



Linking Science and Policy Through an Adaptive Management Approach: The San Pedro River

05-250

Background:

The Upper San Pedro Partnership (Partnership) is a consortium of 21 local, state and federal agencies (including Department of Defense (DoD)/Fort Huachuca), that formed in 1998 to address regional water use conflicts. The Partnership's planning goal is to "ensure that an adequate long-term groundwater supply is available to meet the reasonable needs of both the area's residents and property owners (current and future) and the San Pedro Riparian National Conservation Area (SPRNCA)." The SPRNCA, managed by the Bureau of Land Management, supports a number of federally listed threatened and endangered species by the U.S. Fish & Wildlife Service. Those species depend upon the same limited groundwater resources as Fort Huachuca and area residents.

Objective:

The intent of this DoD Legacy Resource Management Program-funded project was to: 1) provide adequate technical coordination to the Partnership to ensure the effective integration of the best available science (predictive models, research, and monitoring efforts) into decision-making processes, and 2) document key aspects of the Partnership's adaptive management approach such that lessons learned regarding collaborative regional groundwater management can be applied to other watersheds and/or DoD installations.

Summary of Approach:

Funding for the hydrologic monitoring programs, background research projects, development of decision support tools and regional groundwater model, was obtained by the Partnership and its member agencies. This project focused on the effective integration between science, policy development, and the implementation of water conservation, recharge, reuse, and augmentation projects. Subsequent monitoring efforts were also designed to determine progress toward the Partnership's established goals and objectives.

Benefit:

Urban water use demands are steadily increasing throughout the country as urban population centers continue to grow. In the Western states, millions of new residents now rely upon limited regional groundwater resources to meet their water needs. This increase in municipal water demand directly competes with the water needs of riparian habitats along the region's rivers and streams, and with DoD installations. This project provides a key case study for the adaptive management of regional

groundwater resources (and associated riparian habitats), through the integration of strategic monitoring programs, the application of decision-support tools, and collaborative, consensus-based planning processes.

This project provided essential technical coordination to the Partnership for their collaborative development and refinement of water conservation project and policy recommendations, based on the best science available. The key lessons learned from this collaborative, adaptive management program are available for application at other DoD installations throughout the country that face similar groundwater management challenges.



Photo by Holly Richter

The reintroduction of beaver by the U.S. Bureau of Land Management was one of dozens of strategies that Partnership member agencies employed to address regional water management issues.

Accomplishments:

The ongoing adaptive management process underway by the Upper San Pedro Partnership has improved the understanding of key technical concepts by decision-makers, and resulted in the implementation of some new, innovative projects and policies that contribute toward regional water management issues. To view updated plans and reports visit: usppartnership.com.

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