

# GOVERNMENT

## AZ County Requires Water Before Development

Earlier this year, Cochise County in southern Arizona became the first county in the state to amend zoning regulations to require new subdivisions to meet the state's 100-year water adequacy requirements before being approved. This requirement already exists within Arizona's five Active Management Areas (AMAs) that cover the major metropolitan areas, but rural areas outside the AMAs had no such authority. However, last year the Arizona legislature

moved to allow counties, cities, and towns outside AMAs to enact their own legislation requiring similar demonstrations.

Three years ago, the Arizona Department of Water Resources (ADWR) determined that the Upper San Pedro Basin, which lies largely within Cochise County, did not warrant AMA designation because adequate water supplies exist to meet future needs. Many disagreed with this decision, claiming the water demands of the rapidly growing city of Sierra Vista and nearby U.S. Army's Fort Huachuca threatened the flow and ecosystem of the

upper San Pedro River. The new zoning regulations will now allow the county to manage its water resources more closely.

An adequate water supply is defined by ADWR as sufficient groundwater, surface water, or effluent of adequate quality to satisfy the proposed use for at least 100 years. The supply must be continuously, legally, and physically available. In addition, the financial capability to construct the water delivery, treatment, and storage facilities must exist. Tom Whitmer of ADWR elaborated on these requirements to the *Sierra Vista Herald*: If the subdivision will be distributing water from a provider or central system, that water use must not cause the water table to fall further than 1,200 feet below the surface for 100 years. If no central system is to be used and private wells on each lot are planned, the combined projected water use of the subdivision must not cause the water level elevation to fall more than 400 feet below the surface. A subdivision is defined by ADWR as six or more parcels in which at least one covers less than 36 acres. The new regulation does not affect the installation of individual wells by private landowners.

## HydroFacts

Number of species ever listed as threatened or endangered: 1,353  
 Number of species ever delisted for any reason: 41 (3 percent)

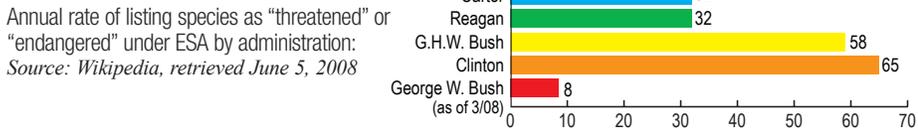
Source: U.S. Fish and Wildlife Service

Number of environmental laws waived by Homeland Security in April 2008 to build the final 470 miles of border fence: 30

Source: CNN

Date that desert-nesting bald eagles were listed under ESA: March 11, 1967  
 Date U.S. Fish & Wildlife removed protection: July 9, 2007  
 Date court reinstated protection: March 5, 2008

Various sources



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The *Herald* reported that although the Cochise County supervisors approved the zoning amendment, some expressed concern over whether smaller developments could afford the hydrologic studies necessary to make the adequacy demonstration. ADWR is aware of that concern, said Scott Miller of the agency's assured and adequate water supply program, and is figuring out ways to help the smaller developments, according to the paper.

Visit [www.azwater.gov](http://www.azwater.gov) and [www.svherald.com](http://www.svherald.com).

## Planning Proceeds on Utah's Powell Pipeline

Documents submitted to the Federal Energy Regulatory Commission (FERC) this spring put into motion the public review process and environmental assessment of

a proposed pipeline from Lake Powell into southern Utah. The pipeline will extend 139 miles to Sand Hollow Reservoir near St. George, then another 38 miles to Iron County. The project was approved in 2006 to enable Utah to make use of some of its 400,000 acre-feet-per-year allotment of Colorado River water that is currently not used. Utah's total Colorado River allocation is 1.37 million acre-feet per year. The southern Utah pipeline will deliver 100,000 acre-feet annually at full development to Washington, Kane, and Iron counties, whose populations are expected to grow three to six percent annually over the next several decades, according to *The [St. George] Spectrum*.

The project will include pumping facilities at Glen Canyon Dam and additional booster facilities to provide the needed 2,000-foot lift. Hydroelectric generation facilities will also be constructed to take advantage of the 2,800-foot fall between the high point and the end of the pipeline; their operation necessitates FERC licensing.

