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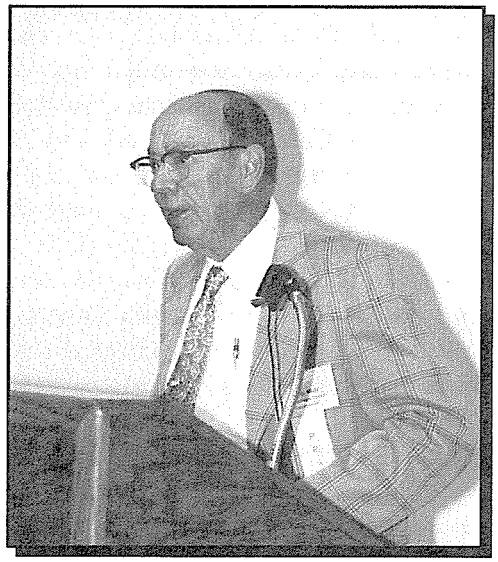

OVERVIEW OF IMPORTANT UPPER COLORADO RIVER BASIN ISSUES

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The conference agenda indicates this presentation is intended to be an overview of important Upper Colorado River Basin issues. A list of such issues from my perspective is as follows:

- Operation of the Yuma Desalting Plant
- Current and projected water needs in the southern California coastal plains and in Clark County, Nevada (Las Vegas)
- Operation of Colorado River reservoirs pursuant to the coordinated Long-Range Operating Criteria
- Interstate and interbasin water marketing
- Indian water rights quantification
- Endangered Species Act in relation to proceeding with water resources development
- Endangered fishes recovery programs in the Upper Basin
- Current water resources development in the Upper Basin

Some of these issues may not seem relevant to those who are not involved in the continued operation of the Colorado River System, in particular, the Yuma Desalting Plant and perhaps operation of the Colorado River reservoirs. However, these and other issues affect the overall management of the Colorado River System and ultimately could affect management of that portion of the Colorado River System which is of considerable importance to the Upper Basin States, including, in particular, the San Juan River Basin, which is the location of this conference.

Yuma Desalting Plant

The Yuma Desalting Plant was completed and the plant declared operational in 1992. Yet the plant has not been operated except very minimally and has been placed in a standby mode primarily because of the high annual cost of operations, estimated at $25-$30 million. The result is that up to about 120,000 acre-feet of water with excessive dissolved solids must be bypassed to the international point of delivery under the Mexican Treaty and the United States

receives no credit under Minute 242 of the treaty. If the plant were in full operation, that bypass could be reduced to 30,000-40,000 acre-feet per year and the United States would receive credit for 70,000-80,000 acre-feet of water toward its annual delivery obligation of 1.5 million acre-feet under the Mexican Treaty. In 1993, after consultation with the Colorado River Basin States, the federal government placed the plant in the standby mode. The Colorado River Basin States had advised that they had no objection to placing the operation on a standby basis so long as the plant was kept ready for startup to meet water needs in the United States.

Water Demands in the Southern California Coastal Plains and Southern Nevada

In 1996, requests for water released and pumped from Lake Mead were large enough that the Bureau of Reclamation determined that the requests could not be fulfilled by operating Lake Mead under the normal condition pursuant to the Coordinated Long-Range Operating Criteria and the provisions of the decree in *Arizona v. California*, the latter apportioned 7.5 million acre-feet annually of consumptive use from the Colorado River mainstem released from Lake Mead to the three Lower Division states of Arizona, California and Nevada. To provide sufficient water to meet the reasonable beneficial consumptive use requirements in the Lower Division, the United States, in consultation with the seven Colorado River Basin States and other affected interests, changed the operation of Lake Mead for 1996 from the normal condition to a surplus condition in mid-year.

Currently, the 1997 annual operating plan is being prepared and it is anticipated that requests for water in the Lower Division again will exceed 7.5 million acre-feet. Fortunately, there are large quantities of water in storage in both Lake Powell and Lake Mead. Also the Upper Basin has not reached development of its full apportionment from the river system under the Colorado River Compact. Therefore, it appears that the 1997 annual operation of Lake Mead will be again in a surplus condition. However, reliance by the Lower Division states on a surplus is not prudent planning; the more surplus used the sooner it will disappear.

An additional factor in surplus situations is that the Mexican Treaty provides that if sufficient water is available in the system an additional 200,000 acre-feet per year shall be delivered to Mexico. Thus Mexico can become involved once operation of the system departs from the normal condition into the surplus condition.

There has been much discussion between state and federal representatives regarding the criteria for declaring a surplus. As yet, no formal criteria have been promulgated and efforts are underway to develop formal criteria. This is an important issue to the Upper Basin because if more water is released from Lake Mead, more water may have to be released from Lake Powell to comply with the operating criteria, which provides for equalization of storage in both reservoirs on September 30 of each year. At that time each year, storage in Lake Powell is greater than that in Lake Mead, except Lake Powell does not have to release water needed to enable the Upper Basin to meet its consumptive-use requirements. It should be noted that with less than full development in the Upper Basin, the Lake Powell storage requirement is not controlling in the reservoir's operation at this time.

Interstate and Interbasin Water Marketing

To provide water for the growing needs in southern Nevada and the southern coastal plain of California, some have proposed that water should be marketed interstate and even interbasin. Intrastate water marketing is being carried out in most states at varying levels of trade. Intrastate water marketing is and has been alive and well for many years in this state and, in general, intrastate marketing is not of concern to other states.

