

Chapter 3. AFFECTED ENVIRONMENT

3.1 Introduction

The relevant resources described in this chapter are those that would be affected by the alternatives if they were implemented. The effects (impacts or issues) to these resources created by the alternatives if implemented are discussed in Chapter 4.

3.2 Description of Relevant Affected Issues and Resources (See list of Issues in Section 1.6)

3.2.1. Native Vegetation

The Rio Grande cottonwood (*Populus deltoides* var. *wislizenii*) dominates the vegetation in the project area. The plant community also contains Russian olive, coyote willow, locust, and saltcedar. In addition, there is a variety of grass species such as orchard, smooth brome, and fescue grasses.

3.2.2. Wetlands

Two wetland surveys were conducted by Eco System Management, Inc. on March 18 and August 4, 2004, respectively. The first study results indicated that no wetlands existed in the project area. This study also identified a small wetland area out of the project area (less than an acre) about 300 feet south of the Borregos Arroyo along the toe of the dike.

The second study was conducted north of the project area along the dike's west toe between the Lopez Arroyo and the Borregos Arroyo. A wetland was identified which covered an area of approximately 1.02 acres. Results of both studies may be referred to in Appendix E.

Water that seeps from the Rio Grande as well as arroyo stormwater runoff have maintained these areas as wetlands.

3.2.3. Threatened and Endangered Species

A field trip with representatives of the Service was conducted at the proposed project area in the fall of 2003. The Southwestern Willow Flycatcher and the Bald Eagle were the only species discussed (see the wildlife species list in Appendix D). The nearest Southwestern Willow Flycatcher species have been observed approximately two miles south of the proposed project. Bald Eagles have also been observed during the winter months; however, no nests have been located in or near the proposed project area.

3.2.4. Water Resources

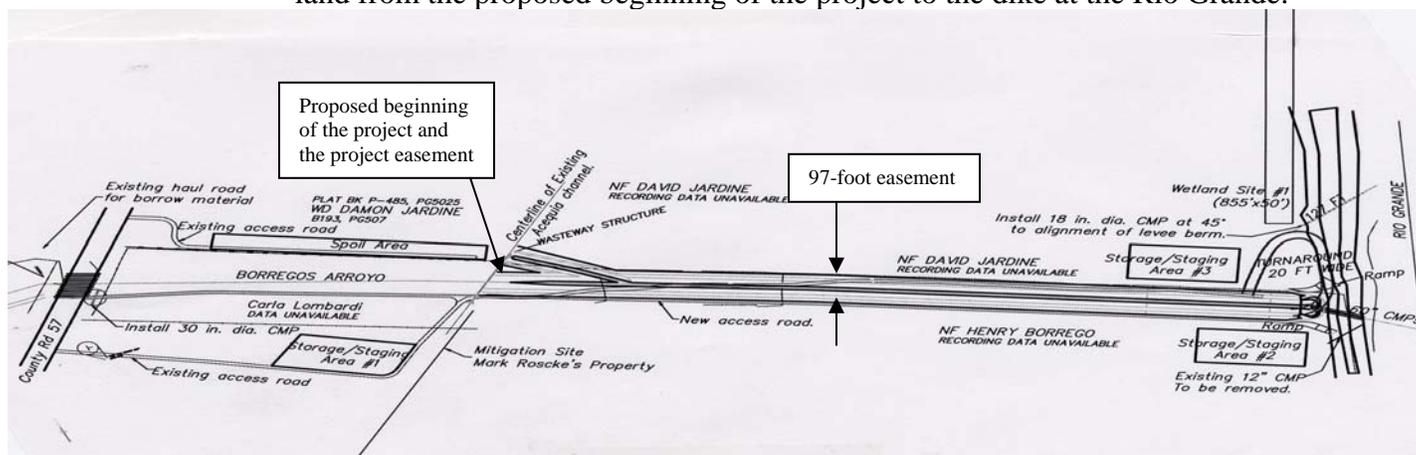
The proposed action would affect the wasteway ditch that has been identified by

the Corps of Engineers as a waters of the United States. The following photo shows the wasteway that leads from the headgate of the acequia to the dike at the Rio Grande:



3.2.5. Private Land

Four private land owners would be affected by the proposed project. The following drawing shows the easement of the acequia in relationship to private land from the proposed beginning of the project to the dike at the Rio Grande:



3.2.6. Environmental Justice

Federal agencies are required to identify and address disproportionately high and adverse human health or environmental effects of its activities on minority and low-income populations. The proposed project site was selected based on the need to reduce seepage and evaporation from the canal. The project would therefore provide additional water through conservation to the farmers of the district. If the proposed project was implemented, additional water would be available for agriculture and, therefore, enhance the

possibility of low-income families to obtain employment.

3.2.7. Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for Indian tribes or individuals. For example, ITAs include land, minerals, hunting and fishing rights, and water rights. The proposed project is not anticipated to have any effect on ITAs.

3.2.8. Cultural Resources

The following lists potential cultural resources associated with the proposed action:

- El Guique Acequia (irrigation ditch older than 50 years)
- Dike on the Rio Grande built between 1935 and 1949 (see contrasting aerial photos on page 1)
- Old headgate in the wasteway (older than 50 years)

3.2.9. Air Quality and Noise

The project area is located in Rio Arriba County, New Mexico. This county complies with all air pollutants identified in the National Ambient Air Quality Standards. Therefore, the county has been designated as part of an attainment area located in Air Quality Control Region 157 (40 CFR § 81.332). As a result, the Environmental Protection Agency would not require monitoring of air pollutants.

Noise levels from the project will reach as high as 96 decibels from bulldozers and backhoes. Conversation levels of noise reach as high as 70 decibels. Since the project area is located in a farming community, decibel levels are normally very low compared to the cities of Espanola and Sante Fe.