New Reports, Software from EPA

Acid Mine Drainage: Innovative Treatment Technologies (October 2003, 52 pages). This document provides an overview of treatment technologies being used to remedy environmental problems at abandoned mine sites, with a focus on innovative treatment techniques. It was prepared by Christine Costello, a National Network of Environmental Management Studies grantee under a fellowship from the U.S. Environmental Protection Agency. Available at clu-in.org/techdocs/CU-0010.pdf.


Technical and Regulatory Guidance for Using Polyethylene Diffusion Bag Samplers to Monitor Volatile Organic Compounds in Groundwater (DSP-3, February 2004, 78 pages). This document, published by the Interstate Technology and Regulatory Council, provides a guide to the use of passive diffusion bag (PDB) sampling, particularly for long-term monitoring. It contains a set of sequenced questions for quick preliminary screening of a site’s potential for PDB sampling. It also discusses regulatory issues related to PDB use, considers potential regulatory impediments to the implementation of PDB sampling, provides suggestions for expediting the process, and reports on a survey of state regulators’ acceptance of the technology. The final sections provide a cost model to estimate the potential savings associated with conversion to PDB monitoring and present some case histories of the technology’s implementation. Available at www.itrcweb.org/DSP-3.pdf.

AQUATOX Release 2. EPA’s Office of Water has released an enhanced version of AQUATOX, a simulation model for aquatic ecosystems. The model is designed to help users evaluate and illustrate the causal links between the chemical and physical environment and living systems that inhabit surface waters by predicting the fate of pollutants and their effects on the ecosystem. While AQUATOX has been available for several years, the enhanced Release 2 allows a more complete and realistic representation of the ecosystem. AQUATOX is designed for ecologists, biologists, water quality modelers, and anyone involved in performing ecological risk assessments. Download AQUATOX Release 2 and accompanying documentation at www.epa.gov/waterscience/models/aquatox.

NADB Approves $16.4 Million in Border Conservation Grants

In its effort to assist U.S. communities along the U.S.-Mexico border to conserve water, the North American Development Bank (NADB) is pleased to announce $16.4 million in grants from the NADB Water Conservation Investment Fund (WCIF) for six U.S. projects. These projects are estimated to cost a total of $36.6 million and will receive WCIF grant funding in the amounts indicated below:

- $1.8 million for the construction of an interconnect system in Cameron County Irrigation District 2, Texas;
- $4 million for the replacement of the river pumping plant in Cameron County Irrigation District 2, Texas;
- $3.6 million for a water conservation improvement project in Delta Lake Irrigation District near Edinburg, Texas;
- $1.5 million for a water conservation improvement project in Hidalgo County Irrigation District 6, Texas;
- $2.5 million for Imperial Irrigation District in California to be used for canal repairs; and
- $3 million for a canal improvement project sponsored by the Yuma County Water Users’ Association in Arizona.

These projects are expected to save about 38,600 acre-feet of water annually. Most will also provide other benefits, such as improved water management and irrigation efficiency, energy conservation, and reduced operation and maintenance costs.

The WCIF was created in August 2002 and funded with $80 million of NADB’s retained earnings for the purpose of providing grant financing for water conservation projects in the border region. To date, the NADB has approved $67.4 million in WCIF grants for 13 projects.

For more information on the NADB or these projects, visit www.nadb.org.

Former EPA Director Voices Concern for Wetlands

In an editorial published Feb. 25, 2004 in the San Francisco Chronicle, Carol Browner, director of the U.S. EPA from 1992 to 2000, criticized the Bush administration for failing to protect seasonal wetlands – those that are non-navigable or dry for part of the year – which make up more than 50 percent of California’s wetlands.

Browner pointed out that although President Bush had in December dropped a heavily criticized proposal to exempt the wetlands from federal protection, he left in place a “guidance” to the EPA that directs field offices not to enforce laws to protect them.

California’s streams and lakes are fed by
The California DHS also recently took
considering costs and analytical feasibility.
must be as close to the PHG as possible,
for setting the MCL for California, which
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50 μg/l. The California Department of
in January 2006. EPA’s current MCL is
10 μg/l that will take effect nationwide
2,500 times lower than the U.S. EPA’s
4 parts per trillion. That concentration is
18 μg/l, based on federal EPA guidance
in support of Superfund activities. But in
2002, DHS lowered the action level to
4 μg/l, which coincided with the analytical
detection limit for reporting. Then on
March 11, 2004, DHS bumped up the
action level to 6 μg/l, a value identical to
the PHG established by OEHHA earlier
this year. DHS must also establish an MCL
for perchlorate based on the PHG; once
the MCL is established, the action level
will no longer be used.

