

U.S. Department of the Interior

**BUREAU OF RECLAMATION**  
**Albuquerque Area Office**  
**Albuquerque, New Mexico**

*Finding of No Significant Impact*

**Rio Grande Silvery Minnow Sanctuary**  
**Environmental Assessment**

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*December 2, 2005*

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*December 2, 2005*

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Date

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## **BACKGROUND**

The Rio Grande Silvery Minnow (RGSM; *Hybognathus amarus*) was formerly one of the most widespread and abundant species in the Rio Grande basin in New Mexico, Texas, and Mexico. Due to population declines resulting from the dewatering of portions of the Middle Rio Grande (MRG) through water-regulation activities as well as habitat degradation, the RGSM is currently listed as endangered both federally and by the State of New Mexico, and is protected under the Endangered Species Act (ESA). Restoring the riverine habitats that support the RGSM is considered to be an essential component for recovery of the species (USFWS 1994).

Recommendations for RGSM habitat restoration needs are included as part of the Reasonable and Prudent Alternatives (RPA) in the U.S. Fish and Wildlife Service's (USFWS) *Biological Opinion for the U.S. Bureau of Reclamation's (Reclamation) Water and River Maintenance Operations, the U.S. Army Corps of Engineers' (USACE) Flood Control Operations, and Related Non-Federal Actions on the Middle Rio Grande, New Mexico* (USFWS 2003a). The BO requires the funding and collaborative execution of the construction of captive propagation facilities (refugium) for the RGSM in the MRG, as specified in RPA element AA.

The Sanctuary would provide created RGSM habitat until natural habitat and river processes can be recovered to the extent that allows the population to rebuild in the Albuquerque Reach of the Rio Grande. Areas of the bosque disturbed during construction of the facility would be revegetated with native species to improve the existing condition of the habitat and benefit native wildlife. In addition to RPA Element AA as discussed above, the USFWS BO (2003a) also requires the funding and execution of habitat restoration projects on the MRG that will improve survival of all life stages of the endangered RGSM, as specified in RPA element S.

Commensurate with the objectives of the RPA, the U. S. Bureau of Reclamation, along with cooperating project partners, the USFWS, Middle Rio Grande Conservancy District (MRGCD) and the City of Albuquerque, proposes to construct an additional facility that will supplement RGSM production in the vicinity of Albuquerque. This facility, termed the Rio Grande Silvery Minnow Sanctuary (Sanctuary), would be comprised of an artificial rearing and breeding channel, containing elements of the natural environment including backwater pools and eddies, located parallel to the Middle Rio Grande River near the existing BioPark in the City of Albuquerque. The intent of this facility is to contribute to the continued enhancement and recovery of the RGSM through the creation of additional habitat for the species as part of the Program.

The Project is funded by Reclamation. The Environmental Assessment (EA) evaluates the impacts of the construction and operation of the Sanctuary on environmental resources and their relationship to other projects and undertakings in compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. 43314335).

## **SUMMARY OF THE PROPOSED ACTION**

The Proposed Action involves the design and construction of a Sanctuary that will contribute to the enhancement and recovery of RGSM in Albuquerque, New Mexico. The proposed project site would be located 4,800 feet south of Bridge Blvd., on the east side of the Rio Grande.

The proposed Sanctuary channel, including overbank areas, will occupy approximately 1.8 acres of habitat within the bosque and will include diverse habitats such as channels, backwaters, and pools for all life stages of RGSM. The intent of this created habitat is to assist in increasing the population of this endangered fish in concert with other ongoing projects in the Middle Rio Grande. It is proposed that this facility would be operated on a year round basis. For the initial phase of this project, it is anticipated that advanced larvae, the progeny of adults currently reared at the BioPark, would be introduced into the facility in the early summer months. Juveniles would be released in October with a percentage of the initial plant held over winter to be released as sub-adults in early spring. Construction will take place over a seven-month period, from December 2005 through June 2006. The final design reflects the use of a pump station near the Sanctuary for the purpose of conveying water from the Drain to the Sanctuary, which is a change in method from constructing a diversion structure on the Drain upstream from the Sanctuary, and a pipeline for water conveyance. This results in a smaller construction area and lessens any construction impacts. Noise impacts are minimal from the pump station building and rapidly attenuate.

No significant adverse impacts to environmental resources and the human environment are anticipated as a result of the proposed action. No Indian Trust Assets have been identified and no impacts are anticipated due to the project. Continual evaluation of both adverse and beneficial effects will be performed over the duration of the project.

Initial operators of the Sanctuary will be Reclamation or another operator, working under contract or agreement with Reclamation. The operators of the Sanctuary will be permitted by the USFWS who will also provide oversight in the operations of the Sanctuary. The functions of the Sanctuary will be modified and adjusted as indicated by operations over time. The Sanctuary operators will work closely with the City of Albuquerque BioPark and others performing research and restoration efforts.

## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

### **ENVIRONMENTAL IMPACTS RELATED TO THE RESOURCES OF CONCERN**

Resources of primary concern associated with project actions include the federally threatened or endangered species that occur within the project area (and their habitat), impacts to potential cultural and historic resources in the project area, impacts to water quality and erosional input to the river and the Albuquerque Riverside Drain, impacts to bosque vegetation and environmental justice.

