

CO Basin States Sign Agreement

The terms are somewhat vague and some issues are yet to be resolved (see “Arizona Builds War Chest,” below), but what many doubted would ever come to pass happened last August: the seven Colorado River Basin states all signed a letter—the same letter—to Secretary of Interior Gale Norton laying out how future drought and water shortages on the Colorado will be addressed.

The letter was sent in response to one sent last May by Norton to the governors of the seven states, announcing her intent to develop shortage guidelines for the Lower Basin and management options for the river’s two main reservoirs, lakes Powell and Mead. It was in the states’ interest to develop their own strategies rather than have one forced on them by the federal government, thus they had incentive to work together. The letter provided the secretary an update of the direction of discussions on resolving management strategies, and included numerous statements of intent for additional work.

The letter listed general management strategies that the states had agreed on: to delay the onset and minimize the extent and duration of shortages in the Lower Basin; to maximize the protection Lake Powell provides the Upper Basin so as to avoid possible calls for the Upper Basin to curtail uses; and to premise shortage guidelines on proportionate shortage-sharing by Mexico.

The proposed management strategy focused on three primary elements: 1) coordinated reservoir management and Lower Basin shortage strategies; 2) system efficiency and management; and 3) supply augmentation. Reservoir management strategies centered on identifying key volumes in the reservoirs that would define storage conditions and operations aimed at managing these storage conditions. In the area of system efficiency, the letter proposed a basin-wide tamarisk reduction program, removing accumulated sediments behind Laguna Dam, developing Wellton-Mohawk

regulatory storage, pursuing elimination of unauthorized uses of Colorado River water in the Lower Basin, and several other measures. Approaches to consider for augmenting the water supply include cloud seeding, desalination, conveying pumped groundwater to the river, and recycling more water back to the river. Conservation was not specifically mentioned in the letter.

The letter is available at www.colorado.edu/in_focus/colorado_river/interior/letter_to_Norton_08-05.pdf.

New EPA Publications on Wetlands, Watershed Protection

EPA recently published “**National Management Measures to Protect and Restore Wetlands and Riparian Areas for the Abatement of Nonpoint Source Pollution**,” a technical guide and reference document for use by state, territory, and tribal managers as well as the public in the implementation of nonpoint source (NPS) pollution management programs. The new guidance contains information on the best available, economically achievable means of reducing nonpoint source pollution through the protection and restoration of wetlands and riparian areas, as well as the implementation of vegetated treatment systems.

For more information or to download the document, visit epa.gov/owow/nps/wetmeasures.

“**Community-Based Watershed Management: Lessons from the National Estuary Program**” addresses questions about managing polluted runoff, increasing wildlife habitat, and controlling invasive species in estuaries. While the focus is on estuaries, the principles and examples are relevant to watershed management in general. The 98-page handbook describes innovative approaches developed and conducted by the 28 National Estuary Programs, which are community-based watershed-management organizations that restore and protect coastal watersheds.

The report can be downloaded from www.epa.gov/owow/estuaries/neprimer.

Arizona Builds War Chest for CO River Struggles

Arizona still can’t rest easy, even after the seven Colorado River Basin states signed an unprecedented agreement dealing with drought and water shortages on the river. A key aspect left unresolved, and of great concern to the state, is whether Arizona and Nevada can take water from tributaries to the Colorado River without having that amount deducted from their overall Colorado River allocation. Much of Arizona’s ability to supply water for the future hinges on its claim to that tributary water, particularly in Maricopa, Pima, and Pinal counties, the state’s most populous areas, said the *Arizona Republic*.

The issue is likely to end up in the Supreme Court, Herb Guenther, director of the Arizona Department of Water Resources (ADWR), told the *Republic*. In preparation, the state created a legal defense fund, hoping to raise at least \$1.5 million just to prepare for possible lawsuits, the paper said. Costs are likely to be much higher if, in fact, the case goes before a judge. ADWR seeded the fund with \$200,000, and the Central Arizona Project promised to match that amount, and any other contributions, until the goal is met, according to the paper. A lawyer has already been retained by the state.

Currently, Arizona claims water from Colorado tributaries, such as the Gila River, as its own, separate from the allocation of Colorado River water it receives under the various compact terms. However, as competition for Colorado River water increases, Upper Basin states, wishing to release less water downstream, are expected to challenge that claim. According to the *Republic*, Colorado has expressed dissatisfaction with Arizona’s use of tributary water in the past, but had never threatened a legal challenge until Nevada recently revealed its plans to take water from the Virgin River, another tributary to the Colorado.

