





What's Going on in the Delta?


 **Results from Ciénega Survey During YDP Test-run:** A 14 month survey (August 06 – September 07) was conducted to evaluate the effect of the 10%-capacity, three-month trial run (March-May 07) of the Yuma Desalting Plant (YDP) on water quality in the Ciénega de Santa Clara. Sixteen stations were sampled monthly before, during and after the trial run. The test-run did not significantly affect water quality in the Ciénega. Salinity levels during the test-run were not significantly different from salinity levels before and after the test-run. Because there was no significant response in water quality to the three-month, 10%-capacity test-run, we cannot predict changes in water quality that would result from longer duration or higher capacity operations of the YDP.



 **Fish Study in the Hardy River:** Pronatura Noroeste completed a study to evaluate how the construction of El Tapón affected the biodiversity, structure, and connectivity of the fish community in the Hardy River. They found that marine species occur upstream from El Tapón, indicating that connectivity still exists. However, most of these species were detected 15 kilometers downstream from the restoration structure, therefore other factors, such as sedimentation, might be determining connectivity in the system. A master student from UABC, Alejandra Calvo, will continue with the study, in coordination with Pronatura, SI, UofA, and AEURHYC. Her work will also include an analysis of trophic relationships along the river. For more information contact Osvel Hinojosa: osvelhh@gmail.com

[Download report](#)
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Feature

 **Laguna Grande Restoration:** In 2005, AEURHYC, Pronatura, and the Sonoran Institute began expansion of restoration actions by defining the Colorado River Restoration Demonstration Project to enhance 4,400 acres of the riparian corridor along 8 river miles in Mexico. Phase I of this initiative was completed in November 2007 by enhancing 23 acres of riparian and marsh habitat in the Laguna Grande backwater area. A total of 2,400 trees were planted, including 1,100 cottonwoods and willows and 1,300 mesquite trees. After 6 - 12 months of growth and about 1.5 meters in height, native trees are already being used by wildlife, mainly birds. Emergent vegetation is re-establishing in cleared marsh areas. Although it will take a few more years to be fully functional for target species, these areas already represent enhanced habitat for wildlife. Outreach activities during this initial project increased awareness and imparted a sense of stewardship for the restoration of the river to 2,400 individuals from local communities. Activities also included the creation of a native tree nursery, which has produced over 10,000 trees. Nine graduate students have or are still working on research associated with this project, and five full time jobs for local individuals were created during this initial phase. For more information contact Francisco Zamora : Fzamora@Sonoran.org



News from the RCN—CRD

☞ **RCN-CRD Third Workshop :** On November 6-8, 2007. Sixty-five participants heard presentations from nine experts in modeling approaches relevant to understanding and predicting the Colorado River delta system. Models focused on paleoclimate, climatic, and hydrologic prediction, fisheries and ecosystem modeling, projection of social and economic demand, decision-making in conservation biology, and scenarios based on the Millennium Ecosystem Assessment approach. The records of past climate suggest that low river flows are likely in the future. In addition, river flow will be lower in the future because of less snowmelt and higher evaporation rates in a

warmer climate. Lower supply in the future will be coupled with increased demand resulting from population increases and economic growth. Presentations by experts are available in.....

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☞ **Shorebird Workshop:** On November 6-8, 2007, the Sonoran Joint Venture and its partners organized the first “Colorado River Delta Shorebird Workshop.” The RCN-CRD provided travel support for some of the participants.

The goal of the workshop was to review the current status of knowledge of shorebirds wintering and migrating through the Colorado River Delta and surrounding wetland habitats. Based on the results, participants will develop a Colorado River Delta shorebird conservation strategy, design a long-term monitoring program, and identify research and conservation needs. For more information contact Robert Mesta : robertmesta@fws.gov

Events: Workshops, Meetings, Symposia, etc,

☞ **“Climate and Deserts Workshop: Adaptive Management of Desert Ecosystems in a Changing Climate.”** April 9-11, 2008.

Aquarius Casino Resort, Laughlin, Nevada. Early Registration Deadline is March 17. For Registration Information, Full Agenda, and Call for Poster abstracts, please visit:

<http://www.dmg.gov/climate/>

☞ **“1er. Congreso Sobre la Evolución Geológica y Ecológica del Noroeste de México.”** Abril 21-23, 2008. Hermosillo, Sonora México. http://www.geologia-son.unam.mx/r_obj.htm

☞ **California Estuarine Research Society Annual Meeting “Arid and Seasonally Arid Estuaries”** April 27-29, 2008. Ensenada , B, C. Mexico. Abstracts due February 29. [For more information click here](#)

☞ **“Lower Colorado River Riparian Revegetation Workshop”** May 7-9, 2008. Las Vegas NV. Hosted by the Southern Nevada Authority and Las Vegas Wash Coordination Committee . [Flyer available here](#)

☞ **“Symposium on Changing Water-scapes and Water Ethics for the 21st Century”.** September 20 – 24, 2008. Flagstaff, Arizona . <http://www.aipg.org/2008/AIPG-AHS-3IPGC.htm>

New Publications, Thesis and Books

☞ Colorado River Project Report. Winter 2007-2008 **“Preparing for an Uncertain Future: Climate Change and the Colorado River Basin.”** Report [Available here](#)

☞ **Remembering the Gulf : Change to the marine communities on the Sea of Cortez since the Steinbeck and Ricketts expedition on 1943.** Sangarin D.R et al. *Frontier Ecology Environment* 2008.

☞ **Shifting Environmental and Cognitive Baselines in the Upper Gulf of California.** Lozano-Montes, H.M. et al. *Front Ecol Environ* 2008.

☞ **Simulation of Ground Water Conditions in the Colorado River Delta, Mexico.** Eden Jael Feirstein. Master of Science Thesis. Department of Hydrology and Water Resources, University of Arizona. December 2007 **Note:** The Model presented here is being updated and in a few weeks will be publish in a department report.

☞ **Simulación Hidráulica del Río Colorado en el Tramo Puente Ferroviario Vado Carranza, Mexicali, B. C.** Tesis de Maestría. Norberto Quezada. UABC, Mexicali 2007

☞ **First-Year Growth and Survival of Habitat Revegetation Trials on the Lower Colorado River, Mexico.** Professional paper for Master of Science Degree Stephen D. Handler. University of Montana. Autumn 2007.