On March 3, regional EPA director Wayne
Nastri responded in the Chronicle to
Browner’s commentary, saying that recent
court rulings were responsible for federal
agencies’ loss of regulatory authority
over seasonal wetlands. Nastri said that
the EPA, working with the U.S. Army
Corps of Engineers and other agencies,
was “using every available tool to protect
seasonal wetlands” and has filled a historic
role as the last line of defense in protecting
such areas.


California Agencies Issue New
Arsenic, Perchlorate Standards

In April, the California Environmental
Protection Agency’s Office of
Environmental Health Hazard Assessment
(OEHHA) announced a Public Health
Goal (PHG) for arsenic in drinking water
of 0.004 micrograms per liter (μg/l), or
4 parts per trillion. That concentration is
2,500 times lower than the U.S. EPA’s
Maximum Contaminant Level (MCL) of
10 μg/l that will take effect nationwide
in January 2006. EPA’s current MCL is
50 μg/l. The California Department of
Health Services (DHS) is now responsible
for setting the MCL for California, which
must be as close to the PHG as possible,
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The California DHS also recently took
action with respect to perchlorate.
Perchlorate is a compound from the Cold
War era that is contaminating waters in
California and other western states, but
no federal or state MCL exists for the
compound. In the absence of an MCL,
DHS uses an “action level”; detections
of a compound in excess of this action
level prompt certain requirements
and recommendations. In 1997, DHS
established an action level for perchlorate
of 18 μg/l, based on federal EPA guidance
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New Web Site for CA Water-
Related Grants and Loans

The California Department of Water
Resources (DWR) has introduced a new
Web site for grants and loans available
for water conservation, groundwater
management, and studies and activities
to enhance local water supply reliability.
The site describes funding available
from several state agencies. The site
can be searched by funding agency,
program, grants, or loans. Results list
grant programs, eligible projects, eligible
groups, and maximum funding available.

Among the upcoming opportunities is the
Integrated Regional Water Management
program, which arose from California’s
2003 Proposition 50. Funding will
be awarded for projects that protect
communities from drought, protect and
improve water quality, and improve local
government by reducing dependence
on imported water. Up to $50 million per
project will be awarded; a total of $384
million is available. The deadline for
applications is currently posted as “late
2004”; check the Web site for additional
information and updates.

The grants and loan Web site is at
www.grantsloans.water.ca.gov.

Nevada Denies BLM
Stockwater Permits

Press reported that Nevada State Engineer
Hugh Ricci had denied 19 applications
for permits for stockwater rights by
the U.S. Bureau of Land Management
(BLM). According to the article, this was
the first test of a new state law passed in
2003 that ties the granting of stockwater
rights to livestock ownership. In Ricci’s
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Continued next page

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Continued next page
Las Vegas Considering $1B for Water Imports

Prompted by continued drought across the Southwest, Las Vegas has begun accelerating plans to tap rural water supplies to supplement its Lake Mead water supply, reported the Las Vegas Review-Journal on Feb. 25. According to the article, the Southern Nevada Water Authority (SNWA) board was scheduled to discuss plans to bring groundwater by pipeline from Clark, Lincoln, and White Pine counties to Las Vegas, and make use of surface water rights owned by SNWA on the Virgin and Muddy rivers. SNWA staff have prepared a plan that calls for three water projects to be built over the next 10 years.

According to the Review-Journal, SNWA reached an agreement with Lincoln County a year ago that opened groundwater sources to the authority. At least two of the groundwater basins under consideration also reach into neighboring White Pine County, with which SNWA has no agreement, the article said.

According to SNWA spokesman Vince Alberta, before water can be transferred for any of the projects, hydrologic investigations, environmental studies, public meetings, and design and construction of the conveyance systems will be required and an estimated $1 billion to fund the projects must be identified, reported the Review-Journal.


Animas-La Plata Water Project “A Mess”

Article originally appeared in Water Tech Online, March 25, 2004

Senators Pete Domenici (R-NM) and Ben Nighthorse Campbell (R-CO) have expressed frustration at the U.S. Bureau of Reclamation’s (BLM) handling of the Animas-La Plata water supply project, The Rocky Mountain News reported. Despite its $180 million estimated cost increase, Campbell told the paper that abandoning the project is not an option. “We’re in a mess, but it’s a mess we’ve got to fix and move forward,” he said at a hearing.

Domenici, chairman of the Appropriations Subcommittee for Water Development, called for the hearing because of concerns over the project’s cost, which is now pegged at $518 million after factoring in inflation over the seven-year construction period. In 1999, the bureau had estimated the cost at $338 million, the article said.

