

Upper Colorado River Basin Compact: Sharing the Shortage

By Hon. Greg Hobbs

The Colorado River runs overfull and skimpy, depending on the year, the decade, the century or the millennium. Drought punctuated by intermittent flood has scorched the expectations of human beings from the Native Americans to the Hispanics to all other immigrants who have settled into this harsh and beautiful land from the river's sources in Wyoming and Colorado to the Sea of Cortez.

The early 21st Century drought reminds us once again that the law of nature and the law of man require understanding, reconciliation, and continued community problem-solving. Sharing the river's shortage and its sometimes plenty is the primary function of the 1922 Colorado River Compact and the 1948 Upper Colorado River Basin Compact.

Bashing the 1922 negotiators for making a compact in the wettest of wet times miserably under-appreciates their achievement. In fact, they were children of the 1890's drought who luckily enjoyed a surge of early 20th Century flows. They could not have chartered the future of interstate and international water sharing among the seven basin states and Mexico except on the basis of reservoir storage in the really good years to make survival possible in the really bad ones. Bathtub rings in Lake Powell and Lake Mead testify that half-empty glasses are at least half full.

Dividing the Waters at Lee Ferry

At Bishop's Lodge in Santa Fe, the 1922 negotiators scrutinized two significant water measurement numbers. In 1902 the Colorado River produced 9,110,000 acre-feet and, well more than doubling that, 25,400,000 acre-feet in 1909. The average for the period 1899-1920 was 16,400,000 acre-feet. Such a figure explains the basic 1922 compact yearly perpetual consumptive beneficial use apportionment of 7.5 million acre-feet to the upper basin states and 7.5 million acre-feet to the lower basin states at the Lee Ferry measuring point, plus 1.5 million acre-feet to Mexico under the 1944 Treaty, totaling 16.5 million acre-feet.

Looking at the 1902 low number and having already gotten a good start at water development, the 1922 lower basin negotiators wanted a yearly guarantee at Lee Ferry for their water uses. The upper basin negotiators, with slower development in their states, wanted a longer term average for managing the wildly fluctuating river and an assured allocation for the future. The compact negotiators settled at 75 million acre-feet for the lower basin on a ten year running average. To meet this, they had before them a map sketched in with large reservoirs at Glen Canyon in the upper basin and Boulder Canyon in the lower basin.

By the time of the devastating 1930s drought, the lower basin had obtained construction of Lake Mead through the 1929 Boulder Canyon Project Act, while the upper basin stood naked without any significant compact storage. Adding the 1930s drought into the calculation of water availability, the Bureau of Reclamation concluded that only 6,300,000 acre-feet of water was available annually for consumptive use in the upper basin, not 7,500,000. Without storage to back up compact operations, the upper basin would face chronic calls by the lower basin for curtailment of water uses. Most alarming to Colorado, New Mexico, Utah, and Wyoming, the Secretary of the Interior recommended to Congress that it not authorize the construction of necessary river storage above Lee Ferry until the upper basin states divided their allocated water between themselves.

Upper Basin States Share the Shortage

Building on experience and good will, the negotiators of the 1948 Upper Colorado River Basin Compact specifically recognized the necessity of sharing the shortage. They divided the water apportioned to the four states by percentage of available water rather than establishing an acre-foot apportionment: Colorado 51.75%, New Mexico 11.25%, Utah 23%, and Wyoming 14%. They also established a commission with powers to resolve disagreements among themselves, curtail water uses in the upper basin for compact compliance, and represent their interests as a whole in all matters of Colorado River operations.

In the 1948 compact negotiations, the legal advisors for Colorado, Jean S. Breitenstein, and Wyoming, W. J. Wehrli, were instrumental in assisting the negotiators. Breitenstein later became a distinguished member of the United States Court of Appeals for the Tenth Circuit. Breitenstein was particularly persuasive on the question of percentage allocation, in contrast to the acre-foot allocations made in the 1922 Compact:

In the Colorado River Compact, of course, the acre-foot measurement is used in the apportionment of rights between the states. Now we come along twenty odd years after the Colorado River Compact and hear the engineers say perhaps there wasn't as much water in the Colorado River as the negotiators of the Colorado River compact thought there was. That immediately raises the point as to whether or not we shall fall into the same error, if it was an error in which they fell in making division between the basins.

The engineers have expressed doubt as to the total amount of water which will be available for use in the Upper Basin. . . . (P)ercentage can apply regardless of the amount of water which is available. And if you use terms of percentage rather than fixed acre-foot quantities, then you have a flexible apportionment which can apply under all conditions and the proportion or ratio or whatever the engineers call it is always the same. (Record of Negotiation of Upper Colorado River Basin Compact, Vol. I, Meeting No. 5, 72-73, December 2, 1947 session).

For Wyoming, Wehrli insisted that La Plata River Compact usage be charged to its allocation under the Upper Basin Compact and not be exempted from any general obligation Colorado and New Mexico might have for 1922 Compact compliance at Lee Ferry. (Record of Negotiation of Upper Colorado River Basin Compact, Vol. II, Meeting No. 6, 111-112, February 20, 1948 session). Wehrli took this position in response to Colorado's request for

recognition of the validity of the La Plata River Compact. The La Plata River is a Colorado River tributary of the San Juan River.

The 1948 Compact makes a perpetual allocation to Colorado, New Mexico, Utah and Wyoming for its percentage of water available under the 1922 Compact. It also provides for a significant Commission role in determining water use curtailments by each of the states necessary for meeting the 1922 Compact, and it reserves to each state the right and power to regulate internally the use of its apportioned water within its boundaries.

Water Sharing Into The Future

After its approval by Congress, the 1948 Compact led to the 1956 Colorado River Storage Project Act for the construction of Lake Powell, Flaming Gorge, Blue Mesa, and Navajo reservoirs that protect Colorado, New Mexico, Utah and Wyoming water uses. As a result, the severe 21st Century drought did not result in a compact call.

Recognizing the need for a cooperative approach to future droughts, the seven basin states have entered into a shortage management agreement that involves the lower basin states. Measures for stretching water supplies include conservation, municipal dry year leasing of agricultural water, water banking, desalination, water storage, water delivery efficiency improvements, and importation of water into the Colorado River Basin. The states are also cooperating with the federal government on endangered species protection projects throughout the Colorado River Basin that will accommodate full compact development.

As they are nearing full development of their compact apportionments, the states will need to take into account climate change scenarios. A 10-20 percent reduction in Colorado River water availability could occur by mid-century. The percentage allocation and curtailment terms of the 1948 Compact will be the benchmarks by which Colorado, New Mexico, Utah and Wyoming will direct their demand management and water infrastructure construction planning and decision-making.

In the event curtailment becomes necessary, the Commission must determine how much water each state needs to contribute under the 1948 Compact, while the states themselves must determine how to establish their respective methods of contribution.

Justice Hobbs was appointed by Gov. Roy Romer to the Colorado Supreme Court on April 18, 1996, and retained twice by Colorado voters for 10-year terms. He practiced law for 25 years, with emphasis on water, environment, land use, and transportation. He currently serves as vice president of the Colorado Foundation for Water Education and co-convenor of Dividing the Waters (Western Water Judges Project). He is also the author of In Praise of Fair Colorado, The Practice of Poetry, History and Judging (Bradford Publishing Co. 2004); Colorado Mother of Rivers, Water Poems (Colorado Foundation for Water Education 2005); and The Public's Water Resource, Articles on Water Law, History, and Culture (Continuing Legal Education in Colorado, Inc. 2007).