The state will pay for the pipeline and the three county water conservancy districts will repay the costs through water sales to its members. Licenses, permits, and the record of decision on the environmental impact statement should be completed by 2012, according to the Utah Division of Water Resources. Construction is scheduled to begin in 2015 so that water delivery can start in 2020.

While some embrace the pipeline as the water supply solution to the area's inevitable growth, opponents say much more information is needed about its potential environmental impacts and true costs before it moves forward, according to *The Spectrum*. Estimates of the construction cost range from \$585 million to \$2 billion. Furthermore, current water use in the southern Utah area ranges from about 250 to nearly 400 gallons per capita per day; opponents say conservation efforts and growth limits could make the

*continued on next page*

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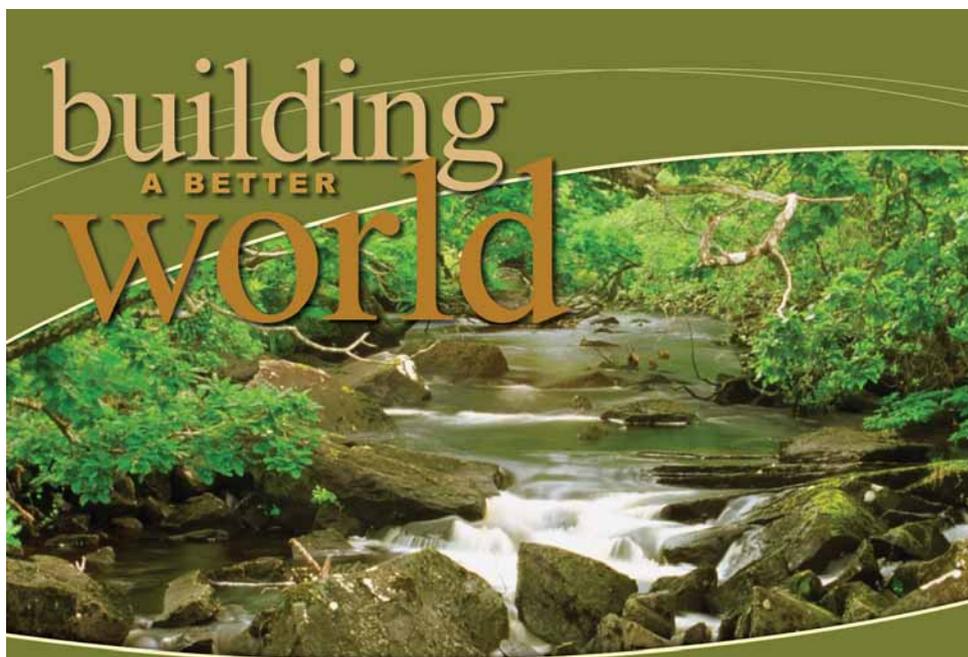
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## GOVERNMENT (continued)

pipeline unnecessary. Concerns about climate change and its impact on the reliability of the Colorado River as a future water supply have also been raised.

Visit [www.water.utah.gov/LakePowellPipeline/Alignment/](http://www.water.utah.gov/LakePowellPipeline/Alignment/) and [www.thespectrum.com](http://www.thespectrum.com).

### NM Bill Eases Restrictions on Water Rights Acquisitions

In late February, New Mexico Gov. Bill Richardson signed legislation to improve the way the state can acquire water to meet the demand of the Pecos River Compact. The 1948 compact provides for equitable division and apportionment of the use of the river between New Mexico and Texas.

SB 227 allows the state of New Mexico to purchase water rights in the Pecos Valley without the extra expense of purchasing the underlying land, as previously mandated. It also enables the Interstate Stream Commission to sell parcels of land previously acquired for water rights, which will save the state money on upkeep of the land.

Farmers in the Pecos Valley may benefit from the new law because it enables them to sell part of their water while keeping their land. The new law took effect immediately.

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

### Waste Dump at TX/NM Border Raises Concerns

A proposed facility to store low-level radioactive uranium waste appeared to be moving forward last spring despite concerns over its potential to contaminate groundwater, according to the *Houston Chronicle*. The site is located in Andrews County about 130 miles west of Midland, Texas, near the New Mexico border. It would store material from a Fernald, Ohio, weapons processing plant that is currently being stored above ground there. In March, the executive director of the Texas Commission on Environmental Quality (TCEQ) recommended approval of Waste Control Specialists' (WCS) license application for the facility.

