GOVERNMENT

EPA Issues Determination on 11 Contaminants, Punts on Two Biggies

Last spring, the U.S. Environmental Protection Agency issued a preliminary determination not to regulate 11 contaminants on its second drinking water contaminant candidate list (CCL), concluding they do not occur at levels of public health concern in public water systems. A regulatory determination is a formal decision on whether EPA should develop a national primary drinking water regulation for a specific contaminant. The Safe Drinking Water Act requires EPA every five years to select at least five contaminants from the most recent CCL to determine whether or not to regulate them. In 2005, the agency published the second CCL of 51 contaminants.

The 11 contaminants that will not be regulated are: boron (a naturally occurring substance); dacthal mono- and di-acid

degradates (herbicides); 1,1-dichloro-2,2bis (p-chlorophenyl) ethylene (a degradate of DDT); 1,3-dichloropropene (Telone, a soil fumigant); 2,4-dinitrotoluene and 2,6dinitrotoluene (in ammunition, explosives, dyes, polyurethane foams, and automobile air bags); s-ethyl propyl thiocarbamate and Terbacil (herbicides); Fonofos (soil insecticide); and 1,1,2,2-tetrachloroethane (volatile organic compound).

EPA determined that two other contaminants—perchlorate and MTBE require additional investigation to ascertain total human exposure and health risks. This outraged many who have been arguing for years for safety standards for these controversial compounds.

U.S. Senator Barbara Boxer, chair of the Senate Environment and Public Works Committee, issued a statement saying, "It is simply unacceptable that EPA would postpone, yet again, a decision on whether to protect our children and families from the dangerous chemical perchlorate. Just last December EPA discontinued

testing for perchlorate in tap water. I am outraged that EPA has yet again refused to do its duty to protect the health of our families and communities from perchlorate pollution. I have introduced two bills on perchlorate—one to require testing and public disclosure of contamination, the other ordering EPA to quickly set a standard. It is clear that action is needed."

The Natural Resources Defense Council accused EPA of "abdicating its responsibility once more," stating that numerous data already exist regarding measurable perchlorate concentrations in human and cow milk, food items, and human urine, and on the risks of exposure.

Visit www.epa.gov/safewater/ccl/reg_determine2.html, boxer.senate.gov, and www.nrdc.org.

Texas Legislators Pass Major Water Bill

In late May, Texas legislators passed Senate Bill 3 providing for the development, management, and preservation of the state's water resources. It was the state's first major waterplanning bill in a decade, according to the Dallas News. A key aspect of the bill is its provision for "environmental flows" designed to protect fish, wildlife, and wetlands in streams, estuaries, and bays. It establishes a basin-by-basin process for developing recommendations to meet instream needs and directs the Texas Commission on Environmental Quality (TCEQ) to establish environmental flow standards to be used in subsequent water rights allocations.

SB3 also provides for the establishment of water conservation and planning programs, requiring public water providers serving greater than 3,300 connections to prepare water conservation plans, and mandating the implementation of a state water conservation public awareness program. Funding for water supply projects is to be allocated with priority to entities that either have achieved or will achieve significant water conservation savings.

HydroFacts

WATER FOR ENERGY

Total daily water withdrawals for coal and gas steam-generating electric plants in the Interior West:

over 650 million gallons (2,000 acre-feet)

Water consumed per kilowatt-hour generated varies greatly with type of plant and its elevation:

Typical case:

coal-burning power plants use on average 0.50 gallons

Worst case:

thermonuclear plant located in low desert uses 0.70 - 0.90 gallons

Best case:

new natural gas plants use about 0.30 gallons

Future case:

dry cooling systems (now used in over 50 plants) use 0 gallons

ENERGY FOR WATER

Percent of natural gas used in California associated with the use of water: 20

Percent of electricity used on western farms to pump groundwater: 90

Rank of water sources by energy intensity (from low to high):

- local surface water
- · reuse of water



In addition, SB3 provides for the designation of unique reservoir sites; the designation expires in 2015 if development of the reservoirs has not yet begun. Environmental groups opposed to new reservoirs proposed in the state's 2007 water plan pointed out that SB3 merely designates certain sites as having unique value for reservoirs and does not in any way provide for their construction. The same article of the bill also allows designation of sites of ecological value, again following on recommendations of the 2007 state water plan.

Finally, the bill authorizes higher pumping limits from the Edwards Aquifer Authority, in an attempt to resolve earlier legislation that permitted fewer water rights than had already been allocated.

The bill was signed by Governor Rick Perry in June.

Visit www.capitol.state.tx.us and www.dallasnews.com.

New Policies to Facilitate Voluntary Mine Cleanup

In June, U.S. EPA issued new policies designed to reduce barriers under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for public and private entities to voluntarily clean up abandoned hardrock mine sites responsible for degrading water quality. Under the new policies, EPA and volunteer parties will be able to enter into "Good Samaritan Settlement Agreements" that provide key legal protections to good samaritans as nonliable parties, including a federal covenant not to sue under CERCLA and protection from third-party contribution suits.

