

A STATE AT RISK: A STUDY OF COLORADO RIVER COMPACT OBLIGATIONS

I. ABSTRACT

Over the past year, POWER members have engaged in a dialogue with Colorado and Upper Basin water managers about the availability of water in the Colorado River Basin for trans-mountain diversion east over the Continental Divide to the Front Range. Within that dialogue, POWER's position has consistently been that-- according to the Colorado River Compact and the body of law, legal decisions, and administrative guidelines that have been used to allocate Colorado River resources and have come to be known as the Law of the River--there is no water available for trans-mountain diversion. The managers' position has consistently been that, according to the Colorado River Compact and The Law of the River, there is considerable water available for that purpose.

It is POWER's position in this study that the prospects of water shortages in the Colorado River Basin are alarming and, in face of these shortages, managers of Upper Basin have failed to develop a clear, strong, reliable legal defense against potential calls from down-stream states of Arizona, California and Nevada.

Unfortunately, the positions taken by the river managers about how much water is available within the Colorado River Basin and their insistence upon overly optimistic estimates of how much Colorado River water is available for trans-mountain diversion puts Coloradans at grave risk of one day having to shut off water they have grown to depend upon, or of having to pay high reparation fees that they cannot afford, or both.

II. MISCONCEPTIONS ABOUT 1 MILLION ACRE-FEET

Contrary to comments by Evans and Lochhead, the delivery requirement for an additional 1 million acre-feet to the Lower Basin states given in Article III (b) of the Colorado River Compact is not the only, nor even the major argument of POWER (see Evans and Lochhead, 1999; pp. 1 - 3). However, this issue will be addressed first. POWER's position is that this quantity of water can be claimed by the Lower Basin states and will be claimed in the future under conditions of water shortage and increased demand.

Evans and Lochhead assert that this quantity, if demanded, should come from tributary water flowing into the Colorado River below Lee Ferry. This interpretation is based on defining the "Colorado River system" as the entirety of the Colorado River within the United States to include both Upper and Lower Basins and their tributaries (see Articles II (a) and Article III (a) and (b) of the Compact). According to this argument, tributary flows ought to be credited against delivery requirements imposed on Upper Basin States at Lee Ferry (Evans and Lochhead, 1999; p. 5).

Apparently Evans and Lochhead believe that the 1 million acre-feet, if it were called for, does not have to be measured at Lee Ferry. Instead, it could be appropriated and measured as flows from Lower Basin tributaries. This interpretation could just as logically be made applicable to the 7.5 million acre-feet apportioned to each basin each year (Article III (a) of the Compact; see also Nathanson, 1978; p. 4). POWER doubts that the Lower Basin states will ever agree to this interpretation.

Moreover, this position is incorrect for several reasons:

First, Lower Basin tributaries often do not produce 2 million acre-feet of water in a year. When the Lower Basin tributaries produces less, it would appear the Lower Basin could call for the shortage to be made up from Upper Basin flows, presumably as measured at Lee Ferry (see Article III (a) and (b) of the Compact).

Second, if several million acre-feet were thus released to meet shortages over a 10 year period, the Upper Basin states would still appear to be obligated to furnish the total of 75 to 85 million acre-feet measured at Lee Ferry over the 10 years as required in Article III (d) of the Compact, thereby not providing any relief as a result of Lower Basin tributary use.

Third, Evans and Lochhead suggest that Upper Basin states have no duty under the Compact to furnish water to states in the Lower Basin on an annual basis. This interpretation seems contrary to the meaning of Article III (a) and (b) altogether, failing to recognize both benefits and obligations clearly bestowed on both basins.

Total water allocations in the Colorado River Basin below Lee Ferry are: 2.8 million acre-feet to Arizona; 4.4 million acre-feet to California; 0.3 million acre-feet to Nevada; and the 1.0 million acre-feet allocated under Article III (b) (see Pontius, 1997; p. 15). The specific quantities for each state were set out in the 1963 U.S. Supreme Court decision in *Arizona v. California*. In addition, 1.5 million-acre feet are due to Mexico under terms of the Mexican Water Treaty of 1944. However, Colorado water resource policy does not agree with the U.S. Supreme Court decision in *Arizona v. California*, nor does it agree with each basin providing half the annual treaty obligation to Mexico (see Colorado River Compact Water Development Workgroup, 1995; p. 9; see also MacDonnell et al., 1995; p. 825) ^{Utah}

Thus, the sum of allocations to the Lower Basin states and Mexico is 8.5 to 9.25 maf. Actual annual average flow to be divided between the Upper and Lower Basins of the Colorado River at Lee Ferry is closer to 13.5 million acre-feet rather than 15 maf, leaving about an average of 4.6 maf for consumptive use by Upper Basin states. (MacDonnell et al. 1995; p. 825 and Nathanson, 1978; p. 10; and Pontius, 1997; p. 6). However, the driest 10 years in the period of gauged measurements at Lee Ferry from 1896 to 1930 had an average annual flow of 11.8 million acre-feet (Nathanson, 1978; p. 2), providing an average shortage during dry years of 2.95 maf for Upper Basin use.

