

GOVERNMENT

New Documents Address MTBE, Acid Mine Drainage, Mitigation Wetlands

“Monitored Natural Attenuation of MTBE as a Risk Management Option at Leaking Underground Storage Tank Sites” (EPA 600-R-04-179) was recently published by U.S. EPA’s Ground Water and Ecosystems Restoration Research Division. The report reviews the current state of knowledge on the transport and fate of MTBE in groundwater, with emphasis on the natural processes that can be used to manage the risk associated with MTBE in groundwater or that contribute to natural attenuation of MTBE. It provides recommendations on the site characterization data necessary to manage risks and evaluate whether monitored natural attenuation (MNA) of MTBE is an appropriate option at a specific site. The information is intended to help state regulators determine whether they have adequate information to evaluate MNA of fuel oxygenates at a site and to identify sites where MNA of fuel oxygenates may be appropriate risk management options.

The 89-page report is available at www.epa.gov/ada/download/reports/600R04179/600R04179.pdf.

Last year, U.S. EPA’s National Risk Management Research Laboratory published “Demonstration of Aquafix and SAPS Passive Mine Water Treatment Technologies at the Summitville Mine Site” (EPA 600-R-04-501). The report details the Superfund Innovative Technology Evaluation program evaluation of two passive water treatment technologies for removing metals from acid mine drainage at the Summitville Mine Superfund Site in southern Colorado: the Successive Alkalinity Producing System (SAPS) and the Aquafix technology. Results of the evaluation demonstrated that the passive water treatment systems removed metals from acid mine drainage. Removal efficiencies ranged from 11 to 97 percent for SAPS and as much as 97 to 99 percent for the Aquafix system. The cost for both systems is \$0.005 per gallon for 25 gallon-per-minute systems.

The 59-page report is available at www.epa.gov/ORD/NRMRL/pubs/540r04501/540r04501.pdf.

The Interstate Technology and Regulatory Council recently published “Characterization, Design, Construction, and Monitoring of Mitigation Wetlands.” To promote the long-term sustainability of

mitigation wetlands, this reference tool provides developers, consultants, regulators, and communities with example checklists for evaluating and documenting habitat health and measuring other performance criteria of mitigation wetlands. This guidance is intended to identify and simplify the technical elements of sound characterization, design, construction, and monitoring of wetlands mitigation projects.

The 197-page report is available at www.itrcweb.org/Documents/WTLND-2.pdf.

USGS Directorship Changes

In June, Charles G. Groat announced his resignation from the position of director of the U.S. Geological Survey to accept an appointment at the University of Texas at Austin. Groat became the 13th director of the USGS in 1998; prior to that he served in various academic and leadership positions at the University of Texas in El Paso.

Interior Secretary Gale Norton announced that Patrick Leahy would become the acting director of the agency until a permanent replacement could be nominated by President Bush and confirmed by the Senate. Leahy has been with the USGS since 1974 and was the associate director of the Geology Division prior to his new appointment.

Visit www.usgs.gov.

ADEQ to Spearhead Effort to Protect the Colorado River

The Arizona Department of Environmental Quality (ADEQ) is coordinating the Clean Colorado River Alliance, a major initiative that brings federal, state, and local government officials together with business and community leaders to protect and improve water quality in the Colorado River, according to an agency news release.

The CCRA consists of more than 30 members representing agriculturally

HydroFacts

Number of aquifers shared between the United States and Mexico: **approximately 20**

Percent of Ciudad Juarez’s water supply that comes from the Hueco Bolson aquifer: **100**
Year that Hueco Bolson is expected to run dry: **2025 to 2030**

Average daily per capita water consumption in U.S. border counties: **162 gal**
Average daily per capita water consumption in Mexican border municipalities: **115 gal**

Factors found to have no relevance to precipitating international freshwater conflicts:
proximity, climate, basin water stress, forms of government, existing dams, water used for agriculture or energy

Factors found to be slightly relevant:
high population density, low per capita gross domestic product, overall unfriendly relations between countries

Factors found to be highly relevant:
rapid changes in physical setting (such as building a dam) or institutional setting (such as creating a new nation)

Months SE Arizona pool owners are most likely to use their pool covers: **April, Sept., Oct. (63%)**

Months SE Arizona pool owners are least likely to use their pool covers: **June, July, Aug. (36%)**

and municipally based irrigation districts, conservation groups, tribes, communities along the river, and other interests. It was launched by Arizona Gov. Janet Napolitano in April, at which time she directed the group to develop an action plan to address existing water quality problems in the Colorado River and lay the groundwork for a regional framework for future water quality protection. The final report is due in December.

