

## NRC Changes Uranium Review Process

In June the Nuclear Regulatory Commission (NRC) published its final generic environmental impact statement (GEIS) for in-situ leach uranium recovery (ISR) operations in the western United States. In addition, NRC announced a change to how environmental reviews of new ISR facilities would take place.

NRC originally proposed preparing environmental assessments (EAs) for new facilities, but instead the agency will issue full supplemental environmental impact statements (SEIS), a more thorough form of environmental review. SEISs also provide greater opportunities for public participation and comment. This change was made in response to public concern that the generic review approach would overlook unique site characteristics.

NRC will continue to prepare EAs for applications to expand or renew licenses of existing operations. These may be issued for public comment if a particular application has high public interest, and will either result in a finding of no significant impact or lead to the preparation of an SEIS.

NRC expects approximately 17 license applications for ISR milling facilities through 2010, including new facilities, expansions, and restarts. The GEIS will serve as a starting point for site-specific environmental reviews of these applications. NRC believes this will improve efficiency, and the agency expects to complete most licensing reviews within two years.

The environmental reviews assess impacts of ISR operations on land use, transportation, surface water, groundwater, geology, soils, threatened and endangered species, and waste management, among other things.

Visit [www.nrc.gov](http://www.nrc.gov). See the final "Generic Environmental Impact Statement on In Situ Leach Uranium Milling Facilities"; [www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/](http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/).

## NM Governor Signs Water Rights Bill

In April, New Mexico Gov. Bill Richardson signed a bill limiting the power of municipalities to condemn water rights. HB40 puts water used by an acequia, community ditch, irrigation district, conservancy district, or political subdivision of the state beyond the reach of condemnation. In other cases where condemnation is still allowed, the municipality must meet certain criteria, including showing that the water is needed for public health and safety or that there is no other way to obtain the needed water at a reasonable price. Just compensation is required and mediation is encouraged.

Municipalities in New Mexico enjoy preferential powers to hold water rights unused for up to 40 years without threat of forfeiture. The new bill may push municipalities to be more proactive in securing capacity in the marketplace to meet their future water needs. The bill may also help preserve the agricultural industry by protecting farmers' water rights.

Visit [www.governor.state.nm.us](http://www.governor.state.nm.us) and [www.nmlegis.gov](http://www.nmlegis.gov).

## ASARCO Must Clean El Paso Groundwater

Much of the \$52 million proposed for cleanup of an ASARCO smelter site in El Paso will be dedicated to groundwater remediation, reported the *El Paso Times* after a public meeting in May. A presentation there by an official of the Texas Commission on Environmental Quality (TCEQ) was the first time the government had acknowledged that groundwater contamination is a serious issue at this site, noted the paper.

According to the *Times*, groundwater remediation will be accomplished using \$21 million to drill wells to keep the diesel-fuel- and metal-contaminated plume from spreading toward the Rio Grande and to treat the pumped water.

Members of the Texas legislature commented that \$52 million would not be enough for the cleanup and that the true cost would be closer to \$250 million, leaving taxpayers to pick up the tab, reported the *Times*. According to the paper, funds are also needed to clean contaminated soil in neighboring Juarez, help former ASARCO workers who are ill, and remediate contaminated dust in homes. Over 1,200 public comments were submitted prior to the meeting.

The site, which began as a lead smelter, operated from 1887 to 1992. In 1995 the Texas government found that the facility had made unauthorized discharges of solid waste, wastewater, and stormwater. In 1999 the U.S. Environmental Protection Agency and the state of Texas filed a civil enforcement action against ASARCO, which resulted in a decree requiring ASARCO to complete corrective action at the site. In 2005 TCEQ issued a corrective action directive, but ASARCO declared Chapter 11 bankruptcy that same year. That case is still pending in federal court in Corpus Christi.

