

Chapter 1. Purpose of and Need for Action

1.1 Introduction

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* [33 United States Code (U.S.C.) 701s, 701f-2]. 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.” One priority site that has been identified is called the Bernalillo Priority Site (Figure 1), hereinafter referred to as the “project area.”

1.2 Proposed Action

The Federal action addressed in this Environmental Assessment (EA) would be the funding and execution of river channel alignment activities at the project area by Reclamation. The proposed action would reconstruct a portion of the east river bank of the Rio Grande and realign the river channel at this location. The reconstruction and realignment would protect the integrity of the east levee and canal system, and prevent severe damage to these facilities and possible flooding. The lands encumbered by the proposed action are on properties conveyed by the Middle Rio Grande Conservancy District (MRGCD) to the United States under the terms of the 1951 Contract between the parties. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) [42 U.S.C. 4321, et seq.].

1.3 Need for the Action

At the present time, the Rio Grande is eroding the east river bank at the project area allowing the river channel to be undesirably close to critical irrigation and flood control facilities. The Rio Grande makes an abrupt bend towards the east levee system at the project area, and the east river bank is less than 100 feet from the levee. Short-term, pre-emergency activities, in the form of riprap placement along the east river bank, were implemented in 2003. At high flows, the east river bank could continue to erode, possibly breaching the east levee system and flooding private, Pueblo of Sandia, and Middle Rio Grande Project facilities. Threatened and endangered species are also of concern along this portion of the Rio Grande.

1.4 Purpose of the Action

The project area is located in Bernalillo (Sandoval County), New Mexico, approximately 10 miles north of Albuquerque, New Mexico (see Figure 1), along the Rio Grande between the Highway 550 Bridge and the northern boundary of the Pueblo of Sandia (centered at Lat. 35°18'50", Long. 106°33'29"). The purpose of this project would be to prevent damage to the east levee system by reducing the probability that high flows will cause further erosion of the east river bank. This action would also provide additional bank stability and reliability at the project area. A secondary purpose of the project would be to take advantage of opportunities provided by the proposed action to restore, improve, and enhance, to some degree, habitat for threatened and endangered species at the project area.