Short-term environmental impacts are anticipated during the construction phase of the project, resulting from temporary construction disturbance and noise. Direct environmental impacts may include temporary and localized increases in the level of suspended sediments into the river and the Albuquerque Riverside Drain due to construction of an intake structure (pump station) and two fish return/water discharge conveyances, clearing or trampling of vegetation including riparian trees and shrubs, and direct impacts to the few, if any, RGSM present in the Drain during in-water construction. These short-term direct effects will be minimized by following best management practices: periodic water quality monitoring, use of cofferdams to limit sediment, use of previously cleared access and staging areas to limit the removal of mature trees and shrubs, conducting construction during low flow periods and outside of the nesting season for migratory birds, and implementation of a monitoring program to limit potential disturbance to overwintering bald eagles during the construction period. Indirect effects may result from construction noise above the ambient noise level normally experienced by recreational users or residents/commercial businesses in the vicinity of the project.

Indirect long-term beneficial effects to restoration efforts for the RGSM, will be evaluated during the course of the project.

#### **OTHER AFFECTED RESOURCES**

Because the use of facility water is considered non-consumptive as it will be withdrawn from the Albuquerque Riverside Drain and returned to the Drain or to the Rio Grande, this project is not anticipated to result in changes in net water depletions.

#### **ENVIRONMENTAL COMMITMENTS**

All applicable permits have been obtained prior to implementation of the project, including but not limited to:

- Clean Water Act (CWA), Section 404 (for in-water work in Drain and work below OHWM in Rio Grande) as administered by the USACE
- State Water Quality Certification under CWA, Section 401
- Temporary Construction Noise Permit, City of Albuquerque Environmental Health Department
- Fugitive Dust Permit – City of Albuquerque Environmental Health Department
- National Pollutant Discharge Elimination System (NPDES) Permit for construction
- Storm Water Pollution Prevention Plans
- Water usage – Letter of resource commitment from MRGCD
- Section 7 of the ESA as administered by the USFWS
- Section 106 of the National Historic Preservation Act (NHPA) as administered by the New Mexico State Historic Preservation Officer (SHPO)
- Spill Prevention and Containment Plan
- Office of the State Engineer (OSE) permit to be obtained by MRGCD for a new diversion

## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

In addition to obtaining these permits, Reclamation makes the following environmental commitments:

- Should a bald eagle be observed within 0.25 mi. upstream or downstream of the active project site in the morning before project construction activity starts, or following breaks in project construction activity, the construction crew would be required to suspend all activity until the bird leaves on its own volition, or if the Reclamation biologist, in consultation with the USFWS, determines that the potential for harassment is minimal. However, if a bald eagle arrives during project construction activities or if a bald eagle is observed beyond the specified distance, construction would not need to be interrupted. If bald eagles are found consistently in the immediate project area during the construction period, Reclamation would contact the USFWS to determine whether formal consultation under the ESA is necessary.
- Avoiding impacts to birds protected by the Migratory Bird Treaty Act by scheduling construction outside of the normal bird breeding and nesting season (April 15 through August 15) for most avian species or conducting pre-construction breeding bird surveys and monitoring if construction were to occur during the breeding and nesting season and consultation with USFWS if affected species are observed.
- Implementing specific mitigation measures to avoid impacts to threatened or endangered species (the Rio Grande silvery minnow and the Southwestern willow flycatcher) and their habitats identified in the project area, as determined in consultation with USFWS.
- During the cofferdam dewatering phase of construction, all stranded RGSM would be salvaged and returned/relocated to the river away from construction activities.
- To avoid increases in sedimentation and turbidity associated with in-water work, BMPs would be enforced to minimize erosional inputs into the river and Drain during periods of work.
- Minimization of soil erosion and increased turbidity in the Rio Grande during in-water construction and during rain storms by using standard construction best management practices (BMPs) to limit runoff during construction.
- Implementing measures to stop work and notify the Reclamation Area Archaeologist in the event that prehistoric or historic remains, human burials, or other archaeological resources are discovered during construction or monitoring.
- Revegetation of areas disturbed during construction activities with native trees, shrubs, and grasses. Mitigation for vegetation losses would include replanting at ratios of 3 new plants for each removed plant < 6 inches dbh, and 10 new plants for each plant > 6 inch dbh.

## **COORDINATION**

Agencies and other entities contacted formally or informally to coordinate efforts in preparation of this EA include:

- Bernalillo County

- City of Albuquerque
- City of Albuquerque Open Space Division
- Corrales Bosque Commission
- Middle Rio Grande Conservancy District
- New Mexico Department of Game and Fish
- New Mexico State Historic Preservation Division and Officer
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- New Mexico Rare Plant Technical Committee
- New Mexico Interstate Stream Commission

### **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

#### **CONCLUSION**

The project, proposed by Reclamation with cooperating partners including the USFWS, the MRGCD and the City of Albuquerque, would construct a Sanctuary to provide additional rearing and spawning habitat for the endangered RGSM. This facility would be comprised of an artificial rearing and breeding channel, containing elements of the natural environment including backwater pools and eddies. The need for projects that contribute to the recovery of the species is identified as part of the RPA in the USFWS Biological Opinion (2003).

Short-term impacts associated with construction may occur to biological resources including vegetation, wildlife and fish. No impacts to threatened or endangered species, including overwintering bald eagles and the RGSM are anticipated through the use of aforementioned environmental commitments. Short term impacts to water quality may occur during in-water construction in the Drain and Rio Grande. Potential short-term construction effects of the project would be minimized with BMPs and impact-avoidance measures to assure that effects do not rise to the level of significance. Long-term effects would be beneficial to the survival of the RGSM. Reclamation and cooperating project partners would monitor the Sanctuary closely to evaluate the overall success of the project.

Based on the analysis performed in the environmental assessment, no significant adverse impacts to the natural or human environment will result from implementation of the project. This Finding of No Significant Impact (FONSI) has been determined pursuant to the National Environmental Policy Act (42 U.S.C. 4321et seq.) It has been determined that the proposed action does not constitute a major federal action that would significantly affect the human environment. Therefore, an environmental impact statement will not be prepared for this project.