In March 2009, TCEQ, EPA, and ASARCO filed a settlement agreement in the bankruptcy court, placing the El Paso smelter property in an environmental custodial trust with \$52 million in funding from ASARCO. The bankruptcy court approved the

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## HydroFacts

Number of Wild and Scenic Rivers designations by the U.S. Congress:	203
Total miles of river protected:	12,556
Miles added in March 2009:	1,100

Number of dams in U.S. National Inventory of Dams:	79,000
Miles of river impacted by dams:	about 600,000

Gallons of water consumed per capita in the U.S., 1976:	1.6
Gallons of water consumed per capita in the U.S., 2007:	29

Terminal velocity of a small (1 mm) raindrop, in miles per hour:	9
Terminal velocity of a large (4 mm) raindrop, in miles per hour:	20

Sources: *National Wild and Scenic Rivers*, U.S. Army Corps of Engineers, *International Bottled Water Association*, *United Nations*, and SAHRA.

settlement in June. TCEQ and EPA will carry out the remediation plan.

Visit [www.elpasotimes.com](http://www.elpasotimes.com). See settlement agreement and related documents: [www.tceq.state.tx.us/remediation/sites/asarco.html](http://www.tceq.state.tx.us/remediation/sites/asarco.html).

## Snake Valley Pipeline Hearings Postponed

In April Nevada's state engineer issued an interim order delaying administrative hearings on the Southern Nevada Water Authority's (SNWA) controversial plan to extract groundwater from Snake Valley and pipe it to the Las Vegas area. The hearings, previously scheduled for September, were delayed until fall 2011 upon SNWA's request for more time to create a complex groundwater-flow model, reported the *Las Vegas Sun* in April.

According to the *Salt Lake Tribune*, SNWA could not meet a June deadline to provide documents to the state engineer because of delays in the Bureau of Land Management's (BLM) review process. SNWA said they needed to see BLM's draft environmental impact statement before they could proceed, but BLM said they could not finish the statement until SNWA demonstrated the capability of its models. BLM is involved because the proposed pipeline would cross land it manages.

Although SNWA asked for only a one-year delay, the *Tribune* reported that the state engineer wanted to allow even more time for interested parties in pending lawsuits to prepare their own scientific studies. SNWA told the *Sun* that the hearing delay would not affect construction plans.

Visit [www.lasvegassun.com](http://www.lasvegassun.com) and [www.sltrib.com](http://www.sltrib.com).

## CBM Drilling Requires Water Permits in CO

The Colorado Supreme Court ruled in April that water diverted for coalbed methane production requires a water permit and sometimes an augmentation plan. The state engineer and BP America, an intervenor in the case, argued that the withdrawal of groundwater for coalbed methane is a nuisance rather than a beneficial use, and therefore does not need to be regulated under the priority administration system of state water law.

Ranchers who used water they felt was threatened by coalbed methane production filed the case to protect their water rights, claiming that the withdrawals for coalbed methane were in fact a beneficial use.

The district water court agreed with them in 2007. The Colorado Supreme Court affirmed the water court's decision, stating the coalbed methane process uses water to accomplish a particular purpose, thus meeting the 1969 definition of beneficial use. In this case, the use is extraction and storage and the purpose is the release of methane gas. They found the use of water could not be considered merely a nuisance because it is an integral part of the process, adding that even if the water becomes a nuisance after it has been extracted, that does not mean it has not already been put to a beneficial use.

According to the *Denver Post*, Colorado hosts 5,000 wells used for coalbed methane production, but only those wells that affect surface water will need a permit and further, only those that impact senior water rights will require an augmentation plan. The state engineer told the *Post* that energy companies have plenty of resources to develop augmentation plans.

*The Associated Press* reported that related legislation, developed by parties in the lawsuit, was in the Colorado Senate. The bill would allow energy companies one year to apply for permits and submit plans. It would also give the state engineer a way to determine which wells affect tributary water and thus would fall under state water law.

Visit [www.cobar.org](http://www.cobar.org), [www.denverpost.com](http://www.denverpost.com), and [www.ap.org](http://www.ap.org).

## CA Lakes Polluted, Fish Show

In May the California State Water Resources Control Board released findings of a 2007 study that looked at contamination in fish samples from 150 lakes and reservoirs. Only 15 percent of the lakes sampled were considered clean—meaning all average pollutant concentrations in all species in the lake were below state thresholds.

The survey was conducted as part of the Surface Water Ambient Monitoring

Program and was the largest study ever conducted on contaminants in sport fish from lakes and reservoirs in California. The results are from the first year of the two-year statewide survey.

