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# ARIZONA RIPARIAN COUNCIL

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November 7, 2005

Mr. John Johnson  
U. S. Bureau of Reclamation  
P. O. Box 61470  
Boulder City, NV 89006-1470

Re: Bypass Flow Replacement or Recovery Methods Study and the Ciénega de Santa Clara and the Colorado River Delta

Dear Mr. Johnson:

The Arizona Riparian Council (Council) is concerned about Arizona's role in protecting riparian areas sustained by the Colorado River. The Council was formed in 1986 as a result of the increasing concern over the rate of loss of Arizona's riparian areas. Our members include scientists from a variety of disciplines with expertise in the values and functions of riparian areas. In addition, our group includes regulators from local, state, and federal agencies, scholars, researchers, and other Arizona citizens who care about maintaining healthy streams and their associated habitats. We submit the following comments regarding alternatives for recovery and/or replacement of bypass flows from the Yuma Desalting Plant (YDP).

On November 28, 2003, the Council wrote to Arizona Governor Janet Napolitano of our concern regarding operation of the Yuma Desalting Plant that will affect bypass flows to the Cienega de Santa Clara (copy attached). Although they are located outside of Arizona, the Ciénega de Santa Clara and the Colorado River Delta in general are a priority for the Council. Political boundaries do not correspond to ecological ones, and the well being of a high diversity of plants and animals that are found in both Arizona and Sonora hinge on the condition of these rare and valuable Colorado River wetland ecosystems.

Since our letter of 2003, a number of changes have occurred. First, Congress directed Bureau of Reclamation (BOR) to ready the YDP for operation by expediting modifications and "accelerating permitting and environmental compliance activities needed for operation of the plant." (House Conf. Rep. No. 108-357, at 118-19, 2003).

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President, Tom Hildebrandt (480) 345-6194 ● Vice President temp, Cindy D. Zisner (480) 965-2490  
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Second, a largely Arizona-based group of water users, resource agencies, and environmental interests have developed recommendations to ensure the life of the Ciénega de Santa Clara while improving Arizona's position during times of drought. These recommendations are summarized in the report, "Balancing Water Needs on the Lower Colorado River: Recommendations of the Yuma Desalting Plant/Ciénega de Santa Clara Workgroup," which is hereafter referred to as the YDP white paper.

In many respects, the Council is pleased and supportive of the YDP white paper because it embraces the concept of protecting the Cienega de Santa Clara in the long term. However, the Council has identified five areas for improvement that, if addressed, could make the YDP white paper a policy breakthrough document.

First, the Council seeks recognition of the ecological significance of flows in the mainstem of the Colorado River, not just the Ciénega. Some of the activities proposed in the YDP white paper would diminish mainstem flows that are critical to sustaining native riparian woodlands. These woodlands complement the wetlands in the Cienega de Santa Clara, but neither habitat is a substitute for the other. Specifically, the YDP white paper promotes capturing excess flows from Colorado River tributaries. This source of water is absolutely essential to maintaining Colorado River Delta habitat of critical importance to both Arizona and Sonora.

The white paper also identifies better management of water released to the Colorado River for water orders as a means of water conservation. However, the errors made in water orders actually do serve a valuable function in sustaining wetlands along the Colorado mainstem. The fact that there is no existing environmental allocation for the Colorado Delta means that this source of water is crucial to retain, until such time as there would be a permanent allocation.

Second, we are concerned that the paper erroneously implies that the effects of brine disposal into the Ciénega are minimal until salinity exceeds a tolerance cited for cattail survival. Increases in salinity concentrations or reductions in volume appear to cause increased stress to vegetation and wildlife. Even modest increases in salinity or decreases in volumetric flow will have proportionate impacts (Glenn et al. 1996, 1997). Conversely, and significant for your alternatives evaluation, increase in volume without an increase in salinity would probably be beneficial to the habitat of the Ciénega.

Furthermore, it has been shown that selenium concentrations of raw CAP water are increased as a result of membrane treatment plant operations (Bureau of Reclamation 2004). We can assume a similar increase in concentration levels would occur with operation of the YDP. The deleterious effects of selenium on wildlife have been well documented (Eisler 1985) and should be carefully considered. Selenium already exceeds EPA standards in portions of the Ciénega (Tanner et al. 1997; Glenn, personal communication, 2005).

Third, the current legal framework of water law in the region of the lower Colorado River is untenable for assuring that the Delta receives a sufficient quantity and quality of water. Preliminary studies of Delta restoration have demonstrated that the amount of water required to restore and preserve critical species is rather modest, perhaps only 32,000 acre-feet each year, with periodic "flood" flows of perhaps 260,000 acre-feet (Glennon and Culp 2002). In the long term, restoration of the Delta and lower Colorado River will require a specific interstate and bi-national agreement. All parties will have to give up a little to reach the goal of a restored Delta, which will benefit all parties. The Secretary of Interior and U. S. Bureau of Reclamation have the responsibility to call for

the negotiations necessary to deliver this needed water. We ask that you take a leadership role in advocating for the multi-party agreement that is needed.

Fourth, we support the Bureau of Reclamation's previous proposals for land fallowing as a means of alleviating shortages on the river and to provide an environmental allocation of water for the Colorado River. Land fallowing could occur anywhere in the region receiving Colorado River water. Land fallowing would decrease the salinity of return flows to the river. We recommend a serious consideration of this alternative to provide replacement for bypass flows.

Fifth, as Congress continues to invest funds to bring YDP online, we fear that operation of the plant will become a foregone conclusion, inhibiting meaningful and open discussion of the best alternatives for replacing the bypass flow. To ensure that this conversation can continue without the shadow of foregone conclusions, Bureau of Reclamation must not give short shrift to in-depth analysis of solutions which might require changes to law.

We sincerely hope that we can count on your addressing these issues, and your recognition of the critical environmental values in the entire Delta region.

Sincerely,



Tom Hildebrandt  
President, Arizona Riparian Council

Cc: Secretary Alberto Cardenas, SEMARNAT  
Governor Janet Napolitano, State of Arizona  
Assistant Secretary Mark Limbaugh, DOI  
Commissioner Arturo Herrera, CILA  
Acting Commissioner Carlos Marin, IBWC  
Regional Director Bob Johnson, BOR  
Director Herb Guenther, ADWR

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