The Colorado River Compact guarantees Lower Basin states that Upper Basin states may not reduce the 10 year aggregate flow below 75 million acre-feet at Lee Ferry (Nathanson, 1978; pp. 4 and 24). POWER submits that Upper Basin states have an absolute duty to release, each year, 7.5 million acre-feet (to 8.5 million acre-feet, if called for) through the measurement point at Lee Ferry (MacDonnell et al. 1995; p. 831). Upper Basin states can not rely on any part of this obligation being supplied by any lower basin tributaries.

Special Master Rifkin states in his report for Arizona v. California (1963) that Article III (a), and by its association, III (b), is considered by Congress as a source of supply, and not merely a ceiling on water use by Lower Basin states (Nathanson, 1978; p. VIII - 6). POWER prefers to adopt Congress' interpretation of the Colorado River Compact and so should the state of Colorado. Moreover, this part of the Master's report was not adopted by the Court in Arizona v. Colorado, nor has it been later (373 US 546 (1963)).

Evans and Lochhead state that, in the last 8 years, no Lower Basin state has called for an added 1 million acre-feet under Art. III (b) (Evans and Lochhead, 1999; p. 4). Perhaps contrary to expectations, entitlements, and need, the Lower Basin states will be content to make do with what they now receive. In POWER's estimate, such conjecture is wishful thinking.

III. MEXICO

Evans and Lockhhead misrepresent POWER's statements about Mexico's entitlement under the latter's treaty with the U.S. (1999; p. 5). POWER did not suggest that Mexico had been, or was being, shorted. POWER did not state that the Upper Basin states "must always" provide one-half of the treaty obligations, though this appears to be the accepted interpretation (for examples see Nathanson, 1978; p. 10 and MacDonnell et al., 1995; pp. 826 - 827, 831). "The 1944 Mexican Water Treaty guarantees delivery of 1.5 maf to Mexico, but provides for a pro-rata reduction in times of shortage." (Pontius, 1997; p. 10).

IV. DROUGHT

If a severe drought occurs, what plans, if any, does Colorado have in place, or does it envisage, to provide for obligations to Lower Basin states and Mexico? To a major extent, the Upper Basin states take the risk for drier years and drought (see Swan, 1997; p. 3 and McDonnell, et al., p. 831). This risk is a consequence of the Upper Basin states' guarantee to deliver water to the Lower Basin (Compact, Article III (d) and Nathanson, 1978; p. 4). If Colorado acted prudently, it would not rely on being relieved of this obligation because, to this point, no agreement is in place upon which the Upper Basin states can rely. Merely to describe this obligation to the Lower Basin states does not address the significance of potential drought problems (see Evans and Lochhead, 1999; pp. 2 - 3). A more comprehensive and substantive response is needed.

V. RESERVED RIGHTS - TRIBAL AND FEDERAL

POWER also is concerned about Indian reserved water claims that can severely limit water consumption from water flow in the Colorado River by the Upper Basin states. There are many questions about whether, how, and when those claims of entitlement to water resources will be quantified and satisfied when these claims are presented. This matter was not settled in 1963 by the Arizona v. California decision as suggested by Evans and Lochhead, nor by the "Law of the River." This matter was addressed in the Compact, Article VII; and both the U.S. and the Colorado Supreme Courts have held that such claims to water, whatever they turn out to be when quantified, will be given precedence. Such tribal claims could amount to around 2 to 5 million acre-feet or more (Pontius, 1997; Tables 10 and 11, pp. 73 - 74). Priority dates for these claims are mostly senior to the Compact and these rights could thus supersede the Compact's allocations.

In its 1999 Annual Performance Plan, the Bureau of Reclamation expresses its on-going effort to help Indian Tribes to realize their rights to Colorado River water.

Comments by Evans and Lochhead about tribal rights are plausible (1999; p. 6). They suggest that such claims are to be satisfied by Lake Mead waters. However, this interpretation does not appear in the Arizona v. California decision (1963). The matter of tribal claims requires much further study and agreement before further water development and consumption in the Upper Colorado River Basin can occur with confidence that it will not have to be relinquished later to Indian tribes - once again, at great cost and expense. The Bureau of Reclamation, for example, believes that discussions with Indian Tribes is a necessary beginning in the process of developing protocols for quantifying and delivering Colorado River water to the Indians.

In addition to tribal rights there are the federal reserved rights of the national forests, parks, and other recreational areas. If there is a shortage of water, must reserved claims below Lee Ferry be satisfied with Lake Powell, or would Lower Basin states call upon Upper Basin for releases of water? POWER believes the latter could be the decision.

VI. UNRESOLVED CLAIMS

The "Law of the River" has many ambiguities (see McDonnell et al., 1995, pp. 834 - 835). To rely on the assumption that Colorado can consume an additional 450,000 acre-feet per year borders on recklessness. Growth and demands for water in the Lower Basin states and in Mexico for its full 1.5 million acre-feet delivered at Morales Dam should not be ignored (see Pontius, 1997; p. 69).

The Compact itself provides that it can be reopened (Article III (f), and (g) and Article IX). These sections should be carefully read and considered.

