no formal proposal has been received. I will not plan to provide any further updates unless the status of the project changes.

The California Department of Fish & Game (DFG) is proceeding with plans to use the fish toxicant rotenone for restoration of the threatened Paiute Cutthroat trout in the Silver King Creek watershed, Alpine County, this fall. The DFG has filed for coverage under the statewide aquatic pesticides NPDES General Permit. Staff has informed DFG that this project will be eligible for General Permit coverage provided that the DFG also meets all Basin Plan provisions and Memorandum of Understanding (MOU) requirements applicable to rotenone use. The DFG submitted a Monitoring and Reporting Plan pursuant to General Permit requirements. The plan is now being reviewed by staff. We expect to receive additional information from DFG prior to the project. I will notify the DFG that NPDES General Permit coverage will be withheld until I have reviewed the information and determined that the project meets Basin Plan and MOU requirements.

SOUTH BASIN

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

Compliance Status

Daily reporting data from IMCC shows that interim effluent limitations set forth in the Waste Discharge Requirements (WDRs) were not exceeded during the month of February 2002. Two bird deaths were reported during the same period. Bird deaths have declined recently. The reason may be that this time of year is between migratory seasons and there are fewer birds. As part of the WDRs (Board Order No. 6-00-53A2), IMCC has submitted a Part III Hydrocarbon Removal Pilot Study Work Plan. Regional Water Quality Control

Board staff (Board staff) is reviewing this Work Plan and will provide comments.

Basin Plan Beneficial Uses

IMCC has submitted a report on the mortality of birds at Searles dry lakebed and evaluation of Searles Lakebed as avian habitat prepared by Dr. Michael Fry, Department of Animal Science of UC Davis. The report includes information regarding the mortality of birds, the environment at Searles Valley, and the exposure risks to wildlife from contaminated areas in Searles Valley. The information summarized in the report will be reviewed when evaluating appropriate beneficial uses for surface water of Searles Lake. Board staff forwarded the report to the Department of Fish and Game (DFG) for comments on the Notice of Preparation for the Basin Plan. IMCC contests that Searles Lake is a water of the United States. IMCC also commented on the proposed beneficial use definitions. Board staff is reviewing these and other comments received.

5. ***Mojave River/El Mirage Dairy Issues – Steve Fischenich***

Tentative WDRs have been issued for Meadowbrook Dairy and A&H Dairy (El Mirage) and are planned for your consideration at the April 2002 Board Meeting. The tentative WDRs require an updated Stormwater Pollution Prevention Plan (SWPPP), a Best Management Practices (BMP) Plan and a Waste Management Plan (WMP), along with installation of ground water wells.

Board staff is currently reviewing information submitted by the Desert View Dairy (Hinkley) in response to my 13267 letter regarding the characterization of

nitrate concentrations in ground water and submittal of waste management data.

N&M Dairy (Helendale), located adjacent to the Mojave River, recently submitted an addendum to their Well Installation Work Plan that addresses Board staff's earlier comments. Three wells are proposed to monitor the ground water downgradient from the wastewater storage ponds, corrals and manure storage areas. One well will be utilized to determine background conditions.

6. ***Hot Creek Hatchery Bioassessment – Kai Dunn***

In WDRs, the Regional Board included a requirement that the DFG Hot Creek Hatchery provide an annual assessment of the biological condition of receiving waters downstream of the hatchery. The first annual report, completed in December 2001, indicated that biological integrity is impaired in Hot Creek below the hatchery, as evidenced by the presence of macroinvertebrate assemblages indicative of organic enrichment. The report also points out that the build-up of organic detritus in Hot Creek below the hatchery is problematic because it is a spring-fed system, having a constant flow, and therefore no natural mechanism for periodic flushing of bottom sediments. Due to this lack of flushing flows, detritus from the hatchery settles and accumulates, smothering native instream fauna and harboring an abundance of pollution-tolerant organisms (i.e., tubificid worms).

DFG has changed the following procedures to improve the hatchery effluent: 1) pond cleaning practices have been modified to lessen the nitrogenous content of the effluent; 2) water re-circulation systems have been replaced with an oxygen injection

system; and 3) DFG has discontinued using the nursery ponds to eliminate waste products from entering the main raceway systems.

Staff evaluation indicates that at least localized impacts have occurred to Hot Creek as a result of the hatchery discharge. DFG is continuing bioassessment monitoring to evaluate the effectiveness of its operation changes to improve downstream conditions. Staff will schedule a site visit and meeting at the facility in the near future to work with DFG regarding facility operations and discharge monitoring.