According to the *Chronicle*, the proposed facility has drawn controversy over fears of groundwater contamination and suspicion that its approval is being greased by the political connections of WCS. WCS is owned by Harold Simmons, who since 2001 has contributed nearly \$500,000 to Gov. Rick Perry, who appoints the state's environmental commissioners, the newspaper said.

Last summer, four geologists and engineers recommended to TCEQ that the license for the dump be denied, reported the *Chronicle*, but WCS

countered that its data and models showed the facility would be safe even if precipitation increased dramatically in the future. The company would also install additional wells to monitor soil moisture under the proposed license.

"Glenn Lewis, a writer who worked with the technical team that evaluated the adjacent site for the low-level radioactive waste dump, said additional wells will not solve the problem of nearby groundwater. Lewis resigned from TCEQ last year over the agency's handling of the license applications," reported the *Chronicle*.

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

### Water Agencies Form Climate Alliance

United by the fact that climate change may pose a major long-term challenge to delivering high-quality drinking water, eight large water agencies have formed the Water Utility Climate Alliance (WUCA). The alliance will work to improve research on the impacts of climate change on water utilities, develop strategies for adapting to climate change, and implement tactics to reduce their greenhouse gas emissions.

Comprised of Denver Water, the Metropolitan Water District of Southern California, New York City Department

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of Environmental Protection, Portland Water Bureau, San Diego County Water Authority, the San Francisco Public Utilities Commission, Seattle Public Utilities, and the Southern Nevada Water Authority, WUCA agencies collectively supply drinking water to more than 36 million people.

In its first official act last spring, WUCA provided comment on the "Summary of Revised Research Plan" prepared by the U.S. Climate Change Science Program (CCSP). WUCA identified key research needs that would improve their members' ability to develop strategies to cope with potential impacts of climate change:

- Reduce uncertainty in climate change projections by improving and refining global climate models and applying them at the regional or local level;
- Enhance the collection, maintenance, and accessibility of information to make data more useful in decision-making;
- Ensure that water providers worldwide have access to consistent climate data;
- Develop decision-support tools for planning, decision-making, and policy-making that can accommodate deep uncertainty and the potential for abrupt climate changes; and
- Coordinate international research efforts, particularly with those countries that

are already experiencing the effects of climate change, such as Australia.

Visit [www.sfwater.org](http://www.sfwater.org).

### **Final Partner Signs On for Drop 2**

In April, Metropolitan Water District of Southern California's Board of Directors authorized \$28.7 million to join agencies in Arizona and Nevada to fund construction of the 8,000-acre-foot Drop 2 Reservoir, to be built near the All-American Canal in Imperial County, California.

At times, Colorado River water users downstream of Parker Dam reduce or cancel their water orders after rain events or other circumstances change their water needs. Depending on operational circumstances at the time, the water cannot always be stored for later use and flows on to Mexico, but is not included as part of Mexico's allocation of Colorado River water—thus the water is considered "lost."

With the new reservoir in place, this non-storable water will be diverted into the All-American Canal at Imperial Diversion Dam, then into the Drop 2 Reservoir. The water will then be released back into the All-American Canal for delivery to and use by the Imperial Irrigation District

according to an approved operations plan. Once completed in late 2010, the reservoir is expected to provide up to 3.5 million acre-feet of water over 50 years.

Under the funding agreement, Metropolitan and the Central Arizona Water Conservation District (CAWCD) will reimburse Southern Nevada Water Authority (SNWA) for their share of the \$172 million paid to the U.S. Bureau of Reclamation to build the Drop 2 Reservoir. In return, Reclamation, which will design and build the facility, will make a total of 600,000 acre-feet of water available to the three agencies through 2036. CAWCD, along with Metropolitan, will receive 100,000 acre-feet, while SNWA will take delivery of 400,000 acre-feet. Metropolitan will be the first agency to take delivery of the water through 2010, provided that Colorado River shortages are not declared.

