

## **Chapter 1. Purpose of and Need for Action**

### **1.1 Proposed Action**

The Bureau of Reclamation (Reclamation) has authority for maintenance of the Rio Grande river-channel between Velarde, New Mexico and Caballo Reservoir under the *Flood Control Acts of 1948 and 1950*. Under this authority, Reclamation monitors locations where there is danger of river erosion causing damage to levees, roads, ditches, and other riverside facilities; these locations are referred to by Reclamation as “priority sites.” Two priority sites that have been identified are called the San Acacia priority sites at River Miles (RM) 114 and 113, hereinafter referred to simply as “San Acacia.”

The Federal action addressed in this Environmental Assessment (EA) would be the funding and execution of levee and Low Flow Conveyance Channel (LFCC) relocation activities at San Acacia by Reclamation. The proposed action would provide space for the river to migrate naturally toward the west in the vicinity of RM 114 and 113. The relocation would prevent severe damage to the levee and LFCC. The lands encumbered by the proposed action are on properties assigned by the Middle Rio Grande Conservancy District (MRGCD) to the United States under the terms of the 1951 Contract between the parties. Assignment of the Receipt and Conveyance numbers relevant to the proposed action are the following: 1353, 1352, 1354, 1367, 1366, 1504, 1330, 1350, 1233, 1503, and 1595. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) [42 United States Code (U.S.C.) 4321, et seq.].

### **1.2 Need for the Action**

At the present time, the Rio Grande is eroding the west-side of the levee downstream of the San Acacia Diversion Dam (SADD). Historically, the river was a wide and braided channel with a sand bed and low banks. The river also experienced larger floods and higher sediment loads. Since the LFCC was built in the 1950s, this section of the river was straightened. In addition, two channel bends were cut off in this section of the river. The river is currently incising, narrowing, coarsening and migrating to the west. The meandering and incising characteristics are causing bank failure and erosion that is threatening the levee at the priority sites previously mentioned.

### **1.3 Purpose of the Action**

The San Acacia project is located in Socorro County, approximately 10 miles (mi.) north of Socorro, New Mexico (Figure 1), and 1.0 mi. south of San Acacia, New Mexico, on the west side of the Rio Grande between the SADD and Escondida Bridge (centered at Lat. 34°13'37", Long. 106°54'03"). The purpose of the San Acacia Project would be to prevent damage to the levee and LFCC and allow the Rio Grande to migrate naturally toward the west. This action would allow the river's natural process of erosion to continue its lateral migration toward the west without breaching the levee and damaging the LFCC. A secondary objective of the project would be to take advantage of opportunities provided by the proposed action to restore, improve, and enhance, to some degree, the habitat and natural condition of the floodplain between the river and the newly aligned LFCC and levee.

### **1.4 Relevant Statutes, Regulations, and Other Plans**

The proposed action does not conflict with any known state or local planning or zoning ordinances. The proposed action would also be required to conform to the provisions of Section 7 of the *Endangered Species Act* (ESA) as administered by the U.S. Fish and Wildlife Service (Service) and Section 106 of the *National Historic Preservation Act* (NHPA) as administered by the New Mexico State Historic Preservation Officer (SHPO).

