

## ARIZONA RIPARIAN COUNCIL

Center for Environmental Studies, Box 873211 Arizona State University, Tempe AZ 85287-3216

November 28, 2003

The Honorable Janet Napolitano Governor of Arizona 1700 West Washington Phoenix, Arizona 85007

Re: Ciénega de Santa Clara and the Colorado River Delta

Dear Governor Napolitano:

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. It is estimated that <10% of Arizona's original riparian acreage remains in its natural form. These habitats are considered Arizona's rarest natural communities. 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.

Much of the riparian area loss has occurred along the Colorado and Gila River systems as a result of water resource development activities. The extensive wetlands that once comprised the Colorado River Delta were nearly destroyed by a century of dam construction, urban water development, and agricultural water use that all but eliminated water flows to the Delta region. Water resource development has certainly enriched the economy of Arizona, but to the detriment of river-dependent plants, animals and indigenous communities located in Arizona as well as Mexico. Demands on the river on both sides of the US-Mexico border have resulted in a degraded delta that no one foresaw in 1944 when a binational treaty was signed.

We Arizonans, have a responsibility to ensure that further harm is not inflicted upon the riparian remnants in the Colorado Delta, such as the Santa Clara Ciénega. The Council believes that Arizona has a responsibility to consider how actions taken in Arizona affect the Colorado Delta system.

For over thirty years, discharge of brackish water from the Wellton-Mohawk Irrigation District has sustained more than 40,000 acres of wetlands at the Santa Clara Cienega. True, the environmental benefits of the discharge have been inadvertent, but the facts are the Ciénega is now by far the largest remaining wetland in the Delta, and it functions as an essential

component of the Delta ecosystem. Despite its central importance, the life of the Ciénega will be decimated due to adverse salinity impacts if the Yuma Desalting Plant (YDP) is operated.

The Ciénega de Santa Clara is home to thousands of migratory and resident birds and a critical link in the Pacific Flyway. This area also harbors several endangered species, including much of the world's population of the endangered Yuma clapper rail. Many of these delta-dependant species spend part of their lives in Arizona. Adverse effects to migratory and endangered species in the Delta not only can affect the distribution and numbers of these species in Arizona, but Arizona's economy, through the regulatory aspects of Endangered Species Act and the Migratory Bird Treaty Act.

The Ciénega also represents an important economic and cultural resource for local communities in Mexico. Residents of the nearby community operate birding tours by canoe on the Ciénega, supplementing their income from an economy that would otherwise be based entirely on subsistence farming. La Ruta de Sonora, a tour operator based in Tucson, also regularly sends commercial tours to the Ciénega. In 1998, The Council held its annual meeting in Yuma and visited the Cienega as one of our field trip destinations. The theme of the meeting that year was *The Lower Colorado River: Changes around the Bend* and we covered an overview of the Law of the River, the Multi-Species Conservation Program (MSCP), Bureau of Reclamation's Reasonable and Prudent Alternatives/Measures in the Biological Opinion, how the MSCP and the Biological Opinion affect the wildlife refuges along the Colorado River, and Natural Resources along the Colorado River in Mexico. The later presentation was given by the Director of the Reserva de la Biosfera, Alto Golfo de California.

We understand that both the Arizona Department of Water Resources and the Central Arizona Project have suggested that the best way to replace the bypass flow is by operating the YDP. More recently, Director Herb Guenther suggested that all options are still on the table. We are pleased to hear that the State of Arizona is willing to consider alternatives to the YDP, given its likely impact upon the Santa Clara Cienega.

Were the Yuma Desalting Plant to function at full capacity, the Ciénega de Santa Clara would very simply be destroyed. The desalting operation would drastically cut water deliveries to the Ciénega (by more than 70%), while tripling the salinity levels in the remaining effluent that would reach the Ciénega. This concentration also would be expected to drastically increase selenium loading in the waste stream, creating the risk of additional environmental, legal, and public health consequences in Mexico that have not adequately been explored.