7. ***Mojave Water Agency - Regional Water Management Plan Update Status - Jehiel Cass***

In June 1994, the Mojave Water Agency (MWA) adopted a Regional Water Management Plan (RWMP) recommending a number of water management strategies – both structural and non-structural features – to address the availability and supply of water to users within the Mojave Watershed served by the MWA. Planning began in 1991. Many of the RWMP recommendations have been implemented or are in the planning phase. For example, the Morongo Basin and Mojave River Pipelines were constructed to bring State Water Project water to the Yucca Valley and Barstow areas, respectively. An extension of the Mojave River Pipeline east of Barstow is planned. The MWA has begun to purchase and deliver imported State Water Project water to these areas as additional water becomes available (and the funds to purchase water). Increased monitoring has begun through cooperative efforts with the US Geological Survey. Cooperative agreements are also beginning with the Victor Valley College to develop a

Geographic Information System. This system is hoped to be beneficial to all stakeholders and will assist policy makers in making future water use decisions. Pilot projects are planned to determine the feasibility of recharging depleted ground water aquifers by percolating State Water Project water in ponds adjacent to the State Water Project aqueduct.

In early 2001, the MWA began Phase I of the RWMP update. The firm Saracino-Kirby-Snow was hired to assist in the first phase, which is to involve stakeholders' participation in a Technical Advisory Committee in determining what issues should be addressed in the update. The update will have an increased emphasis on water quality impacts of each of the management alternatives evaluated. In July 2001, an RWMP Update Issue Questionnaire was mailed to stakeholders. From this, in February 2002, the MWA identified key management issues that will be addressed for each of the Mojave Basin subareas (Baja, Centro/Transition, Alto, Oeste and Este). Stopping the continuing ground water overdraft is identified as a critical issue. Many stakeholders believe that the current physical solution (part of the court ordered adjudication) will not address overdraft in the short term. Specific water quality concerns identified in the survey include arsenic, nitrates, chromium, uranium, methyl tertiary butyl ether, and long-term buildup of total dissolved solids. The MWA Technical Advisory Committee will review an outline of the RWMP in the spring 2002 and then the consultant will make a presentation to the full MWA Board of Directors.

8. ***Town of Mammoth Lakes – Doug Feay***

Warm weather in the last part of February in the Eastern Sierra began to cause snowmelt in the area of the Town of Mammoth Lakes (Town). Board staff observed erosion control BMPs at three sites in the Town. Most areas still had significant snow and frozen conditions, although some snowmelt runoff was occurring in the streets. Some BMPs require maintenance due to damage from snowplows, and from winter conditions. Staff referred one site to Town staff for follow-up on BMP repair. A Notice to Comply (NTC) was issued to one site due to significant potential for offsite sediment transport from the stockpile and debris staging area and only partially protected site slopes. Staff discussed with site owners the need to monitor BMPs as the snow melts and repair damaged BMPs as necessary. Town staff was present when the NTC was issued and will be doing follow-up inspections for compliance. A third site had good BMP protection.

A stormwater erosion control workshop for the Town has been scheduled for the month of April in Mammoth. The San Francisco Bay Regional Board staff will assist in conducting the workshop. The workshop will consist of a half-day presentation with a half-day field trip. Focus will be given to BMPs that work in alpine conditions.

9. ***President Sends Yucca Mountain Recommendation to Congress - Tim Post***

On February 14, 2002, the Secretary of Energy Spencer Abrams formally recommended the Yucca Mountain site to President Bush for development as a repository for the geologic disposal of spent nuclear fuel and other high-level nuclear materials. The following day, the President

notified Congress that he considers Yucca Mountain qualified to begin the construction permit application process, taking the next in a series of steps required for approving the site as a nuclear materials repository.

The President stated his decision to recommend Yucca Mountain is based on sound science resulting from decades of scientific study, costing nearly \$8 billion, and a determination by the Secretary of Energy that the site can be safely used to store high-level nuclear materials.

Currently, nuclear materials are stored in 131 aboveground facilities in 39 states, and 161 million Americans live within 75 miles of these sites. The President's position is that one central repository provides more protection for this material than do the existing 131 sites.

Federal law now gives Nevada the opportunity to disapprove the recommendation and, if it does, then Congress will have to act to override that disapproval, by a majority vote in both houses, for the permitting process to continue. Senator Boxer has issued a press release opposing Yucca Mountain and Senator Feinstein is expected to do the same.

10. ***Palladium Process Produces Benign Byproducts from Trichloroethylene*** - Liz Lafferty

Results of field-scale tests conducted at Edwards Air Force Base, using a palladium catalyst show rapid conversion of trichloroethylene (TCE) into low concentrations of inorganic salts (chloride) and ethane. The process involves bubbling hydrogen over a palladium catalyst immersed in water containing TCE. The

catalyst causes the complete conversion of TCE into harmless byproducts. The process was developed, over the past 10 years, at Stanford University. Palladium is a metal used in many applications ranging from dentistry to watch making.

This palladium cleanup technology is being used at Site 19 on the Main Base Operable Unit 1. Site 19 has also been used for previous Innovative Technology Treatability studies to degrade TCE including co-metabolic bioremediation and in-well vapor stripping which have not been successful at the Site. The location is appropriate for technology testing because the ground water basin drains towards the center of the Edwards Air Force Base property (Rogers Dry Lake) and therefore, any subsurface contamination will always remain under Air Force Control.