Middle Rio Grande Endangered Species Act Collaborative Program

Overview

The Middle Rio Grande Endangered Species Act Collaborative Program (Collaborative Program) was established in January, 2000 to strive for the survival and recovery of threatened and endangered species in the Middle Rio Grande while simultaneously protecting existing and future water uses in compliance with state and federal law, including compact delivery obligations. Members represent a wide array of agencies and groups. In April, 2002, an Interim Memorandum of Understanding (MOU) was signed, identifying a strategy to formalize the Collaborative Program and to secure funding.

The Collaborative Program has two main purposes:

- Within the Middle Rio Grande valley, act to prevent extinction, preserve reproductive integrity, improve habitat, support scientific analysis and promote recovery of listed species, in a manner that benefits the ecological integrity, where feasible, of the middle Rio Grande riverine and riparian ecosystem.
- Exercise creative and flexible options under the Endangered Species Act so that water use and development can proceed in compliance with applicable federal and state laws. The chosen options must not impair valid state water rights or federal reserved water rights of individuals or entities, federal or other water rights of Indian nations or Indian individuals, Indian Trust assets, San-Juan-Chama Project contractual rights, and/or the State of New Mexico's ability to comply with Rio Grande Compact delivery obligations.

During its short history, the program has developed and implemented several projects with \$24.8 million in funding from federal congressional appropriations from FY 2001 to 2003. In addition, the state legislature approved \$1.5 million from New Mexico Water Trust funds.

The signatories to the MOU believe the Collaborative Program is the best mechanism to conserve and recover endangered species in the Middle Rio Grande valley; attain regulatory compliance for all parties; and, provide for existing, ongoing and future water development and management activities.

Interim MOU signatories are: Alliance for Rio Grande Heritage, Bureau of Indian Affairs, Bureau of Reclamation, City of Albuquerque, Middle Rio Grande Conservancy District, National Association of Industrial and Office Properties, New Mexico Attorney General, New Mexico Department of Agriculture, New Mexico Department of Game and Fish, New Mexico Environment Department, New Mexico Interstate Stream Commission, New Mexico Lieutenant Governor, New Mexico State University, Pueblo of Isleta, Rio Grande Restoration, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S.D.A. Forest Service—Rocky Mountain Station, and University of New Mexico. Tod Stevenson, Assistant Director, New Mexico Game and Fish Department, is chairman.

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Representative Projects

Each year, the Collaborative Program competitively solicits proposals for projects that will benefit protected species, with particular emphasis on the endangered Rio Grande silvery minnow and Southwestern willow flycatcher. Funded projects include habitat restoration, non-native species management, species population surveys, water quality, hydrology and geomorphology research, and silvery minnow egg collection and propagation. Here is a sampling of projects that are in the works.

- The Albuquerque Biological Park Refugium is a state-of-the-art breeding and rearing and research facility for the Rio Grande silvery minnow. The Biological Park was the first to have minnows spawn in captivity without the use of hormones. Fish and eggs are also captured in the wild and brought here to grow. Some of the resulting larvae are sent to other hatcheries, some are retained in order to establish a captive population and some are released back into the river. Biologists are studying the mating habits, habitat influences, relationship between water temperature and gender distribution of the hatchlings, egg survival and effects of water quality on the minnow in order to better understand what factors influence the fluctuation in minnow populations.
- A burned area west of the Rio Grande in Los Lunas is very close to being restored. The river channel is being widened to create the shallow water habitats preferred by the minnow and the river banks are being lowered to encourage over-bank flooding which will promote cottonwood and willow regeneration. A similar project is taking place near the Alameda Bridge in Albuquerque with an emphasis on replacing exotic vegetation with native species.
- The Pueblo of Isleta is gathering data on the Southwestern Willow Flycatcher that will help assess the viability of expanding the bird's habitat on Pueblo lands.
- Captively propagated silvery minnows need to be genetically diverse and the University
 of New Mexico's research will produce recommendations for the selection of
 brookstock to keep wild populations healthy.
- Clearing and thinning bosque vegetation will reduce the risk of fire but will also increase water evaporation from soils. Just how much water will be lost? An integrated GIS-based model will be developed by the University of New Mexico to map soil water evaporation in the Middle Rio Grande.
- The silvery minnow can't migrate upstream to wetter reaches of the river in some places because of diversion dams. Bureau of Reclamation is developing a conceptual design of what a fish passage structure should look like based on modeling studies in laboratories.
- Several Collaborative Program partners are working together to identify the main areas
 where water is being lost in the conveyance system and the best strategies to reduce
 water loss.