

U.S. Department of the Interior

BUREAU OF RECLAMATION

Albuquerque Area Office
Albuquerque, New Mexico

Finding of No Significant Impact

**Perennial Rio Grande Silvery Minnow Refugia at Drain Outfalls
Valencia County, New Mexico**

Robert B. Maxwell ^{For}
Manager, Environment Division

8-15-07
Date

Stephenson
Area Manager, Albuquerque Area Office

8/15/07
Date

AAO-07-003
FONSI Number

BACKGROUND

The Middle Rio Grande Conservancy District (MRGCD) along with its project partners HabiTech in Laramie, Wyoming; New Mexico State University in Las Cruces, New Mexico; and the Bureau of Reclamation Denver Technical Service Center, are proposing to implement habitat enhancement measures in three drain outfalls in the upper Isleta Reach of the Middle Rio Grande to increase perennially wetted pool habitat. The MRGCD has changed the operation of the drain outfalls/wasteways to improve flows to these three outfalls without impacting water deliveries.

The project, termed Perennial Rio Grande Silvery Minnow Refugia at Drain Outfalls, will utilize large woody debris to improve refugia habitat for silvery minnow. The proposed project is funded by, and is under the oversight of, the Middle Rio Grande Endangered Species Act Collaborative Program (Collaborative Program). This Environmental Assessment (EA) has been conducted to evaluate the impacts of the implementation of habitat measures in drain outfalls on other resources and their relationship to other projects and undertakings, in compliance with the National Environmental Policy Act (NEPA) (42. U.S.C. 4331-4335).

SUMMARY OF THE PROPOSED ACTION

The Proposed Action consists of anchoring from three to eight habitat enhancement structures comprised of large cottonwood snags in the Middle Rio Grande (MRG) channel at each outfall of three drains as they enter the river channel. The drains are located at the Los Chavez Drain Wasteway; Peralta Wasteway and the Lower Peralta Drain #1. These drains are located upstream of the Highway 309 bridge near Belen, New Mexico. Placement of the large cottonwood snags takes advantage of persistent drain flows to provide refugia at critical times, while not impairing the function of the drains. Such placement should also assure fish access to the river channel when flow conditions allow, and at times of high flow in the MRG, will likely facilitate the scour of main channel pools to further enhance such habitats. The MRG Project irrigation system can be operated in a manner to ensure adequate flows are present at critical times in selected drain outfalls as long as water is available.

No significant adverse impacts to environmental resources and the human environment are anticipated as a result of the project. No Indian Trust Assets have been identified and no impacts are anticipated during project implementation. Continual evaluation of both beneficial and adverse effects will be monitored over the duration of the project. The project design is expected to produce beneficial effects on aquatic habitats and aquatic resources. After project construction activities are complete, monitoring will take place to evaluate the success of the project in meeting state goals and to ensure that unintended negative impacts are addressed.

ENVIRONMENTAL IMPACTS RELATED TO THE RESOURCES OF CONCERN

Resources of primary concern for the project include the three federally threatened or endangered species (Rio Grande silvery minnow (silvery minnow), southwestern willow flycatcher, and American bald eagle¹) and their associated habitat that may occur within the Project area, water quality in the Rio Grande and erosional input to the river, the three drains, impacts to riparian vegetation and environmental justice.

Short-term environmental impacts are anticipated during the project construction phase as a result of temporary construction disturbance and noise. Direct environmental impacts may include temporary and localized increases in the level of suspended sediments into the river due to installation of the large cottonwood logs in the river bank or river bed near the outfall of the three drains; clearing or trampling of vegetation including riparian trees and shrubs, and direct impacts to the few, if any, silvery minnow present in the drain outfalls during in-water construction. These short-term direct effects will be minimized by following best management practices: periodic water quality monitoring, use of silt curtains to limit sediment, use of previously cleared access and staging areas to limit the removal of mature trees and shrubs, 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 projects. Indirect long-term beneficial effects to restoration efforts for the silvery minnow will be evaluated during the course of the project.

Short-term adverse effects of the project on silvery minnow will likely occur as a result of implementing the project. A Biological Opinion (BO) and incidental take permit have been issued, pursuant to section 7(a)(2) and 7(b)(4) of the Endangered Species Act, as amended (USFWS, February 15, 2007). The Reasonable and Prudent Measures (RPMs) are:

1. Minimize take of silvery minnow due to construction.
2. Manage for the protection of water quality from activities associated with construction.
3. Minimize take of silvery minnow resulting from adverse pool conditions subsequent to construction.
4. Monitor pools to determine adverse impacts to silvery minnows or a decrease in habitat suitability.

¹ The bald eagle was delisted by the U.S. Fish & Wildlife Service on June 28, 2007. However the analysis will remain in the EA as it is also a State Threatened species.