About half a million orphan mines exist in the United States, most of them hardrock mines in the West. In many cases, the parties responsible for pollution from orphan mine sites no longer exist or are not financially viable. Yet, a variety of interests, ranging from nonprofit organizations to state and local governments, are willing to voluntarily clean up these abandoned sites. Prior to these new policies, however, many proposed cleanup projects were thwarted by volunteers' concerns of being held liable under the Clean Water Act and CERCLA.

EPA acknowledges that voluntary cleanups facilitated under the new policies likely will not solve all the problems at abandoned mines, but the agency encourages incremental improvements that benefit the ecosystems impacted by these mines.

Visit www.epa.gov/compliance/resources/ publications/cleanup/superfund/factsheet/ goodsam-tools-fs.html.

New Federal Wetland Guidance Issued

In June, the U.S. EPA and the U.S. Army Corps of Engineers issued joint guidance for their field offices designed to clarify circumstances when a Clean Water Act (CWA) Section 404 permit is needed before conducting activities in wetlands, tributaries, and other waters. The guidance was developed following last year's Supreme Court split decision regarding the scope of the agencies' jurisdiction under the CWA. The split decision resulted in the ninth judge, Anthony Kennedy, stating that decisions on how the CWA applies to smaller water bodies must be made in the lower courts on a case-by-case basis.

To help make that determination, the guidance discusses the agencies' protection of three classes of waters through the following actions:

- Continuing to regulate "traditionally navigable waters," including all rivers and other waters that are large enough to be used by boats that transport commerce and any wetlands adjacent to such waters;
- Continuing to regulate "non-navigable tributaries that are relatively permanent and wetlands that are physically connected to these tributaries"; and
- Continuing to regulate other tributaries and adjacent wetlands that have

certain characteristics that significantly affect traditionally navigable waters, on a case-by-case basis.

Critics said the new guidance is still not clear on exactly how to protect surface waters, may eliminate protection for many streams, and likely will result in many lawsuits, reported *Reuters*.

During the first six months the guidance is implemented, the public is invited to comment on their experiences applying the guidance and to offer case studies. The agencies will broadly consider jurisdictional issues, including additional clarification and definition of key terminology, through rulemaking or other appropriate policy practice.

Comments can be submitted to docket EPA-HQ-OW-2007-0282 through www.regulations.gov/fdmspublic/component/main.

continued on next page



Total Water Management



19,000 professionals serving your needs in:

- Water resource and demand management
- Environmental restoration
- Sustainability solutions

Solutions Without Boundaries ch2mhill.com

Kathy Freas, Albuquerque Tel: 505.884.1682 x205 kathy.freas@ch2m.com Tom McLean, Phoenix Tel: 480.966.8577 x6239 tom.mclean@ch2m.com

© 2007 CH2M HILL

GOVERNMENT (continued)

Tiny Fish Wields Big Power in the Delta

The three-inch-long endangered delta smelt (*Hypomesus transpacificus*) is causing great turmoil in California's State Water Project (SWP). In recent years, the populations of smelt and some other fish species have been markedly declining, and scientists warned that large pumps drawing water out of the Sacramento-San Joaquin Delta for transport to 25 million people and 750 million acres of farmland in Southern California are largely to blame, sucking in and killing large amounts of the fish, particularly juveniles.

Last year, the issue came under greater focus as federal water agencies requested revisions to endangered species permits that would allow pumping despite the loss of certain numbers of fish. But in March, Alameda Superior Court Judge Frank Roesch ruled that the California Department of Water Resources (DWR) must comply with the state's more strict endangered species act or face shutdown of the pumps. DWR continued working to get federal endangered species permits rewritten and then endorsed by state wildlife regulators.

Before any new permits were issued, however, new information came out about a severe decline of the young smelt, along with evidence that many were being entrained by the pumps, and DWR voluntarily ceased pumping on May 31. In his announcement, DWR Director Lester Snow pointed out that many factors affect the smelt population, including invasive species, toxins, and diversions by other users besides SWP, and challenged other public agencies to take aggressive actions to protect the species. The U.S. Bureau of Reclamation also runs part of its Central Valley Project water supply through the delta, and drastically reduced its pumping during that time. The shutdown lasted 10 days, until the young smelt migrated out of the pump area to cooler waters.

The shutdown was closely monitored by downstream water users, but reservoirs were generally full enough and the shutdown sufficiently brief that no crises ensued.

On June 10, DWR began to gradually resume pumping, beginning at just 10 percent of its normal rate and reaching normal pumping rates by the end of the month. On June 22, U.S. District Judge Oliver Wanger ruled "there was insufficient evidence to indicate that current pumping operations in the ... Delta jeopardize the continued existence of the tiny delta smelt," reported the *San Francisco Chronicle*.

