States Agree on Plan to Manage Shortages on the Colorado River

By John Thomas, Tucson Water

On February 3, 2006, the seven states including Arizona that share the Colorado River waters sent the Secretary of the Interior a preliminary agreement for River operations under shortage conditions. This agreement, if approved by the Federal Government, would establish a framework for handling shortages and also would establish a process for augmenting the flow in the River. An approved agreement would also head off a potential legal battle among the Basin states over the interpretation of the "Law of the River" (which is the resulting sum of all of the agreements and legal actions concerning allocations of the river, starting with the 1922 Colorado River Compact).

Outgoing Secretary of the Interior Gale Norton, a former Colorado Attorney General, was a primary driver for this agreement, threatening that she would impose a federally-drafted river management plan by the end of 2007 unless the states agreed on a plan of their own.

The continuing drought is intensifying a collision between two historical realities: The 1922 Compact was adopted after a historically wet period, so it overallocates Colorado River supplies to the seven Basin states. Second, the parties to the 1922 Compact could not have anticipated the explosive growth that would occur in the Basin states, particularly in the Las Vegas area. (The Compact provides Nevada an annual allocation of only 300,000 acre-feet – 4% of the allocated river flow – compared with 4.4 million acre-feet for California and 2.8 million acre-feet for Arizona.)

HOW THE AGREEMENT BENEFITS ARIZONA AND THE OTHER BASIN STATES

Arizona – Without an agreement, Arizona has the greatest exposure to risk during times of shortage. That's because in 1968, as a price of getting Congressional approval of the CAP, the CAP and its 1.5 million acre-feet of Colorado River water was given the lowest priority on the river.

The new agreement does not change that priority, but it does provide a staged implementation of shortages to the Lower Basin states and Mexico, based on the elevation of Lake Mead. At the time of the agreement, the elevation of Lake Mead was about 1,140 feet above mean sea level. If the Lake drops to 1,075 feet, the agreement provides that the Lower Basin would be shorted 400,000 acre-feet. A further drop in the Lake to 1,050 feet would short the Lower Basin by 500,000 acre-feet, and a still further drop to 1,025 feet would short the Lower Basin by 600,000 acre-feet. Any drop in the level of the Lake below 1,025 feet would cause all seven states to meet with the Secretary of the Interior to reach a solution.

Municipal water providers with CAP allocations should note that, in a time of declared shortage, municipal customers would not be the first to experience a cut. Lower priority CAP customers including Agriculture uses, miscellaneous uses, and Arizona's water banking programs would be cut before municipal customers. However, once a shortage is declared, the shortage may last for several years or even decades. Therefore, CAP municipal users must be prepared for the possibility of long term reductions in their CAP deliveries.

Upper Basin States – The 1922 Compact and subsequent agreements require the Upper Basin states (Colorado, Wyoming, New Mexico, and Utah) to deliver a minimum amount of Colorado River water from Lake Powell to Lake Mead for use by the Lower Basin states (Arizona, California, Nevada) and Mexico. The amount of the minimum delivery is under dispute, with the Upper Basin arguing that releases must not threaten the power head in Lake Powell, while Arizona, in particular, argues that a minimum of 8.23 million acre-feet must be released. Regardless of how this dispute is resolved, Colorado remains concerned that in a continuing drought, the Lower Basin states could issue a "Call on the River" demanding delivery of the full amount. Colorado, the largest user in the Upper Basin, could then be faced with having to curtail its own use of Colorado River water in order to meet its obligation to the Lower Basin.

The agreement is intended to address this Colorado concern by providing more flexibility in how Lake Powell and Lake Mead are operated, without violating the fundamental tenets of the Law of the River. While the Upper Basin states may ultimately still have to meet a minimum delivery obligation to the Lower Basin states, more flexibility is provided in terms of how this is done. The Bureau of Reclamation will manage the lakes "conjunctively," that is, the Bureau will consider the relative water levels in each lake in order to determine how much to release from Lake Powell into Lake Mead in any year. While the target release will be 8.23 million acre-feet per year, the amount may vary from 7- to 9.5-million acre-feet based on the relative levels of each Lake. This more flexible management of the river will reduce the chances of shortage in the Lower Basin that could prompt a "Call on the River" so feared by the Upper Basin states.

Nevada – While Nevada retains its small Colorado River allocation (300,000 acre-feet), the agreement does provide the opportunity for additional supplies that Nevada creates. Nevada will fund the construction of a reservoir on the California-New Mexico border (estimated cost, $80 million) to catch river overflows that the regional farmers cannot use and which would otherwise go to Mexico. In return, Las Vegas will be able to take an additional 280,000 acre-feet out of Lake Mead. This arrangement will help bridge Nevada's needs for additional water until such time as Las Vegas's controversial Great Basin groundwater pumping and transmission project is completed, which if approved would be in 2018 at the earliest. Treated wastewater from the Las Vegas development supported by Great Basin pumping would flow into Lake Mead. The agreement provides that Las Vegas would be able recover this water in the form of return flow credits from Lake Mead to augment its river allocation. In addition, Nevada may seek to obtain access to additional Colorado River water by paying for seawater desalinization plants in California or Mexico that would replace use of Colorado River water in those areas. Finally Nevada is funding a study of potential augmentation programs for the entire Colorado River system.

California – California benefits from this agreement as will other states that embark on extraordinary Colorado River conservation programs, such as lining canals, fallowing farms, and desalination programs (but excluding weather modification programs). States will be given a credit for such "Intentionally Created Surplus" and allowed to store the unused allocation (minus a 5% contribution to the system) in Lake Mead. They can then make arrangements to take the water at a future time (however, absent an emergency or extraordinary weather conditions, the state could not take the unused allocation during a time of declared shortage on the river).

In general, the agreement establishes a framework for shortage sharing among the seven Basin states. It provides some relief to each state, and encourages technology and research to enhance Colorado River supplies. The agreement represents a shared beginning, not a conclusion, as many details still need to be worked out and the whole package approved by the Secretary of the Interior. If approved, the agreement will continue until 2025.

The test of the agreement will then be how it works in practice – will more flexible management of the river and management of shortages, conservation incentives, river augmentation efforts, and provisions addressing some of Las Vegas's spiraling water needs – be sufficient to maintain agreement among the seven Basin states? We can only hope so. The alternative, a showdown among the states in Supreme Court over management of the Colorado River and the allocations in the 1922 Compact, is too scary and expensive to contemplate.