

Chapter 1: Purpose and Need for Action

1.1 Introduction

The Bureau of Reclamation has authority for river channel maintenance on the Rio Grande between Velarde, New Mexico and the headwaters of Caballo Reservoir. Reclamation regularly monitors changes in the river channel and evaluates channel and levee capacity in an effort to identify river maintenance priority sites where there is concern about possible damage to riverside facilities.

The Drain Unit 7 Extension River Maintenance Priority Site (Project) is located 500 feet upstream of San Acacia Diversion Dam (SADD), on the right bankline of the Rio Grande. The approximate River Mile is 116.3. The river is actively eroding a spoil levee embankment that protects the Drain Unit 7 Extension irrigation structure, operated by the Middle Rio Grande Conservancy District (MRGCD). The Drain Unit 7 Extension structure serves as both a drain and canal, conveying irrigation drain water to the Socorro Main Canal for downstream irrigation needs. If the river is allowed to continue erosion of the levee, the drain prism could be destroyed, and the roadway on the levee lost, which is used to maintain Drain Unit 7 and access parts of the Sevilleta National Wildlife Refuge (Sevilleta).

Erosion has been a persistent problem in recent years on approximately 350 feet of the levee that protects the drain from the river. This portion of the levee is adjacent to the active river channel. Recent bankline erosion and bend migration upstream of the site indicate that bend migration may soon begin at the site, which will expose more of the levee to active erosion. The majority of the recent bend migration upstream of the site occurred during high flows brought on by monsoon season rainstorm events during July and August of 2006. The general site area is shown in Figure 1, with a designation of the area of concern and the projected future bank line erosion.

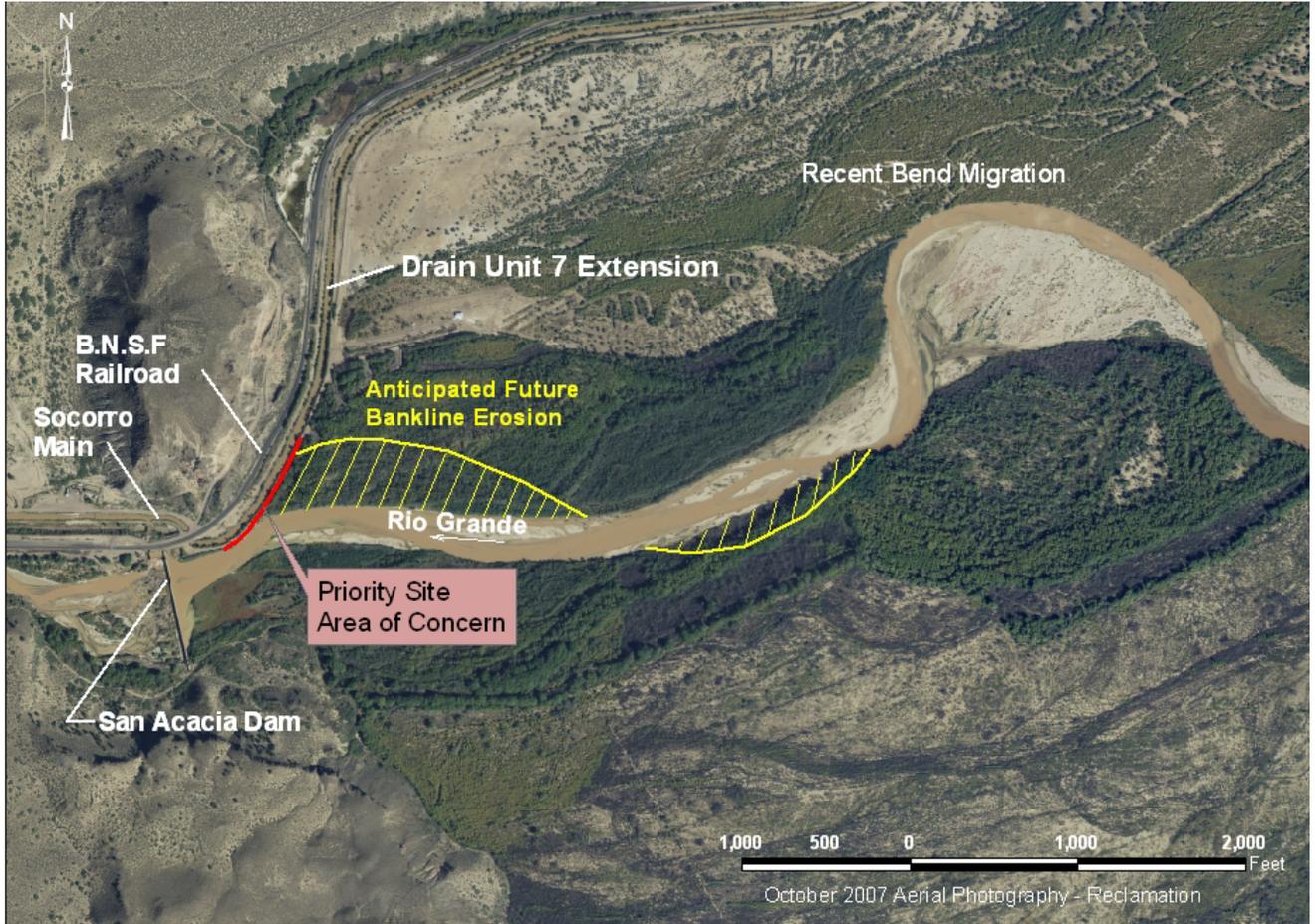


Figure 1: General Site Location of Drain Unit 7 Priority Site

This EA is prepared pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended; the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508); the Department of the Interior's NEPA Implementing Procedures (516 DM 1-15); and Reclamation's NEPA Handbook.

1.2 Need for the Action

The need for action is protection of the facility against erosion. Erosion has been a persistent problem in recent years on approximately 350 feet of the levee that protects the drain from the river. This portion of the spoil levee is adjacent to the active river channel. Recent bankline erosion and bend migration upstream of the site indicate that bend migration may soon begin at the site, which will expose more of the levee to active erosion. The majority of the recent bend migration upstream of the site occurred during high flows brought on by monsoon season rainstorm events during July and August of 2006.

1.3 Purpose of the Action

The design calls for placement of riprap along the river side of the Drain Unit 7 Extension spoil levee for a length of 650 feet. The purpose of the riprap placement would be to prevent further erosion of the levee that protects the Drain Unit 7 Extension irrigation structure.

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).

The U.S. Army Corps of Engineers (ACOE) determined the Project is under the irrigation exemption and sent a letter to the New Mexico Environment Department (NMED) to that effect. 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 which Reclamation has obtained through the Environmental Protection Agency (EPA).

1.5 Public Scoping

Public meetings were held by Reclamation on Thursday, February 1, 2007, at 7 p.m. at New Mexico Institute of Mining and Technology, Macey Center, Socorro, NM, and Friday, February 2, 2007, at the University of New Mexico in Albuquerque as part of the scoping process. Reclamation sought comments concerning the formulation of alternatives. Scoping included four separate projects: San Acacia Fish Passage Project, La Joya Siphon Project, Drain Unit 7 Extension River Maintenance Priority Site (the subject of this DEA) and the SADD Apron Maintenance Project.