In 2007 over 6,000 fish were analyzed for PCBs, DDT, Dieldrin, chlordanes, mercury, and selenium. The contaminant of greatest concern was mercury, a legacy of mining that can turn up in distant lakes as a result of atmospheric deposition. Twenty-six percent of lakes surveyed had at least one fish species with an average mercury level exceeding the consumption limit determined by the Office of Environmental Health Hazard Assessment (OEHHA).

PCBs accounted for the second biggest concern: 36 percent of the lakes had at least one fish species that exceeded OEHHA's Fish Contaminant Goal (contaminant levels that pose no significant health risk at the standard consumption of one eight-ounce fish serving per week). However, only one percent of the lakes sampled had a species with an average concentration level that exceeds the point at which OEHHA may consider a recommendation of no consumption. Other pollutants were also found, but at generally low levels.

Another 130 lakes were sampled in 2008, and those results along with trend analyses will be available in 2010. Altogether the 2007 and 2008 surveys included more than 200 popular fishing lakes and 50 other lakes chosen out of California's 9,000 by random sampling to provide a basis for statewide statistical assessment.

Visit [www.waterboards.ca.gov](http://www.waterboards.ca.gov). See Davis, J.A., A.R. Melwani, S.N. Bezalel, and others, 2009. *Contaminants in fish from California lakes and reservoirs: Technical report on year one of a two-year screening survey*, California State Water Resources Control Board.

## SoCal Rebate Demand Exceeds Supply

Within hours of releasing funding in May, the SoCal WaterSmart rebate program ran out of money for the remainder of its fiscal year ending June 30, reported the *San Diego Union Tribune*. The program's funding allocation for April ran out in eight days.

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The Metropolitan Water District of Southern California administers the program for other water wholesalers and retailers. It makes available rebates for clothes washers, toilets, synthetic grass, and irrigation equipment and controls. According to the *Union Tribune*, the rebate program started in July 2008 with \$4 million from water sales revenues, and funding was increased to \$6 million as a result of high demand.

Rebates were originally guaranteed to anyone with a receipt, but funding shortages led the district to institute a reservation system, allocating a certain amount of money each month, reported the *Union Tribune*. With many southern California water agencies resorting to voluntary or mandatory conservation measures as a result of drought, water users were trying to take advantage of ways to help conserve.

Visit [www3.signonsandiego.com](http://www3.signonsandiego.com) and [www.sdcwa.org](http://www.sdcwa.org).

## Black Canyon Surges with Spring Flow

In May, 7,000 cubic feet per second (cfs) of water was released down Black Canyon of the Gunnison in Colorado for the first time in decades, reported the *Denver Post* and the *Colorado Springs Gazette*.

According to the papers, before three dams were constructed upstream of the canyon between 1937 and 1978, peak spring flows reached 13,000 cfs with an average

of more than 6,000 cfs. In 2007 the peak flow was only 1,700 cfs. The National Park Service (NPS) and environmental groups had expressed concern about negative effects on the ecosystem: vegetation and debris were no longer washing away and were impairing water quality and fish habitat, reported the *Gazette*.

Although NPS was granted a water right for protective flows in 1978, years of wrangling with other interests prevented the amount of water in the right from being established. In 2003, conservation groups successfully challenged an agreement between the state of Colorado and federal agencies that would have prevented protective flows. In late 2006, a federal court judge determined the 2003 agreement violated several provisions of federal law. That ruling established the federal government's responsibility to maintain the park's water right and natural resources.

After months of negotiation, conservationists, water users, hydroelectric-power producers, federal agencies, the state of Colorado, and other groups reached a settlement guaranteeing a year-round minimum flow of 300 cfs along with higher annual peak and shoulder flows tied to natural water availability. The final settlement agreement was approved by the state water court in early 2009, allowing May's high flow to take place.

Visit [www.westernresourceadvocates.org](http://www.westernresourceadvocates.org), [www.gazette.com](http://www.gazette.com), and [www.denverpost.com](http://www.denverpost.com).