Interstate water marketing is a concern to at least the states involved. In the case of the three Lower Division states, California currently is using more than its basic apportionment. Nevada will reach its basic apportionment level in about ten years. Use in Arizona is well within the apportionment. Consequently, while Arizona grows into its apportionment, the opportunity may exist to market water to the other Lower Division states by banking water in groundwater storage in Arizona for future delivery interstate. In 1996, the Arizona legislature enacted a statute to establish a water banking authority.

Most of the state's representatives directly involved in water resources administration feel that interstate water marketing must be accomplished on

a state-to-state basis, that is, the state would control the marketing as a broker. There is much concern that if private interests in different states become engaged in water marketing, the opportunity for speculation and an uncontrolled market would be presented and could create many problems.

Some have proposed water marketing between the Upper Basin and the Lower Basin. Several interstate marketing schemes have surfaced over the years but none has materialized. State water administrators in the Upper Basin have been opposed to most of these proposals, however, there have been cracks in that opposition recently. There is debate as to whether interbasin water marketing would comply with provisions of the Colorado River Compact, which apportions beneficial consumptive use to the Upper Basin and to the Lower Basin and specifically defines those basins.

Also, there is concern that an uncontrolled water market could develop. Some Upper Basin interests observe that a bidding war could ensue and monetary resources certainly lie in the Lower Basin. The result would be that Upper Basin interests would be outbid and lose the water for future and even current development. This would be directly contrary to the Upper Basin's philosophy in the negotiation of the Colorado River Compact seventy-five years ago. New Mexico has not embraced either interstate or interbasin water marketing schemes.

Indian Water Rights Quantification

Until recently, most Indian water rights claims were not quantified. In the last ten years, considerable progress has been made in quantifying Indian water rights claims through adjudications and through negotiated settlements. In the San Juan River Basin, the claims of the two Colorado Ute tribes and the Jicarilla Apache Tribe have been negotiated and the settlement agreements approved by the U.S. Congress. However, implementation of a major portion of the Colorado Ute settlement is tied to construction of the Animas-La Plata Project (A-LP), while some parts of that settlement are not dependent upon the project. Water rights claims of the Navajo Nation in the mainstem of the Colorado River have not yet been quantified and the Navajos also have unquantified claims in the San Juan River. The claims of the Ute tribes in Utah also are not settled. These unquantified Indian claims could represent large blocks of water.

Recovery of Endangered Species

The Upper Colorado River and the San Juan River both have endangered fish recovery programs underway involving a number of federal, state and local agencies. The Upper Colorado River Program involves the Colorado River and its upper tributaries in Colorado, Utah and Wyoming. The San Juan River Program includes only the San Juan River Basin. The goals of both programs are similar—to conserve the endangered fish species while water development proceeds. Beyond the common theme, the two programs are carried out separately although some agencies are represented by the same people in both programs.

The San Juan River Program was initiated in 1991 and currently is in the sixth year of a seven-year research effort. An important objective of the research is to make recommendations for the flows necessary to conserve the endangered fish. The reasonable and prudent alternative to jeopardy opinion for Stage A of the A-LP is to operate Navajo Reservoir for the life of the project. The operation contemplated is to mimic the natural hydrograph in order to cue spawning and to provide habitat.

To provide information for the flow recommendations, the research is looking at both high-flow and low-flow conditions on the San Juan River. Low-flow conditions could involve releases during winter months of less than 500 cubic-feet-per-second from Navajo Reservoir—a contentious proposal. A lawsuit was initiated in fall of 1995 over the proposal to conduct a two-week low-flow test as precursor to a four-month low-flow test scheduled to begin in November 1996. While a settlement was reached at the hearing on the suit filed in 1995, the settlement allowed the suit to be refiled within a specified time period. The plaintiff has given notice of its intent to pursue litigation and thus one of the current issues is reactivation of that lawsuit.

Current Water Resources Development

The Central Utah Project is nearing completion and the A-LP still awaits a construction start. Construction is proceeding on Block 8 of the Navajo Indian Irrigation Project and design is underway for

blocks 9, 10 and 11. These are the major federal construction efforts underway in the Upper Colorado River Basin. Currently, planning studies continue on a potential Gallup-Navajo pipeline to transport San Juan River water to Navajo Nation communities and to the city of Gallup for municipal and domestic water supplies.

Development of the A-LP has been very contentious. Proponents of the project seek to implement the Colorado Ute Water Rights Settlement, provide water for municipal and industrial demands and water for supplemental irrigation and irrigation of new lands. All irrigation would occur in the La Plata River Basin. The project has the potential to provide much needed municipal and industrial water for many of the communities in New Mexico. Currently, some of these communities are up to the limit of their existing water rights and the need for additional water is immediate.

Developing additional water from the Animas River is predicated by storage to conserve snowmelt runoff for later release to meet the demand when natural flow drops to the point where prior existing rights require all the direct flow. The year, 1996, is a very good example of why storage is needed to provide water for additional use from the Animas River as well as to firm up the supply for some existing uses. Development of the Animas River water supply for new uses in both Colorado and New Mexico is a very important item of water resources development in this portion of the Upper Colorado River Basin. The absence of additional water supplied from the Animas River could severely restrict economic development in this basin in both states.

It should be noted that Public Service Company of New Mexico's (PNM) contract for water to supply the San Juan Power Plant with 16,200 acre-feet annually expires in 2005. Currently, PNM is seeking to extend that contract to 2025 for the same amount of water. The requested extension has attracted considerable attention. The contract extension is very important to assure continued operation of the power plant beyond 2005, which is only a short nine years hence.