## Chapter 1. PURPOSE AND NEED FOR ACTION

#### 1.1 Introduction

The Cochiti reach of the Middle Rio Grande has undergone, drastic landscape alterations. The installation of the Galisteo Dam and Cochiti Dam has shifted the riparian ecosystem, resulting in reduced pulse flows, altered ecological processes, and encroachment of non-native phreatophytes. The regulated hydrograph in the Rio Grande has swift currents, incised river banks, abandoned side channels, isolated backwaters, and thick stands of exotic vegetation.

The Santo Domingo Tribe-Natural Resources Branch (NRB) proposes work at two sites along the Rio Grande and one site on the Galisteo Creek. The NRB will be practicing multiple aquatic habitat restoration techniques outlined in the "Habitat Restoration Plan for the Middle Rio Grande", September 2004. Two of the restoration projects are aimed at enhancing riverine features to accommodate RGSM needs; one site will be a low-flow side channel, and the second site will be a low-flow backwater habitat. These two projects will incorporate embayments, scallops and other habitat features associated with RGSM habitat. The last site, located on Galisteo Creek, is intended to encourage sediment delivery to the Rio Grande through the extraction of non-native phreatophytes.

The Project is funded by the Collaborative Program through Reclamation. This Environmental Assessment (EA) has been conducted to evaluate the impacts of the construction on environmental resources and their relationship to other projects and undertakings in compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. 4331-4335).

# 1.2 Proposed Action

The federal action associated with this project includes Reclamation's funding of the work through the Middle Rio Grande Collaborative Program. The Proposed Action involves habitat construction and removal of non-native phreatophytes that will contribute to the enhancement and recovery of RGSM in the upper Middle Rio Grande (MRG). The proposed projects are located on Santo Domingo Tribal Land, two projects are located on the east side of the Rio Grande and one project is located in the Galisteo Creek.

The proposed Rio Grande projects include diversifying habitat for RGSM by removing sediment from an abandoned oxbow to create embayments, and a backwater. The creation of this habitat will diversify habitat for the RGSM in the Cochiti reach. This project will complement other restoration efforts taking place with-in Santo Domingo Tribal Land. The Galisteo Creek project will allow

Q.S. DEPARTMENT OF THE MYSSICOL AGRESIU OF RECLAMATION sediment sequestered by non-native trees to be transported to the Rio Grande, with the goal of supporting habitat for the RGSM

# 1.3 Purpose and Need for the Action

The purpose of the project is to implement habitat restoration projects, as part of Santo Domingo's overall habitat planning process, for the benefit of the RGSM in this reach of the Rio Grande and Galisteo Creek.

The need for the Proposed Action is to satisfy federal requirements under the Biological Opinion (2003 MRG BO) for Reclamation's Water and River Maintenance Operations, the USACE's Flood Control Operations, and Related Non-Federal Actions on the Middle Rio Grande, New Mexico, 2003 (U.S. Fish and Wildlife Service 2003). The 2003 MRG BO requires the funding and collaborative execution of habitat restoration projects on the Middle Rio Grande that will improve survival of all life stages of the endangered RGSM, as specified in RPA element S:

In consultation with the [U.S. Fish and Wildlife] Service and appropriate Pueblos and in coordination with parties to the consultation, action agencies shall conduct habitat/ecosystem restoration projects in the Middle Rio Grande to increase backwaters and oxbows, widen the river channel, and/or lower river banks to produce shallow water habitats, overbank flooding, and regeneration stands of willows and cottonwood to benefit the silvery minnow, the flycatcher, or their habitats. Projects should be examined for depletions. It is the Service's understanding that the objective of the action agencies and parties to the consultation is to develop projects that are depletion neutral. By 2013, additional restoration totaling 1,600 acres (648 hectares) will be completed in the action area. In the short term (5 years or less), the emphasis for silvery minnow habitat restoration projects shall be placed on river reaches north of the San Acacia Diversion Dam. Projects should result in the restoration/creation of blocks of habitat 24 hectares (60 acres) or larger [the Service 2003:95–96].

## 1.4 Relevant Statutes, Regulations, and other Plans

Compliance is required under the provisions of Section 7 of the ESA as administered by the USFWS, and Section 106 of the National Historic Preservation Act (NHPA; 16 U.S.C.) as administered by the New Mexico State Historic Preservation Officer (SHPO). A site visit and review of the project and intentions by the Army Corps. of Engineers determined under Section 404 of the Clean Water Act (CWA) that a permit was not required to conduct these restoration activities.