This combination of increased salinity and decreased flows would have irreparable and devastating effects on the Ciénega, starving the marshlands of their water even as salinity increases beyond the salt-tolerance of the dominant vegetation. These effects are neither speculative nor even uncertain, as the effects of the deprivation of water on the Ciénega have been well documented in the scientific literature. For example, two studies published in 1995 documented significant degradation to the Ciénega as a result of a temporary interruption in flows due to flood damage and subsequent repairs to the bypass canal in 1993. Although the

<sup>&</sup>lt;sup>a</sup> E.G., Zengel, S, et. al. 1995. Cienega de Santa Clara, a remnant wetland in the Rio Colorado delta (Mexico): Vegetation distribution and the effects of water flow reduction. *Ecological Engineering* 4: 19-36; Glenn, E., et. al. 1995. Effects of Water Management on the Wetlands of the Colorado River Delta, Mexico. *Conservation Biology* 10(4):1175-1186.

interruption was only temporary in nature, the Ciénega rapidly lost between 60 and 70 percent of its wetland habitat.

The protection of the Ciénega de Santa Clara and the Colorado River Ddelta is a priority for our Council. Operation of the YDP would precipitate an environmental disaster in the Ciénega. We are concerned that momentum is rapidly building behind the operation of the YDP. We understand that there is language that requires BOR to ready the YDP for operation in the 2004 Energy and Water Appropriations bill. Congressman Ed Pastor has recently been appointed to the House and Senate conference on the Energy and Water Appropriations. If this language can be successfully removed from the congressional report, BOR will not be constrained in its ability to work with the State of Arizona to identify the best way to meet its obligation to replace the bypass flow.

Otherwise, we fear that as Congress continues to invest funds into bringing the YDP online, operation of the plant will become a foregone conclusion, inhibiting meaningful and open discussion of the best alternative for replacing the bypass flow. To ensure that this conversation can continue without the shadow of foregone conclusions, we respectfully request that you use your office to voice Arizona's interest in protecting riparian resources through the identification of solutions to the bypass flow replacement. Your leadership on this issue is essential to ensure an open and honest debate.

As Governor of Arizona, you represent a wide spectrum of interests, including taxpayers, water users, and the environment. We urge you to work towards a solution that addresses the needs of all. We sincerely hope that we can count on your leadership on this issue, and your support for the protection of the critical environmental values in the Ciénega. Please call upon our organization if we can help in protecting this important riparian asset.

Sincerely,

Jeff Inwood, President

CC:

Secretary Alberto Cardenas, SEMARNAT
Assistant Secretary Bennett Raley, DOI
Commissioner Arturo Herrera, CILA
Acting Commissioner Carlos Marin, IBWC
Regional Director Bob Johnson, BOR
Director Herb Guenther, ADWR

Citations

Ohmart, R. D., W. O. Deason, and C. Burke. 1977. A riparian case history: the Colorado River. Pages 35-47 in R. R. Johnson and D. A. Jones, tech. coords., Importance, preservation and management of riparian habitat: a symposium. Proceedings of a symposium 9 July 1977, Tucson, AZ. USDA Forest Service General Technical Report RM-43. Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 217 pp.

- Ohmart, R. D., B. W. Anderson, and W. C. Hunter. 1988. The ecology of the lower Colorado River from Davis Dam to the Mexico-United States International Boundary: a community profile. U.S. Fish and Wildlife Service, Biological Report 85(7.19). U.S. Department of the Interior, Fish and Wildlife Service, Research and Development, Washington, D.C. 296 pp.
- Ohmart, R. D. 1994. The effects of human-induced changes on the avifauna of western riparian habitats. Pp. 273-285 in J. R. Jehl and N. K. Johnson, eds., A century of avifaunal change in western North America. Proceedings of an International Symposium at the Centennial Meeting of the Cooper Ornithological Society, Sacramento, CA. Studies in Avian Biology No. 15.