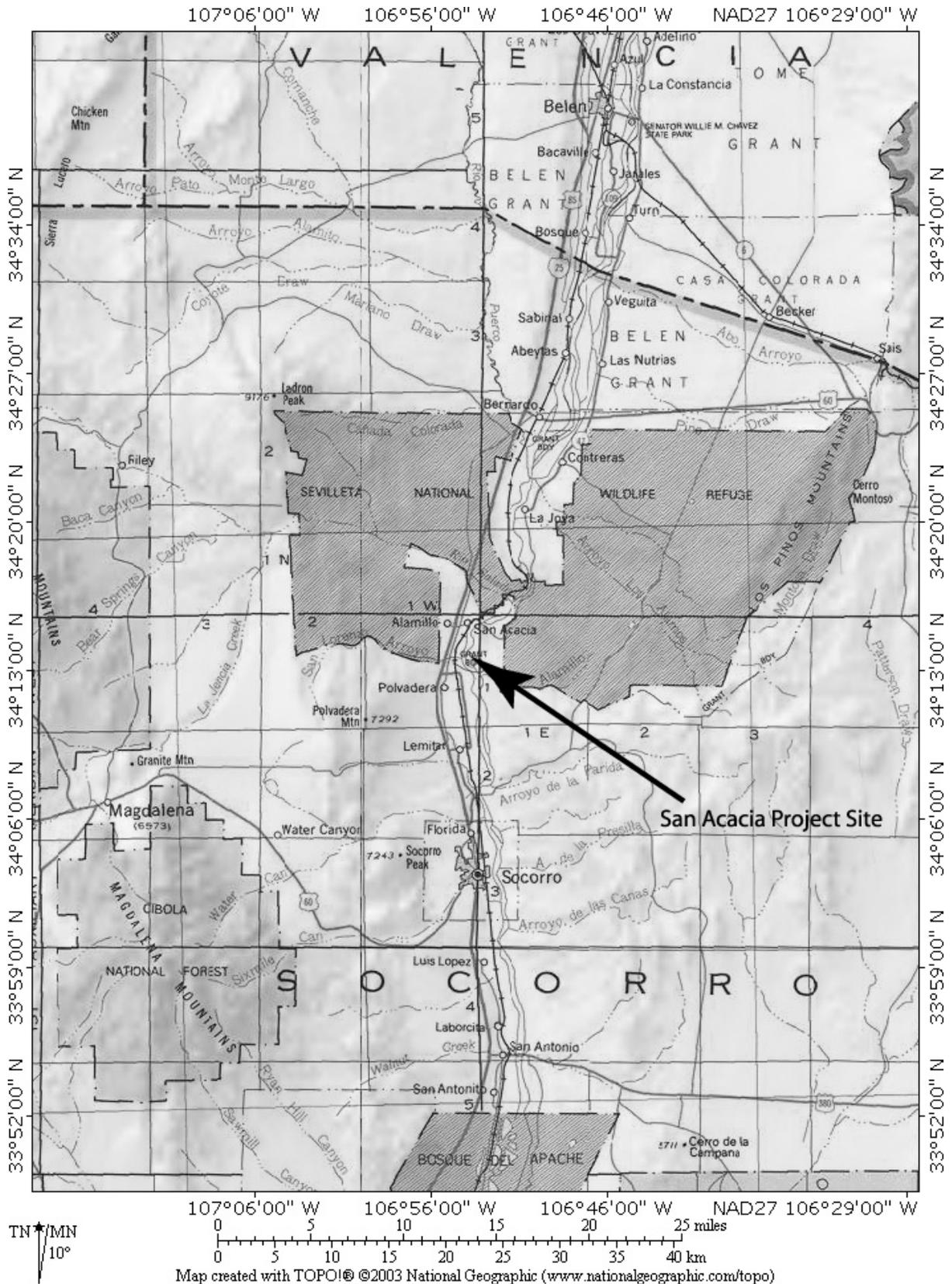


Figure 1. San Acacia project site location map.

The U.S. Army Corps of Engineers (ACOE) has issued an Individual Permit (Section 404 Permit No. 2004-00321) for this project to meet the requirements of the *Clean Water Act* (CWA). Because more than one acre of land would be disturbed by the proposed action, the project would require a *National Pollution Discharge Elimination System* (NPDES) permit.

For the purpose of analyzing cumulative effects, two other planned projects in the region were identified. A second phase of the proposed action, which may or may not be carried out at some time in the future, would increase the capacity of the new alignment of the LFCC. Reclamation is also planning to address another priority site at RM 111 sometime after construction has begun at the RM 114 and 113 priority sites. These projects are discussed further in Chapter 2.