Visit www.azcentral.com.

Arizona County Links Development, Conservation

According to the recently approved Babocomari Area Plan, new subdivision plans submitted to Cochise County in southern Arizona must indicate what design features are included for reducing overall water use, such as excluding water features and open water storage facilities, reported the *Sierra Vista Herald*. The plan covers a region in southern Arizona that is rapidly converting from ranching-dominated land use to residential lots of four acres or larger, the paper said. The Babocomari area extends from the Huachuca Mountains east to the San Pedro River, whose world-renowned ecosystem is threatened by development in the watershed.

According to the *Herald*, the plan states that new developments, both residential and nonresidential, “will have to meet standards that will preserve existing watercourses and protect them from erosion, pollution, and alteration of natural drainage patterns. No new wells will be allowed in the Babocomari alluvial aquifer.” In addition, nonresidential developments will be required to incorporate “water harvesting and storm water filtering and recharge facilities... along with waterless urinals in employee and public restrooms. Landscaping plans shall include drought-tolerant vegetation. Irrigated turf is prohibited in parking areas, roadway medians, and landscape features. Air conditioning shall replace evaporative coolers,” the article said. New swimming pools and water spas may not use potable water, according to the newspaper, but developers could treat gray water to meet standards for use in those facilities. Car washes and other high-water-use businesses are not prohibited under the new plan, but they face restrictions: if they use more than a net 200 gallons per day, they must recycle or recharge the water.

Pat Call, chair of the Cochise County Board of Supervisors, told the *Herald* that “to the best of my knowledge, this is the

most progressive effort by any county in Arizona to link development with water conservation.” He added that developers in the area helped develop the plan and they understand the issues faced by the region.

Visit www.svherald.com.

Security Concerns Overrule Wetlands Protection

Border security took precedence over the environment in the Tijuana River watershed last fall as Homeland Security Secretary Michael Chertoff exercised his authority and for the first time waived environmental laws to allow the 14-mile fence along the California-Mexico border to be completed, reported the *Los Angeles Times*. The final 3.5-mile section to the Pacific Ocean will include two new roads, fencing, stadium-style lighting, and surveillance cameras, and will run through the Tijuana Estuary, which various groups on both sides of the border have been working to restore.

The newspaper article indicated that environmental groups and the federal agency had long been at loggerheads. A coalition of organizations, including the Sierra Club, the San Diego Audubon Society, the California Native Plant Society, the Southwest Wetlands Interpretive Association, San Diego Baykeeper, and the Center for Biological Diversity, earlier filed a lawsuit alleging that an environmental

impact statement had not been issued for the project. Congressional Republicans became disgruntled with what they viewed as obstructionism by environmentalists and pushed through the Real ID Act in May, “authorizing the Homeland Security secretary to waive any legal requirements that he ‘determines necessary to ensure expeditious construction’ of barriers, like border fences,” wrote the *Times*.

In his comments reported by the *Times*, Jim Peugh of the San Diego Audubon Society indicated that the environmental groups were fighting for a border that could still be protected, but that would take into account the biology and ecology of the wetlands rather than cutting off hilltops and filling in valleys to create a straight, freeway-type border.

Visit www.latimes.com.

Flood Concerns Shake Up Californians; Governor Replaces Flood Board

Images from Hurricane Katrina’s devastation on the Gulf Coast woke up Californians to their own vulnerability to flooding and disaster. California’s Sacramento-San Joaquin delta area has many features in common with the New Orleans area, as pointed out by University

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HydroFacts

Huge quantities of water can be locked up or released via geologic actions such as volcanoes venting steam. And water is constantly created and destroyed via biologic and chemical processes. Consider:

Water destroyed by photosynthesis in creating 1 pound of cellulose: **0.6 pounds**

Water vapor emitted by a car burning 1 gallon of gasoline: **about 1 gallon**

Water generated by burning of the 930 billion barrels of oil produced since the start of the Industrial Revolution: **123 million acre-feet**

Sea level rise caused by burning oil and natural gas since the start of the Industrial Revolution: **0.15 inch**

Percent of water on Earth originating from comets, from two competing theories: **10 percent, 80-90 percent**

Source of calculations: Gary Woodard, SAHRA, University of Arizona

GOVERNMENT (continued)

of California at Davis professor Jeffrey Mount for the *Los Angeles Times*: “Both are at the bottom of a large, flood-prone river system. They have both been reclaimed with a vast system of levees. The land is subsiding below sea level. They have lost much of the wetlands that could absorb storm waves and floods. And they are both vulnerable to rising sea levels tied to global warming.” While the reclaimed land in the California delta area does not house a city like New Orleans, farmland is rapidly being replaced by housing developments. And although California is hardly hurricane-prone, it does exist under a different threat—earthquakes—which, either alone or in combination with waves from a heavy winter storm, could wipe out significant portions of an aging levee system, Mount told the *Times*.

