

# WATER CONSERVATION

## Colorado River water, an endless resource?

By Eric Kuhn

How often have you read or heard that the state of Colorado has 800,000 to 1,000,000 acre feet of unused Colorado River water available for future development? Is this common statement fact or fiction? Let's examine the facts.

The 1922 Colorado River Compact divided the use of the waters of the Colorado River between an Upper Basin and a Lower Basin. The compact negotiators thought they had enough water to provide each basin 7,500,000 acre feet of water per year of consumptive use. Further, the lower basin got a guarantee from the Upper Basin that the flow at Lee Ferry, the dividing point between the basins, would not be reduced below 75,000,000 acre feet in any consecutive 10-year period.

In the 1940s, the United States and Mexico entered into an international treaty providing 1,500,000 acre feet to Mexico. Then in 1948, the states of the Upper Basin entered into a compact to apportion the water available to the Upper Basin under the 1922 Compact among each Upper Basin state. Colorado received 51.75 percent of the Upper Basin's share.

How much water does this provide Colorado? It sounds like a simple question, but it is not. The current estimated virgin flow of the Colorado River at Lee Ferry is approximately 14,000,000 acre feet per year. If the Upper Basin must guarantee a delivery of 75,000,000 acre feet over any consecutive 10 years, that takes away 7.5 million acre feet per year. If the Upper Basin has to provide half the Mexican Treaty obligation, that amounts to another 750,000 acre feet per year, the total for both is 8.25 million acre feet per year. This happens to be the target release from Len Canyon Dam located just above Lee Ferry.

Taking 8.25 million away from 14 million leaves 5.75 million for the Upper Basin. Arizona gets a flat 50,000 acre feet per year for the small portion of that state which is physically in the Upper Basin, so Colorado gets 51.75 percent of 5.7 million, or 2,950,000 acre feet per year.

How much water is Colorado us-

ing today? The latest figures put that number around 2,100,000 acre feet per year. Remember, that number varies widely from year to year.

Doesn't the difference between 2.95 million and 2.1 million equal 850,000? It does, but not exactly. Under the law, Colorado is responsible for its share of evaporation on the Colorado River Storage Project reservoirs: Powell, Navajo, etc. This evaporation averages about 270,000 acre feet per year and reduces the net available to about 580,000 acre feet per year.

Further, what is the definition of "development?" There are many projects in Colorado that have already been developed but are not delivering water at average design capacity and there are projects under construction. Good examples of a project delivering at less than capacity are Windy Gap and the Dallas Creek Project. An example of a project under construction is Phase I of the Animas-La Plata Project. If we assume that these projects will some day be fully used, another 300,000 acre feet of water is already spoken for. This leaves the real amount of undeveloped water as low as 280,000 acre feet per year.

That may sound like a lot of water, but when it is spread over the six major sub-basins of the Colorado River, it is less than 50,000 acre feet per basin.

For the lawyers' benefit, I must clearly state that the Upper Basin states strongly disagree with any interpretation of the compacts made by the Bureau of Reclamation, or for that matter anyone else. Obviously, the Compact is fertile ground for litigation.

Where, when and how Colorado will use its remaining Colorado River Compact entitlement is a major issue facing the Colorado Water Conservation Board, the Colorado River Water Conservation District, the Colorado General Assembly and the Citizens of the state.

Eric Kuhn is on the staff of the Colorado River Water Conservation District in Glenwood Springs. He was recently appointed to the Colorado Water Conservation Board. The views expressed represent those of the author and should not be considered official positions of the district or the board.



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