### **1.5 Agency and Public Scoping Activities in Support of the Environmental Assessment**

Prior to the initiation of the NEPA process, Reclamation held four public scoping meetings in the San Acacia area to solicit public comments and concerns and identify issues that would need to be addressed in this EA. The first meeting was held at Reclamation’s Socorro Field Division Office on Tuesday, April 8, 2003, from 2:00 to 4:00 pm. The second meeting was held at the Sevilleta National Wildlife Refuge on May 13, 2003. The third meeting was held on Friday, May 21, 2004, from 1:30 to 2:30 pm at the Socorro Field Division Office. The fourth meeting was held on Tuesday, June 1, 2004, at 1:00 pm at the State Forestry Office in Socorro.

The first two public meetings discussed numerous alternatives, including using riprap, to stabilize the bank at RM 114 and 113 to halt the migration of the river to the east. These first two meetings were responsible, in part, for the elimination of some alternatives and for development of the proposed action described in this EA. Copies of the public scoping announcement letters from the meetings are contained in Appendix A.

Reclamation also consulted directly with the Service to identify their issues and concerns. A PowerPoint presentation was given to Service personnel on March 19, 2004 and a field trip was conducted on April 27, 2004. Consultation with the Service consisted of an initial consultation letter to the Service briefly describing the project and location and requesting a species list. Because Reclamation has determined that there would be no effect to any federally protected species by the proposed action, no further consultation is required. A copy of the initial consultation letter and the Service’s response letter containing a list of special status species is contained in Appendix A.

Other agencies and groups consulted by Reclamation for this EA included the ACOE, New Mexico Environment Department (NMED), New Mexico Department of Game and Fish (NMDG&F), the New Mexico Rare Plant Technical Council (NMRPTC), the SHPO, the MRGCD, Save Our Bosque Task Force, Sevilleta National Wildlife Refuge, and Native American tribes.

Scoping and consultation resulted in the identification of eight issues, which would need to be addressed by the proposed action. They are:

- 1) The potential for effects to protected species would need to be determined by Reclamation;
- 2) Removal of existing cottonwood trees, willows, and other vegetation within the project area and effects to native wildlife;
- 3) The introduction of state-listed noxious weeds;
- 4) Erosion and water quality during construction and after construction has been completed;



- 5) Air quality from dust generation during construction;
- 6) The avoidance of cultural and archaeological resources, as well as potential sacred sites in the project area;
- 7) The avoidance of Indian Trust Assets, and;
- 8) Any potential for adverse effects to low-income and minority populations.

With regard to federally protected species, three were identified that could potentially occur in the project area: the Bald Eagle (*Haliaeetus leucocephalus*), the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and the Rio Grande Silvery Minnow (*Hybognathus amarus*). Bald Eagles looking for nesting sites could potentially be disturbed by construction activities at the site. A monitoring plan for Bald Eagles, as described in Chapter 4, would be employed during construction to mitigate this potential.

Surveys in 2004 for the presence of Southwestern Willow Flycatchers did not result in the discovery of any birds or nests in the project area (Doster, per. comm., 2005). Clearing and grubbing operations would take place before the nesting season to further ensure no flycatchers are affected.

Filling activities during the abandonment of the realigned segment could potentially result in a take if Rio Grande Silvery Minnows were present in the LFCC. No Rio Grande Silvery Minnows were located in the LFCC during recent Reclamation fish surveys (Reclamation, 2004a). There would be no in-stream activities in the Rio Grande; therefore, there would be no effects to the Rio Grande Silvery Minnow or its designated critical habitat.

The following issues were not considered relevant to the project in this EA.

- Effects to visual resources are not considered relevant because the project site does not contain any unusual or exceptional visual characteristics and is in an area that receives very little public attention.
- Noise is not considered relevant because the nearest potential receptors are residences that are not close enough to the project site to hear construction activities at levels that would approach or exceed standard noise threshold levels.
- No social or economic effects are expected to occur as a result of this project.
- There are no segments of designated Wild and Scenic Rivers in the vicinity of the project site that could be affected by the proposed action.
- There are no wetlands in the project area.
- No changes in the land use would occur as a result of the proposed action.