Concern over earthquake damage is not limited to flooding in the delta area; Southern California imports 60 percent of its water via three major aqueducts, all of which cross major active fault lines, according to the *Times*. Southern California water companies told the newspaper that they have been building up local surface water and groundwater reserves in recent years as a safeguard, should they lose their supply lines.

In response to the renewed concern over levee failure, Gov. Arnold Schwarzenegger requested more than \$90 million from Congress to improve California’s levee system. In his request, he noted that “many parts of the Central Valley have significantly lower levels of flood protection than similar areas in the nation,” having only a 100-year level of protection. Prior to Hurricane Katrina, New Orleans had a 250-year level of protection, and other large cities have up to a 500-year level of protection, according to his press release.

In other flood control-related action, Schwarzenegger ousted the existing six-member State Reclamation Board, most of whom had been appointed by former Gov. Gray Davis, and replaced it with

seven new members who “share my commitment to ensuring these lifesaving efforts are not ignored or postponed,” he wrote in his announcement. Among those ousted was Jeffrey Mount.

According to the Reclamation Board’s Web site, its mission is “to control flooding along the Sacramento and San Joaquin rivers and their tributaries in cooperation with the U.S. Army Corps of Engineers; to cooperate with various agencies of the federal, state, and local governments in establishing, planning, constructing, and monitoring flood control works; and to maintain the integrity of the existing flood control system and designated floodways through the Board’s regulatory authority by issuing permits for encroachments.”

The board serves at the discretion of the governor and, according to the *Sacramento Bee*, it is not unusual for a new governor to replace appointees from a prior administration. But the timing of this action raised questions about the governor’s interest in maintaining a balanced flood management strategy, said the newspaper. The prior board had years of experience working with the complicated flood control issues of the state. Since Hurricane Katrina, that board had taken a more “aggressive stance toward new development in floodplains. It challenged local governments to update their floodplain maps and check their levees before approving any new homes and buildings behind these aging mounds of dirt,” said the *Bee*, much to the consternation of some local governments, developers, and agribusiness groups. The replacement board does not have that history of working together, and even individually, members are seen as less experienced, according to the *Bee*.

Visit www.latimes.com and www.sacramentobee.com.

\$7.1 Million to Aid New Mexico Colonias

from the U.S. Department of Agriculture
Agriculture Secretary Mike Johanns recently awarded \$7.1 million to five

southern New Mexico colonias for water and wastewater system improvements. The funds were provided through the Rural Utilities Program of the U.S. Department of Agriculture’s Rural Development office to the communities of Anthony, Bayard, Chaparral, Columbus, and Lordsburg. Individual awards ranged from \$740,000 to \$2.8 million.

“These projects will provide modern water delivery systems and meet a growing demand for services,” said Johanns. “Each of these investments will provide jobs and enhance the quality of life in these historically underserved rural communities.”

Information on rural programs is available at www.rurdev.usda.gov. A complete listing of the loans and grants provided to the colonias residents is at www.rurdev.usda.gov.

NM Restricts Conventional Septic Systems

Effective last fall, owners of parcels smaller than three-quarters of an acre must install advanced sewage treatment systems that filter wastewater before it is discharged, reported *The [Santa Fe] New Mexican*. Conventional septic systems are no longer allowed, except on larger parcels. The regulation was enacted by the New Mexico Environmental Improvement Board, said the paper. New Mexico Environment Secretary Ron Curry attributed more groundwater pollution in New Mexico to septic tanks than from all other sources combined.

The new requirement applies only to new systems, or if owners enlarge their existing homes and increase water usage, New Mexico Environment Department Field Operations Division director Ana Marie Ortiz told the newspaper. In addition, those with the advanced systems will be required to maintain and periodically sample them to make sure they are operating correctly. Ortiz was unable to provide *The New Mexican* with estimates of the additional costs the new systems would entail.

Visit www.freewmexican.com.