Visit [www.usbr.gov/lc/region/programs/drop2/faqs.html](http://www.usbr.gov/lc/region/programs/drop2/faqs.html) and [www.mwdh2o.com](http://www.mwdh2o.com).

### **Impacts of Delta Delivery Cuts Widespread**

Last year, a federal court order curtailed the amount of water that state and federal water projects are permitted to pump from the Sacramento-San Joaquin Delta between December

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and June in order to protect the threatened Delta smelt. Those restrictions went into effect this year.

In early January, the California Department of Water Resources (DWR) announced that 2008 allocations from the State Water Project (SWP) would be 25 percent of requests, but after abundant January precipitation, the amount was increased to 35 percent.

A Feb. 28, 2008 snow survey showed Sierra snowpack at 118 percent of normal. However, due to the number of dead Delta smelt recovered at the pumping plant, DWR at that time reduced SWP pumping rates to 25 percent of the rate normally pumped at that time of year, or about 2,000 cubic feet per second (cfs) compared to the normal 8,000 cfs. Two weeks later, DWR further reduced the SWP pumping rate to about 1,500 cfs.

On May 1, the final snow survey of the season indicated snow water content had fallen to just 67 percent of normal for the date. Much of the snow water was being absorbed by dry soils resulting from last year's extremely dry weather, said DWR, and March and April 2008 precipitation was the lowest on record (since 1921) in the northern Sierra. Nevertheless, DWR projects 2008 deliveries will be 35 percent of requests overall. Pumping rates can increase somewhat this summer once the smelt migrate away from the pumping area.

The Association of California Water Agencies (ACWA) reported in March that impacts of the reduced deliveries were beginning to ripple across the state, especially since the restrictions follow several dry years. The association's 450 members are responsible for about 90 percent of the water delivered in California. ACWA said many agencies

were dipping into dry-year reserves and seeking more expensive alternative supply sources where possible. Among the impacts ACWA reported:

- Communities such as Long Beach put mandatory conservation programs in place.
- Decisions on new housing and retail developments in Riverside County are on hold because the necessary water supplies cannot be guaranteed.
- Growers in northern San Diego County are cutting down citrus and avocado trees due to water shortages.

ACWA advocates actions to improve the sustainability of the state's water system and reduce pressure on the delta, such as investing in conservation, water recycling, local and regional water storage, and desalination.

Visit [www.acwa.com](http://www.acwa.com) and [www.water.ca.gov](http://www.water.ca.gov).

A photograph of a person wearing blue shorts, seen from behind, digging in the sand on a beach. The background shows a rocky coastline and waves crashing against the shore.

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## Feds Improve Wetland, Stream Mitigation

In March, the U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency released a new rule to clarify how to provide compensatory mitigation for unavoidable impacts to wetlands and streams. The rule was designed to enable the agencies to promote greater consistency, predictability, and ecological success of mitigation projects under the Clean Water Act.

Each year thousands of property owners undertake projects that affect aquatic resources. Proposed projects that are determined to impact jurisdictional waters are first subject to review under the Clean Water Act. The Corps reviews these projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as possible. Consistent with the administration's goal of "no net loss of wetlands," a Corps permit may require a property owner to restore, establish, enhance, or preserve other aquatic resources in order to replace those impacted by the proposed project. This compensatory mitigation process seeks to replace the loss of existing aquatic resource functions and area.

Property owners who must complete mitigation are encouraged to employ a watershed approach. The new rule establishes performance standards, sets timeframes for decision making, and to the extent possible, establishes equivalent requirements and standards for the three sources of compensatory mitigation: permittee-responsible mitigation, mitigation banks, and in-lieu-of-fee programs.

The new rule does not change the standards that determine when mitigation is required, only where and how it is to be completed. The rule also preserves the requirement for applicants to avoid or minimize impacts to aquatic resources before proposing compensatory mitigation projects to offset permitted impacts.

Visit [www.usace.army.mil/cw/cecwo/reg/citizen.htm](http://www.usace.army.mil/cw/cecwo/reg/citizen.htm) or [www.epa.gov/wetlandsmittigation](http://www.epa.gov/wetlandsmittigation)



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