To implement RPM1, MRGCD; HabiTech; New Mexico State University and the Denver Technical Service Center (project team) shall:

- 1.1. Monitor for the presence/absence of silvery minnow in the project area prior to, during and after construction.
- 1.2. Prior to the start of construction each day, transverse on foot the wetted portion of the path that will be used by heavy equipment to displace any minnows that may be present.
- 1.3. Report findings of injured or dead silvery minnow to the Service.
- 1.4. Use Information collected from Terms and Conditions 1.1 – 1.3 to develop new or modify existing BMPs to minimize the adverse effects of this project and future river maintenance projects. Any changes made to the project must be made in coordination with the Service to determine if reinitiation of consultation is required.

To implement RPM 2, the project team shall:

- 2.1. Avoid the wetted channel of the river with heavy equipment during high flows.
- 2.2. Monitor water quality, including turbidity and dissolved oxygen before, during and after equipment operates in the river channel.
- 2.3. Use information collected from Term and Condition 2.2 to develop new or modify existing BMPs to minimize the adverse effects of the project and future projects in the wetted channel. Any changes made to the project must be made in coordination with the Service to determine if reinitiation of consultation is required.

To implement RPM 3, the project team shall:

- 3.1 Monitor presence/absence of piscivores in newly created habitats and report monitoring results to the Service annually.
- 3.2 Coordinate with the Service if monitoring results from this or other projects indicate poor water quality, potential for stranding, high levels of predation, stress, or disease in pools created from the Perennial Outfalls Project.
- 3.3 Use information collected from Term and Condition 3.1 to develop new or modify existing BMPs to minimize the adverse effects of this project and future projects in the wetted channel. Any changes made to the project must be made in coordination with the Service to determine if reinitiation of consultation is required.

To implement RPM 4, the project team shall:

- 4.1 Monitor the condition of each pool to determine habitat quality is not reduced, temperature is within range of greater than 1°C (35°F) and less than 30°C (85°F) and there is not decreased dissolved oxygen.
- 4.2 Coordinate with other ongoing projects that are monitoring the pools.
- 4.3 Determine if there has been a decrease in habitat suitability or value; if so, coordinate with the Service, and if necessary, remove structures.

OTHER AFFECTED RESOURCES

The Rio Grande Compact limits the amount of surface water that can be depleted (consumed) annually in the MRG based upon the natural flow of the river measured at the Otowi Gage near Los Alamos (Rio Grande Compact 1939). In addition, the New Mexico State Engineer has determined that the MRG is fully appropriated. Therefore, any increase in water use in one sector of use must be offset by a reduction in use in another sector such that senior water rights or New Mexico's ability to meet its downstream delivery obligations are not impaired. Therefore, the New Mexico State Water Plan (Office of the State Engineer/Interstate Stream Commission 2003) requires that habitat restoration projects do not result in increases in net water depletions, or that any increases that do occur because of project activities are offset by purchased or leased water rights.

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 drains and work below the OHWM in Rio Grande) as administered by the USACE.
- State Water Quality Certification under CWA, Section 401
- National Pollutant Discharge Elimination System (NPDES) Permit
- Storm Water Pollution Prevention Plans

In addition to obtaining these permits, the following environmental commitments are to be undertaken by the project team:

- Avoiding construction or location of staging areas in jurisdictional wetlands.
- Avoiding impacts to birds protected by the Migratory Bird Treaty Act by scheduling construction outside of the normal bird breeding 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 season and consultation with the USFWS if affected species are observed.
- Implementing specific mitigation measures to avoid impacts to threatened or endangered species and their habitats identified in the Project area, as identified in the Biological Opinion.

- 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.
- Water depletions for each would be assessed. If increases do occur, they would be offset through a permitting process established by the Office of the State Engineer.
- Silt curtains and fences will be used to minimize any potential increases in turbidity in the river during and immediately after construction-related activities.
- Monitoring as described in the Reasonable and Prudent Alternatives.

COORDINATION

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

Middle Rio Grande Endangered Species Act Collaborative Program
 Middle Rio Grande Conservancy District
 New Mexico Department of Game and Fish
 New Mexico Environment Department
 New Mexico Office of the State Engineer
 New Mexico State Historic Preservation Division
 U.S. Army Corps of Engineers
 U.S. Fish and Wildlife Service

CONCLUSION

The Project, proposed by the project team consisting of the MRGCD, HabiTech, New Mexico State University and the Bureau of Reclamation Denver Technical Service Center, will install large woody debris in three drain outfalls in the Isleta Reach to create and improve perennial refugia habitat for the endangered silvery minnow. The project addresses the Collaborative Program's emphasis on habitat restoration measures that aid in the prevention of silvery minnow extinction. The project also is located in Isleta reach which the Collaborative Program identified as a high priority for habitat restoration.

Short-term impacts to visual and aesthetic resources, noise, water quality, and threatened or endangered species, including silvery minnow may occur. Short-term construction impacts will be minimized through implementation of best management practices and impact-avoidance measures. This will ensure that effects do not rise to the level of significance so long as the terms and conditions specified in the biological opinion and other environmental commitments are met. Long-term effects may be beneficial to riverine ecosystem processes and will be monitored by the project team to determine if they meet the objectives 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. 4321 et 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.