Management failures by the BLM and mischaracterizations of site conditions were among the factors that increased costs, said Bennett Raley, assistant secretary for water and science at the U.S. Department of the Interior.

The project will pump water from the Animas River to a 120,000-acre-foot reservoir near Durango to provide water to more than 3,000 members of the Ute Mountain Ute and Southern Ute Indian tribes, as well as businesses and farms in Colorado and New Mexico. The project would also settle century-old disputes over Native American water rights, the paper reported.

Campbell and Domenici agreed that saddling local water users with unforeseen cost increases would be unfair. “Water partners should not have to pay for the bureau’s mistakes,” Domenici said in the report.

Raley indicated he is confident the BLM can meet its current cost projection. He also said in the article that the agency has revised its procedures in order to ensure future projects are completed within their allotted budgets.


U.S. EPA Gives $75,000 to Help California Tribes Protect Drinking Water Systems

In February, the EPA awarded $75,000 to the Rural Community Assistance Center, a nonprofit organization in West Sacramento, California, to help California tribes protect their drinking water systems from vandalism, terrorist attacks, and other threats.

The EPA has awarded $440,000 to three nonprofit organizations and the Navajo Nation to help tribes in California, Arizona, and Nevada assess and protect their drinking water systems. Tribal drinking water systems are often located in isolated areas that can be difficult to secure and patrol, which makes them potentially more vulnerable to risks.

The Bioterrorism Act of 2002 requires the EPA and drinking water systems to take steps to improve the security of the nation’s drinking water infrastructure. All tribal community water systems that serve between 3,300 and 50,000 people were required to conduct vulnerability assessments by June 2004.

Visit www.epa.gov.

San Diego County Suspends Desal Talks; Carlsbad Interested

On Jan. 29, 2004, the San Diego County Water Authority (SDCWA) announced that its board had voted to suspend negotiations with Poseidon Resources for a $270 million seawater desalination facility at Encina Power Station in Carlsbad, California. The water authority plans to continue its own studies for a seawater...
SDCWA largely blamed the action to suspend negotiations with Poseidon on the agency’s inability to resolve an ongoing dispute with the private development firm over a 2002 confidentiality agreement. Several other factors that could change the timing of a desalination project were also listed by SDCWA as contributing to the decision to suspend the talks. These included: the potential availability of additional water as a result of lining the All-American and Coachella canals (a provision of the recently completed Quantification Settlement Agreement); the authority’s rate analysis and evaluations of options for increasing the region’s treated water capacity (currently underway); problems currently experienced in a Poseidon desalination project in Tampa Bay, Florida; and the city of Carlsbad’s interest in considering the Poseidon proposal for its local water supply.

According to an article in The San Diego Union-Tribune on Jan. 29, 2004, Poseidon’s involvement with the Tampa Bay desalination plant was a major reason for SDCWA’s withdrawal from the deal. In 1998, Poseidon was contracted to design, build, own, and operate what was to be the largest desalination plant in North America, while Tampa Bay Water agreed to buy the water at a guaranteed price for five years before purchasing the plant itself. However, according to the article, two of Poseidon’s business partners had declared bankruptcy by 2002 and the company had trouble getting financing. In the end, Tampa Bay Water bought out Poseidon’s interest and financed the project through government bonds. According to The Union-Tribune, additional problems ensued when the plant was ready for testing, including unforeseen clogging of filters and other failures of performance tests. Tampa Bay Water and Poseidon are now engaged in finger-pointing over responsibility for the problems.

On Feb. 6, 2004, The Union-Tribune reported that the city of Carlsbad was negotiating with Poseidon for the desalination plant. Under the proposed arrangement, Carlsbad would purchase water from the plant through a long-term contract but would not pay for the site, construction, or operation of the plant itself, according to the article, and in turn it could receive $2 million per year in taxes from the project. However, reported The Union-Tribune, cost could still be a factor: currently, Carlsbad pays $530 per acre-foot of water to SDCWA, while Poseidon’s best price is $800 per acre-foot for desalinated water. According to the article, Public Works Director Lloyd Hubbs said SDCWA must pass on to Carlsbad a $250 per acre-foot subsidy from the Metropolitan Water District, offered to encourage new desalination water sources, or the proposed deal would not work. Hobbs said that Carlsbad is monitoring the problems in Tampa, mostly to make sure the price quote is realistic, according to The Union-Tribune. In Hobbs’ opinion, Carlsbad’s arrangement with Poseidon would be different from Tampa’s because Tampa bought the plant and thereby its associated problems, whereas Carlsbad is only planning to buy the water, said the article.