Water for Endangered Species, Communities, and Cultural and Economic Uses - a Southwestern Collaborative Solution

Haggerty
Abstract for a poster presentation submitted under the “ESA effects on water allocation and economics” category

**Water for Endangered Species, Communities, and Cultural and Economic Uses – a Southwestern Collaborative Solution**

Grace Haggerty¹, Cristina Radu²

¹Hydrologist, ESA Project Manager, New Mexico Interstate Stream Commission, (505) 764-3871, ghaggerty@ose.state.nm.us;  
²Environmental Engineer, Project Manager, Tetra Tech EMI, (505) 881-3188, cristina.radu@temi.com

The Rio Grande stream system and its tributary aquifers provide the water supply for the majority of New Mexico’s citizens and are fundamental to the economics of the region. Water control infrastructure constructed in the early to middle 20th century and ongoing river management and maintenance activities to provide flood protection and agricultural water supplies for the citizens of the middle valley as well as aid New Mexico in meeting its interstate water agreement obligations are said by the U.S. Fish and Wildlife Service, along with predation by introduced fish species, to have contributed to the decline of Federal and State listed aquatic endangered species in the middle Rio Grande. The key listed species that inhabit the Middle Rio Grande are the Rio Grande silvery minnow (*Hybognathus amarus*) (silvery minnow) and the southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher). In addition, this area is one of the oldest continuously inhabited in North America by several Indian pueblos. The river is, and has been historically, central to the traditional pueblo way of life, both culturally and economically. In many ways, the identity of the inhabitants of the MRG valley has been defined by activities that have water as a central element. As New Mexico enters the 21st century, the need for water management has increased to accommodate endangered species concerns in addition to traditional water uses. Severe and persistent drought conditions that have plagued New Mexico for the last 5 years significantly aggravate this situation.

The Middle Rio Grande (MRG) Endangered Species Act (ESA) Collaborative Program (Program) was established to contribute to the recovery of two endangered species in the MRG while simultaneously protecting existing and future water uses, as well as cultural values in the area. The intent of the Program is to address these issues using a consensus based approach.

The Program currently involves over 20 traditional water users, nongovernmental groups, pueblos, and federal, state and local agencies that have chosen to participate in the resolution of these issues in the MRG. Over the last few years, memoranda of understanding were executed among representatives of these various interest groups and agencies. The following entities are participating in the Program: Alliance for Rio Grande Heritage; Assessment Payers Association of the MRG Conservancy District (MRGCD); Attorney General, State of NM; Bureau of Indian Affairs; City of Albuquerque; Pueblo of Isleta; Lieutenant Governor, State of NM; MRGCD; National Association of Industrial and Office Properties; NM Department of Game and Fish; NM Department of Agriculture; NM Environment Department; NM Interstate Stream
Commission; NM State University; Rio Grande Restoration; University of NM; U.S. Bureau of
Reclamation; U.S. Department of Agriculture, Forest Service, Rocky Mountain Research
Station; US Corps of Engineers; and US Fish and Wildlife Service (FWS).

We will discuss the structure of the Program, methods that have been used to resolve
complex social, political, and scientific problems associated with endangered species recovery
and the regions water needs, and projects implemented by the program. Significant progress was
made in the first years of the Program’s existence to plan and execute various projects consistent
with the reasonable and prudent alternatives established and according to the biological opinion
issued by FWS. Funding for the implementation of the Program has been obtained on a yearly
basis through Congressional write-in appropriations, as well as State funding, and in-kind
contributions by the MOU signatories.