Over the summer, the saga continued. In early July, DWR began to switch off the pumps at night, hoping to avoid smelt attrition without significantly impacting water deliveries. According to a July 6 article in the *San Jose Mercury News*, more than 600 smelt were killed in the pumps in the first week of July, but in the 3 days that the pumps were off at night, no more than 21 died each day.

The status of the delta ecosystem as a whole, as reflected by the plight of the smelt in particular, is the subject of much attention in California by everyone from environmental groups to the governor. All seem to agree that the delta needs rescuing, and many proposals are being put forth to accomplish that, but given the large numbers of parties that have a stake in the delta, finding an agreeable, effective solution will be a challenge.

Visit www.water.ca.gov, www.sfgate.com, and www.mercurynews.com.

Reclamation Completes Yuma Desalter Test

From March through May, the U.S. Bureau of Reclamation performed a 90-day test of the Yuma Desalting Plant, located on the Colorado River just north of the U.S.-Mexico border. The plant was run at one-tenth capacity to gather data on the potential costs of operating the plant and determine whether design

deficiencies revealed during earlier tests have been resolved. In addition, University of Arizona researchers monitored water quality in the downstream cienega during the test run to help assess potential environmental impacts of operating the plant. Scientists are concerned that running the desalting plant will significantly reduce flow to the cienega and concurrently increase its salinity levels, severely impacting the ecosystem that has developed there.

Construction of the plant was completed in 1993 at a cost of about \$245 million. It can produce up to 72 million gallons of desalted water per day, and was built to help meet salinity requirements for Colorado River water delivered to Mexico and to salvage saline irrigation drainage water for beneficial use. However, the plant has never been operated other than for an initial six-month test because water storage in the Colorado River reservoirs has been adequate to meet all water quantity and quality requirements. With the droughts of recent years threatening water shortages in the Colorado River Basin, however, interest in the plant has been renewed.

According to the *Yuma Sun*, Reclamation officials said the plant performed better than expected during the recent test, producing more than 4,000 acre-feet of water that was discharged into the river, and successfully incorporating new, more efficient technology. The cost of the test run was not immediately available because additional shut-down activities had to be factored into it. Likewise, water quality results have not yet been released.

Visit www.yumasun.com and www.usbr.gov/lc/region.

Salton Sea Restoration Plan Selected

After reviewing extensive comments on nine different proposals presented in an October 2006 draft Salton Sea Restoration Report, the California Resources Agency announced in May its preferred alternative for restoring the sea. Secretary for Resources Mike Chrisman then presented the plan to the state legislature for approval and funding.

The process to restore the Salton Sea began in 2003 with the Quantification Settlement Agreement to reduce southern California's dependence on Colorado River water. Under terms of the agreement, inflows to the Salton Sea will be reduced, hastening its ecological degradation. To mitigate these effects, state legislation established a Salton Sea Advisory Committee to help guide the secretary in determining the best restoration and mitigation plan for the next 75 years. The Salton Sea Restoration Act and related legislation required that the preferred alternative be the one that will best restore the long-term stable aquatic and shoreline habitat to historic levels and promote diversity of fish and wildlife that depend on the Salton Sea, eliminate air-quality impacts from restoration activities, and protect water quality.

According to the *Palm Springs Desert Sun*, the chosen alternative—with an \$8.9 million price tag—subdivides the existing sea into a wildlife habitat in one area and a recreational lake in another. The final footprint of the sea will be one-fifth of its current area, meaning much of the lakebed will become exposed.

Strong opposition to the plan immediately arose from the Torres Martinez Desert Cahuilla Indians and environmental groups, who said the large amounts of lake bed that would be exposed under the plan would create significant air quality problems, reported the *Desert Sun*.

In June, the California Senate passed SB187, establishing the Salton Sea Restoration Fund and allocating \$47 million for initial restoration activities. The bill then moved to the Assembly, where committees were expected to work on details.

Visit info.sen.ca.gov, www.thedesertsun.com



Hydrology and Water Resources University of Arizona

Are you ready to take your study of water to the next level?

The University of Arizona Hydrology and Water Resources Department is actively seeking applicants for all programs (BS,MS,M.Eng,PhD) for Academic Year 2008-2009. Come study with an outstanding faculty of scientists and engineers to gain a whole new perspective on the field of hydrology and water resources.

Competitive student assistantships and scholarships are available. Are you a prospective student and ready for an on-campus visit? Check out our website or give us a call.

- Learn more at www.hwr.arizona.edu
- Contact us at 520-621-3131
- Write to us at admissions@hwr.arizona.edu
- Apply online at www.hwr.arizona.edu/apply

Come study with the original.
Come study with the best.
Hydrology and Water Resources
University of Arizona



The University of Arizona -- EEO/AA - M/W/D/V