Recognizing the many environmental challenges facing the Colorado River, including contamination from perchlorate, nitrogen, chromium, bacteria, uranium, selenium, sediment, and other pollutants, ADEQ Director Steve Owens cited several initiatives the agency is currently implementing to address quality issues in the river, including:

- convincing the Department of Energy to move a 12-million-ton pile of uranium tailings near Moab, Utah, away from the river;
- working with California officials to prevent a plume of hexavalent chromium from the Pacific Gas & Electric facility near Needles from contaminating the river, and conducting an investigation to determine whether Arizona groundwater supplies have been affected by the plume;
- monitoring levels of perchlorate released into the river from the Kerr-McGee plant near Las Vegas; and
- preventing further nitrate contamination of the river from sewage disposal.

Visit www.azdeq.gov/environ/water/ccra.html.

Winter Rains Dilute Arizona's Proposed Water Legislation

Arizona lawmakers considered 10 bills for water conservation and water planning measures in the state legislature this spring, but most were either dropped or severely weakened before being passed. Many legislators, including Arizona Senator Jake Flake,

blamed the heavy winter rains that filled the state's reservoirs, so that "all of a sudden water didn't seem to be near so important anymore," according to *The Arizona Republic*.

Flake was part of the opposition, along with other ranchers like himself, realtors, and home builders, who fear private property rights will be lost and economic development thwarted if too many water restrictions are enacted, particularly in rural areas, said *The Republic*.

Proponents of the water legislation had hoped that the drought, combined with Arizona Gov. Janet Napolitano's strong support, would make this the year when water management measures would make it through the legislature. A few measures were successfully passed.

House Bill 2174 created an assured and adequate water supply fund. According to *The Republic*, the fund allows the Arizona Department of Water Resources to "impose a fee on developers to determine whether new subdivisions have a 100-year water supply." The fund will help support the agency, which has been severely impacted by budget cuts in recent years.

House Bill 2277, designed to implement the recommendations of the state drought plan developed by the Governor's Drought Task Force, also passed, but in watered-down form. It requires public water systems to prepare water-supply, drought-preparedness, and water-conservation plans, but with less stringent enforcement measures, said *The Republic*.

Senate Bill 1336, sponsored by Flake, created a rural water legislative study committee to evaluate existing rural water supplies, review options for developing alternative supplies, and review opportunities for water reuse, improved conservation, and other means to improve rural water supplies.

Visit www.azleg.state.az.us and www.azcentral.com.

Two Top CALFED Officials Resign

In late May, just weeks after state lawmakers made severe cuts to the CALFED budget, the director of the California Bay Delta Authority, Patrick Wright, and the agency's lead scientist, Johnnie Moore, announced their resignations.

Wright accepted the position of assistant secretary for program development at the California Resources Agency, announced Mike Chrisman, that agency's secretary. Joe Grindstaff, formerly chief deputy director for the California Department of Water Resources, replaced Wright as acting director of CALFED. Grindstaff is now responsible for completing actions called for in a recent budget revision requested by Gov. Arnold Schwarzenegger, including: facilitating an independent program and fiscal review of CALFED; refocusing CALFED efforts on solving conflicts over water supply, water quality, levee stability, and the environment; and developing a 10-year prioritized action plan in coordination with stakeholders and federal partners.

Moore, a geologist, returned to Montana, attributing his departure at least in part to the lack of funding and poor organization within the authority, according to the *Stockton Record*. He had been at CALFED less than one year. Grindstaff told the newspaper that the CALFED science program will continue to move ahead without Moore.

The CALFED Bay-Delta Program was created in 1996 to develop and implement a long-term comprehensive plan to restore ecological health and improve water management for beneficial uses of the Bay-Delta System. The California Bay-Delta Authority was formed in 2003 to oversee the implementation of the program for the 25 state and federal agencies involved.

Visit calwater.ca.gov and www.recordnet.com.

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CA DWR Announces \$25M in Water Desalination Grants

The California Department of Water Resources (DWR) recently awarded \$25 million in grants to 25 water desalination projects. The funds will be used by local agencies, water districts, and academic and research institutions for construction, pilot and demonstration projects, research and development, and feasibility studies to promote the development of new water supplies using water desalination technologies.

Awarded projects include construction of three desalination facilities, in Marin, Alameda, and San Bernardino counties. Six pilot and demonstration projects in the cities of Long Beach, Santa Cruz, San Diego, and Carson, and the Eastern Municipal Water District and West Basin Municipal Water District, will receive funds under this cycle of the desalination grants program. Research and development activities at seven locations, including the Lawrence Livermore National Laboratory, the University of California–Los Angeles, and several municipal water districts were funded to study such aspects as desalination techniques, removing metals from brine, guiding desalination planning, and using horizontal wells in seawater desalination. Finally, nine feasibility studies by agencies in Monterey, Riverside County, and the San Francisco Bay and San Diego areas were funded.

Approximately \$11.5 million of the available funds will support ocean water desalination-related projects and \$13.5 million will subsidize brackish water desalination projects.

Funding for the projects is available through the Water Security, Clean Drinking Water, Coastal and Beach Protection Act (Proposition 50), passed by voters in 2002. Proposition 50 authorized the sale of \$3.4 billion in general obligation bonds for a variety of water projects including coastal protection, the CALFED Bay-Delta Program,

integrated regional water management, safe drinking water, and water quality.