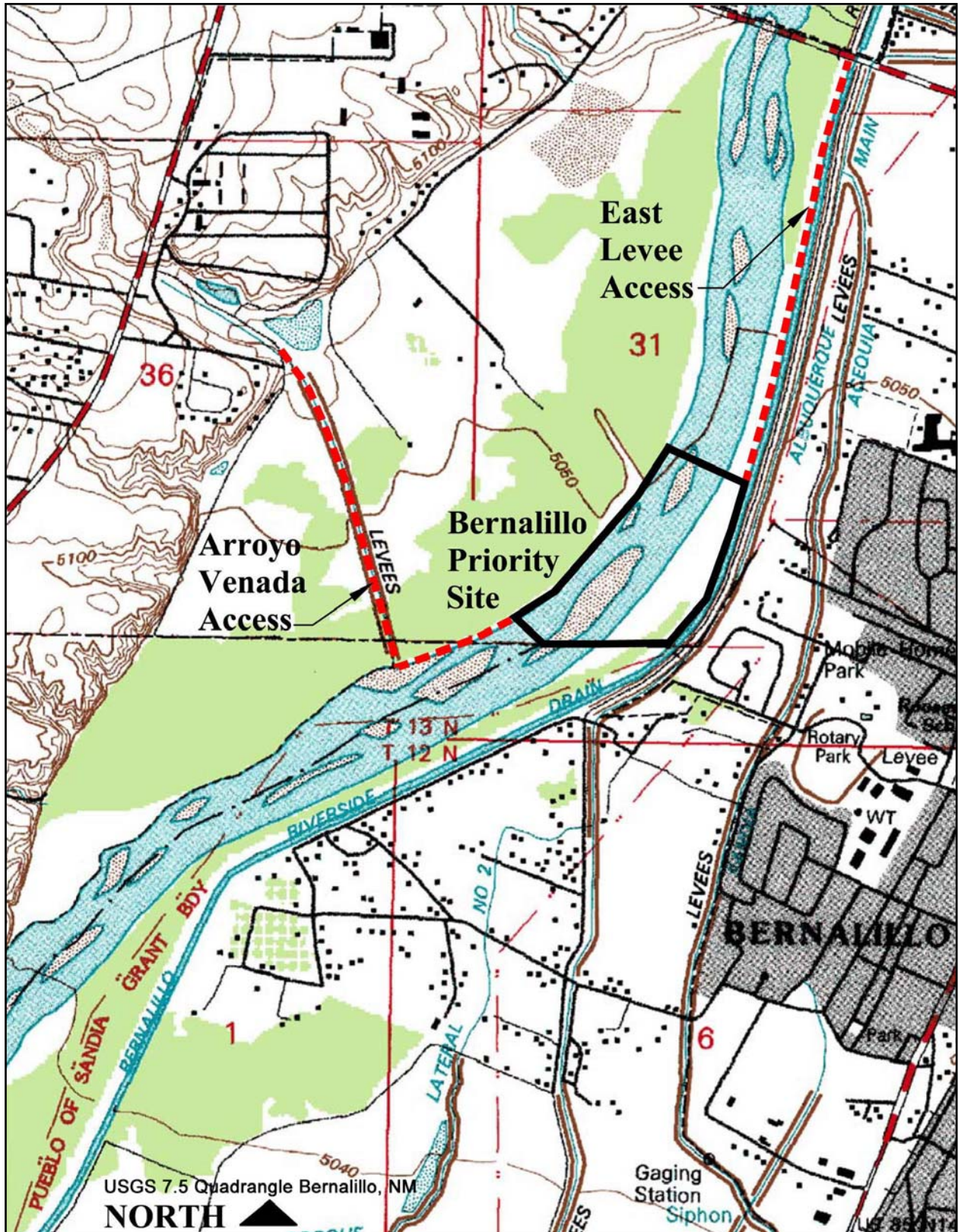


Figure 1. Bernalillo Priority Site (project area) location map.

1.5 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).

Reclamation would need to secure a Section 404 Permit for this project to meet the requirements of the Clean Water Act (CWA). Because more than 1 acre of land would be disturbed by the proposed action, the project would require a Section 402 *National Pollution Discharge Elimination System* (NPDES) permit.

For the purpose of analyzing cumulative effects, two other planned projects in the vicinity of the project area were identified. One project, which may or may not be carried out at some time in the future, would involve construction and alignment of the Rio Grande at the Sandia Priority Site location just 0.5 mile south of the project area. Reclamation is planning to investigate the possibility of connecting the Bernalillo and Sandia Priority Site construction projects in terms of threatened and endangered species habitat improvements. The Sandia Priority Site project is discussed further in Chapter 2. The other project is being undertaken by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) at the mouth of Arroyo Venada and involves construction of approximately 600 feet of earthen berm, 1 to 3 feet in height, as a water quality treatment pond near the river. A separate environmental permitting process for this project is being pursued by SSCAFCA.

1.6 Agency and Public Scoping Activities in Support of the Environmental Assessment (EA)

Prior to the initiation of the NEPA process, Reclamation held a public scoping meeting in Bernalillo, New Mexico, to solicit public and agency comments and concerns, and to identify issues that would need to be addressed in this EA. The public scoping meeting was held at the Sandoval County Courthouse on Tuesday, September 13, 2005, from 6:00 to 8:00 pm. At the public scoping meeting, project personnel presented the purpose and need for the project, discussed numerous alternatives that were preliminarily identified by Reclamation staff, and described the methods for individuals and agency representatives to provide input on the proposed action. Copies of the public scoping meeting announcements are contained in Appendix A.

Reclamation also consulted directly with the Pueblo of Sandia and the Service to identify their issues and concerns. A meeting was held with Pueblo of Sandia staff on January 6, 2005. Consultation with the Pueblo of Sandia consisted of an initial consultation letter briefly describing the project and location, and requesting comments. A field trip was conducted on March 30, 2005, with Service personnel to review existing conditions at the project area.

Other agencies and groups consulted by Reclamation for this EA included the U.S. Army Corps of Engineers (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 U.S. Environmental Protection Agency (EPA), the MRGCD, The Bosque Encantado Homeowners Association, and Native American tribes.

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

- The potential for impacts to protected species (to be determined by Reclamation);
- The resultant effects to native wildlife from the removal of existing cottonwood trees (*Populus* spp.), willow trees (*Salix* spp.), and other vegetation within the project area;
- The potential for introduction of State-listed noxious weeds;
- The potential for erosion-related water quality impacts during construction and after construction;
- Air quality from dust generation during construction;
- The avoidance of cultural and archaeological resources, as well as potential sacred sites in the project area;
- The avoidance of Indian Trust Assets (ITAs);
- The potential for any adverse effects to low-income and minority populations;
- The effects to visual resources as a result of construction activities; and
- The construction equipment-generated noise and its impact on nearby residences.

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 eagle looking for nesting or roosting sites could potentially be disturbed by construction activities at the project area. Protocols for monitoring bald eagle, as described in Chapter 4, would be employed during construction to mitigate this potential impact.

According to on-site surveys conducted in 2005 for the presence of southwestern willow flycatcher habitat, no suitable potential habitat exists in the project area. In addition, clearing and grubbing operations for construction would take place before the nesting season to further ensure no southwestern willow flycatcher are affected. The project area was recently cleared of non-native vegetation following a fire.

Partial dewatering of the main channel for construction after flow is diverted into the secondary channel could “adversely affect” individual Rio Grande silvery minnows that become stranded in small disconnected pools. However, the construction techniques used with refugial pool management in the proposed action are designed to minimize contact with the Rio Grande silvery minnow and the potential for harm or harassment. There would be no effects to the Rio

Grande silvery minnow's designated critical habitat. Reclamation would continue to coordinate with the Service on whether Rio Grande silvery minnows should be transported away from the project area.

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

- No social or economic effects are expected to occur as a result of the proposed action.
- There are no segments of designated Wild and Scenic Rivers in the vicinity of the project area that could be affected by the proposed action.
- Jurisdictional wetlands in the project area that would be affected by the project would be mitigated.
- No changes in the land use would occur as a result of the proposed action.
- No permanent effects to recreation activities are expected as a result of the proposed action.