## EPA to Test Pesticides for Endocrine Disruption

In April, the U.S. EPA issued the first list of pesticides to be screened for their potential to disrupt endocrine systems in humans and animals. The testing is part of the Endocrine Disruptor Screening Program (EDSP) initiated by the 1996 Food Quality Protection Act. EPA also announced revised policies and procedures that the agency will follow to order initial screening tests, minimize duplicative testing, promote equitable cost-sharing, and protect manufacturers' confidential business information.

EPA planned to issue test orders in summer 2009 to the manufacturers of 67 pesticide chemicals to determine whether they are endocrine disruptors. Manufacturers are required to conduct testing as specified by the screening program and submit results to EPA in a reasonable time period, or EPA can suspend the sale or distribution of the substance. The listed pesticide chemicals were selected because they have high potential for human exposure through food and water, residential activity, or agricultural pesticide application. Testing will eventually be expanded to cover all pesticide chemicals.

If a chemical is found to have the potential to disrupt endocrine systems, it will proceed to Tier 2 testing, designed to identify adverse endocrine-related effects and establish a quantitative relationship



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between dose and effect. EPA is currently developing and validating Tier 2 tests.

Visit [www.epa.gov](http://www.epa.gov).

## Animas-La Plata Project Begins Pumping

The Bureau of Reclamation's 40-year-old Animas-La Plata project in Colorado began pumping water to fill its 120,000 acre-foot-capacity reservoir, Lake Nighthorse, in early May, but an almost immediate malfunction pushed back the date the reservoir will be full by as much as six months, reported the *Durango Herald*.

The reservoir is being filled from the Animas River by eight pumps with capacities varying from 14 to 56 cubic feet per second, noted the paper. It was expected to fill over a span of 18 months to three years, but the crest gates that allow water to flow into a fish screen area before it is pumped uphill malfunctioned. According to the *Herald*, the problem was expected to be solved in only a few days but caused the project to miss high flows from spring snowmelt.

The project was authorized by Congress in 1968 but has been hampered by setbacks. According to the *Herald*, these included suspension of federal funding, U.S. Fish and Wildlife Service concerns about the endangered Colorado pikeminnow, lawsuits by environmental groups over loss of wetlands and wildlife habitat, cost increases from

\$338 million to \$500 million, and reduction in the scale of the project to address opponents' concerns.

The project was originally developed to supply over 190,000 acre-feet of water per year for irrigation and drinking, but the final version is limited to 57,100 acre-feet of depletion and contains no water for irrigation, reported the *Herald*. It does, however, provide water for the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe as part of the 1986 settlement of their water right claims.

Other Colorado partners in the project are the state and the Animas-La Plata Water Conservancy District. New Mexico partners—the Navajo Nation, the San Juan Water Commission, and the La Plata Conservancy District—also receive water from project drawn from the San Juan River.

Visit [www.durangoherald.com](http://www.durangoherald.com).

## EPA Reforms IRIS Process

In May, the U.S. EPA announced reforms to its Integrated Risk Information System (IRIS). This database includes information on ways human health is impacted by exposure to chemical substances released to air, water, and land at contaminated sites, as well as exposure through the use and disposal of products. It currently contains qualitative and quantitative health effects information for more than 540 chemical substances

found in the environment. Government agencies and private entities use IRIS to help characterize public health risks of chemical substances at specific sites.

In the past, the IRIS program has been hampered by an assessment development process that took too long, was redundant, and was not transparent to the public (see *Southwest Hydrology*, Sept/Oct 2008). In January 2009 the General Accountability Office identified the IRIS process as one of three program areas warranting attention by Congress and the executive branch.

The new process will be entirely managed by EPA and contains a streamlined review schedule. It will no longer provide other federal agencies the opportunity to request suspension of an assessment process in order to conduct research on "mission-critical" chemicals. Other federal agencies and White House offices will still have opportunities to submit comments as long as they are from health scientists and focus on scientific and technical aspects. After considering this input, EPA will have final authority over the contents of all IRIS assessments.

Rigorous independent external peer review as well as public review and comment will remain key components of the new IRIS process. In addition, all written comments from other federal agencies, including White House offices, regarding IRIS assessments will be made public. ■

Visit [www.epa.gov/iris/process](http://www.epa.gov/iris/process).

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