A complete list of the awarded projects and other related information is at www.owue.water.ca.gov/recycle/index.cfm.

CA Farmers Can't Sue Feds on ID Water Contracts

After the U.S. Bureau of Reclamation reduced water deliveries to Westlands Water District in central California by as much as half in 1993, the district and about two dozen individual farmers sued the agency to recover their financial losses. Westlands had a water delivery contract with the agency dating back to 1963, according to an *Associated Press* article in the *Fresno Bee*, but 1992 deliveries were reduced in order to protect endangered fish species. The water district dropped its case two years later, but the individual farmers held firm, claiming about \$32 million in losses from undelivered water.

In June, the U.S. Supreme Court ruled that “individual farmers may not sue the federal government to enforce water contracts entered into by their irrigation districts,” according to *AP*, although water districts can. The decision was strongly supported by Westlands, the state of California, and environmentalists, who feared endless lawsuits would ensue if the ruling had been in favor of individual farmers, said *AP*. Furthermore, the report noted that water districts would have a harder time doing business with the Bureau of Reclamation if individuals were permitted to sue the federal government.

William Smiland, the attorney for the lead plaintiff in the case, told the *Bee* that the farmers “might consider taking another route, by seeking compensation through the separate U.S. Court of Federal Claims.” The paper reported that the court brought up that possibility several times during the oral arguments on the case.

Visit www.fresnobee.com.

Rural Nevada, Utah Eye Proposed Water Transfer

Farmers and ranchers in east-central Nevada and western Utah are keeping a close eye on plans to transport large amounts of groundwater from rural Nevada south to the Las Vegas area to supply the growing metropolis. Southern Nevada currently gets 90 percent of its water supply from Lake Mead, having rights to 300,000 acre-feet per year of Colorado River water. The Southern Nevada Water Authority (SNWA) is seeking to add about 200,000 acre-feet per year of additional surface water and groundwater supplies to plan for future needs.

A key element of SNWA's groundwater development plan calls for building a 450-mile pipeline from White Pine and Lincoln counties, where the proposed groundwater development area is located, down to Clark County in southern Nevada. Utah is concerned because the aquifer that is slated to be tapped extends beneath the western part of that state as well. Farmers and ranchers, who comprise most of the population in the potentially affected areas, and environmental groups have expressed concerns about the impacts the project could have on the area.

Two studies – a joint project by the USGS and the Desert Research Institute and one by the U.S. Bureau of Land Management – are underway to evaluate potential impacts of the proposed groundwater pumping. The studies are expected to take two to three years to complete. Nevada's state engineer will carefully review the findings: he is required to approve only groundwater extraction projects that are sustainable.

In spite of efforts by media to hype a water war brewing between the two states, officials from both sides have told the *Las Vegas Sun* and *Salt Lake Tribune* they are not looking for conflict.

In May, Nevada Gov. Kenny Guinn signed Senate Bill 35, allowing counties

to charge a fee of \$6 per acre-foot for the transfer of groundwater to another county or state. In 2007, the fee increases to \$10 per acre-foot. Imposition of the fee by a county is subject to approval by the state engineer. Nevertheless, the law would apply to the transfers proposed by SNWA, according to the *Sun*.

Guinn also signed Senate Bill 62, which provides \$1 million to fund the Water Rights Technical Support Fund, administered by the state's Board for Financing Water Projects, to make grants to local governments to support activities to enhance or protect their existing water rights. State Senator Dean Rhoades told the *Sun* the money will help rural Nevada fund additional research on the potential impacts on local aquifers of SNWA's proposed transfers. The funding was seen as a step toward "leveling the playing field" between SNWA and rural areas.

Visit www.lasvegassun.com and www.sltrib.com.

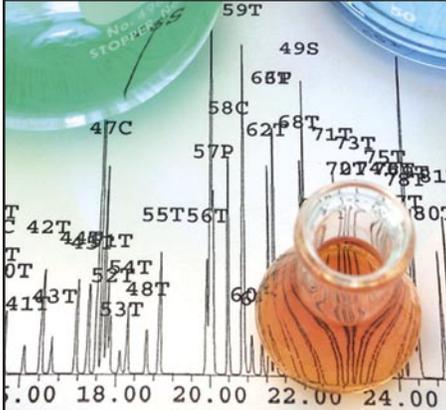
NM Hires Special Water Projects Coordinator

New Mexico State Engineer John D'Antonio recently hired a new special water projects coordinator to assist the Office of the State Engineer and Interstate Stream Commission with aquia programs and other water projects.

Roberto Mondragon began working for the agency on May 7. He previously served two terms as lieutenant governor of New Mexico and was a state representative. He also spent 15 years working with nonprofit and for-profit organizations in New Mexico developing culturally based bilingual educational materials.

D'Antonio cited Mondragon's experience in state government and familiarity with New Mexicans as key aspects that will help Mondragon educate the public on complex water-related issues.

Visit www.ose.state.nm.us.



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