VII. PERFECTED RIGHTS

Present perfected rights are prior rights to use Colorado River water created under federal or state law, whether or not water granted by the right has been put to use before 1929 (Nathanson, 1978; pp. 152 - 194 and Chapter X). If the quantity of consumption from the perfected rights in the Colorado River Basin are added to the Compact entitlements of both the Upper Basin states and Lower Basin states, a dramatic shortage to Lower Basin states could occur. In such a case, the Lower Basin states may well claim water from the Upper Basin states, using the compact as their authority to do so.

VIII. COMPACT REVISIONS

In the future, it may be possible for Arizona, California and Nevada to claim that the Colorado River Compact no longer apportions water equitably--using population growth, among other arguments, as the basis of their claim. Article I of the Compact allows for this kind of complaint, clearly providing for a reopening of the compact in the event that such complaints emerge. California has 56 Representatives in Congress, Colorado has only 5. The Lower Basin States have 3 Supreme Court Justices, the Upper Basin States have none. Colorado should not wish to have to fight these strong political and economic forces. Consider for example, one ton of hay grown on an acre in the Upper Basin has an estimated market value of \$100 whereas 1 ton of strawberries grown on an acre or less in the Lower Basin can have an estimated value exceeding \$20,000 (see current pricing at City Market in Gunnison, Colorado).

Evans and Lochhead imply that the Upper Basin states are not to worry about the concerns that POWER raises because both the Upper Basin states and the Lower Basin states are satisfied with the status quo (see Comments p.4-5). If Colorado could count on this as being firmly in place, then Hallelujah! POWER suggests, however, that until such time, Colorado and the other Upper Basin states should: (1) prepare their defenses against the time when they will have to do battle with the giant down stream and (2) not provoke the giant by tampering with his water supply while he is still asleep.

The apportionment of the Colorado River under the Compact is not perpetual as some may assume (Evans and Lochhead 1997, p. 7). For reasons perhaps prompted by economic and political causes, reapportionment of Colorado River waters can occur at the request of two or more signatory states (Article III (f) and (g) and subject to Congressional approval). Many have recommended a market-driven water allocation system which, depending on its details, could benefit or burden the Upper Basin states (see MacDonnell et al., 1995; p. 835; see also earlier discussions for example in White (1968) and Engelbert and Scheuring 1984).

IX. EMERGENCIES

POWER is concerned that insufficient thought has been given to how to deal with emergencies. These are most likely to exist in the event of drought or perhaps simply over- allocation of the

Colorado River - already asserted to be over-allocated by 20-30% (Pontius, 1997; p. 14). Prudent people set aside a portion of their incomes and assets to tide them over in the event of sickness, old age, or other misfortunes. Evans and Lochhead suggest that the presently "unused" Colorado entitlement to the Colorado River water of approximately 450,000 acre-feet is available and should be used, presumably on the Front Range of Colorado, because that is, at the moment, where the demand is located (1997; pp. 6 - 7).

If Colorado spends or commits all of its entitlement to Colorado River Basin water on current consumptive projects (especially on additional trans-mountain diversions to Front Range projects), such actions can only be deemed negligent, improvident, unwise, and surely very expensive.

Colorado should publish realistic reports about the amount of Colorado River water available for consumption and trans-mountain diversion. It should not encourage avid developers and it should not discourage conservation of the state's water resources. Neither should Colorado provoke Lower Basin states by diverting additional water from the Colorado River Basin at this unsettled period of time. As a state, Colorado should seek to maintain and formalize the status quo - a situation not requiring delivery of 1 million additional acre-feet to the Lower Basin. To achieve this goal, Colorado should discourage further trans-mountain diversions to the Front Range of Colorado, at least until the myriad problems associated with shortages of water flows in the Colorado River and ambiguities of the Compact have been addressed and resolved.

X. UNANSWERED QUESTIONS

Questions needing answers:

- 1) Where are Compact obligations to be determined, if not at Lee Ferry, and by what authority?
- 2) What does Article III (b) of the Compact referring to the obligation to provide an additional 1 million acre-feet to Lower Basin states mean?
- 3) How is water to be delivered under Article III (a) and (b) of the Compact managed, overseen, and monitored in the event of shortage and under what authority?
- 4) Should ambiguities be identified and cleared up before the present flow of the Colorado River is further depleted by trans-mountain diversion and by other forms of consumption?
- 5) If any agreements are in place answering POWER's concerns, can you list them for us for further scrutiny?

XI. CONCLUSION

Mr. Evans and Mr. Lochhead aptly point out that in the early 1920s Colorado's representative on the Colorado River Compact Commission, Delph Carpenter, warned that the first and fastest

areas to grow within the Colorado River Basin should not be permitted to hog available water and, thus, to stifle future growth in as yet undeveloped areas. What Delph Carpenter wanted for the State of Colorado in the 1920s, POWER wants for the Gunnison Basin, the Western Slope and the San Luis Valley in the early part of the 21st Century. The water and the futures of these regions must not be sacrificed to Los Angeles style sprawl along the I-25 and I-70 corridors.

Prepared by POWER Executive Committee. Revised 5-10-99

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