

# Supplement II to the Environmental Assessment for the SOUTHWEST VALLEY FLOOD DAMAGE REDUCTION PROJECT, Albuquerque, Bernalillo County, New Mexico

Prepared by

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**Cooperating Agencies** 

U.S. Bureau of Reclamation Middle Rio Grande Conservancy District

December 2013

#### **Finding of No Significant Impact**

#### Supplement II to the Environmental Assessment for the

#### Southwest Valley Flood Damage Reduction Project

#### Albuquerque, Bernalillo County, New Mexico

The United States Army Corps of Engineers, Albuquerque District (Corps), in cooperation with and at the request of the Albuquerque Metropolitan Area Flood Control Authority (AMAFCA) and Bernalillo County, New Mexico, is planning a project that would improve stormwater drainage and reduce the potential for flood damage within the Southwest Valley Project Area (Project Area), which is located in the southwest corner of Albuquerque and Bernalillo County. The purpose of the project is to reduce flood damages in the Project Area using existing irrigation acequias and drains that are owned and operated by the U.S. Bureau of Reclamation (Reclamation) and the Middle Rio Grande Conservancy District (MRGCD).

The Southwest Valley Flood Damage Reduction Project was originally described in the *Final Feasibility Report/Environmental Assessment (FFR/EA) for the Southwest Valley Flood Damage Reduction Project, Albuquerque, Bernalillo County, New Mexico* (2004 FFR/EA) which was completed in 2004 and a Supplemental Environmental Assessment dated September 2010 (2010 SEA). The current SEA-II describes the slight change in design of the features at Pond 187, the redesigned inflow channel to Pond 187, and the use of the Arenal Acequia as a haul route with the construction of a temporary haul road to the west of the acequia.

The proposed action is located west of the intersection of Don Andres Road and Tapia Road. Pond 187 would be excavated immediately south of Don Andres Road on what is currently an agricultural field. The main construction access for the pond excavation would be along the Arenal Acequia from Arenal Road downstream to Don Andres Road. A new inflow channel pipe into Pond 187 would be placed within a section of the Arenal Acequia easement, and that easement would provide temporary construction access. Once the proposed action is completed, the acequia would continue to provide irrigation water while a separate conveyance pipe would take surface stormwater into Pond 187. Construction is proposed to take place beginning in 2014.

The proposed action is a preferred alternative design for Pond 187 and its inflow channel based upon local sponsor preference and coordination with various affected stakeholders. The project co-sponsors, AMAFCA and Bernalillo County have been involved in the design of the project and review of the SEA-II. Reclamation and MRGCD are Cooperating Agencies for the project.

The Corps' archaeological survey report entitled A Cultural Resources Inventory of 4.6 Acres for Phase II Project Modifications, Southwest Valley Flood Damage Reduction Project, Bernalillo County, New Mexico (Corps Report No. USACE-ABQ-2013-010; NMCRIS No. 128254) was submitted to the SHPO. The Corps considers that the proposed use of the vacant AMAFCA land and/or the Rio Grande High School retention pond for disposal of earthen material from the Pond 187 excavation would result in No Historic Properties Affected. In consideration of the extent of the Arenal Acequia and the huge MRGCD system, the Corps considers that the reshaping and concrete lining modifications to the Arenal Acequia would result in negligible effects to the Arenal Acequia and the MRGCD system, and therefore, would result in No Adverse Effect to Historic Properties. On November 14, 2013, the SHPO concurred with the Corps determinations of No Historic Properties Affected and No Adverse Effect to Historic Properties as noted above.

The proposed project qualifies for Nationwide Permit 33 under Section 404 of the Clean Water Act. Section 401 of the CWA, (33 U.S.C. 1251 *et seq.*) as amended, and requires that a Water Quality Certification Permit be obtained for anticipated discharges associated with Section 404 of the CWA activities. A Water Quality Certification Permit was requested from the New Mexico Environmental Department (NMED) and received on August 9, 2010.

The proposed work would utilize the appropriate Best Management Practices discussed in the 2010 SEA in order to reduce the quantities of pollutants.

Specific environmental commitments include:

- 1) Fuel, oil, hydraulic fluids and other similar substances would be appropriately stored out of the floodplain and must have a secondary containment system to prevent spills if the primary storage container leaks.
- 2) Appropriate erosion control measures would be utilized to prevent surface water drainage and erosion material from leaving the construction areas.
- 3) Water dispersal equipment would be used to minimize dust during construction activities.
- 4) A Fugitive Dust Control Permit is required by the City of Albuquerque Air Quality Program.
- 5) Best management practices would be implemented regarding the treatment and disposal of waste material. Proper disposal of all waste material at commercial disposal areas or landfills would occur.
- 6) Activities would be limited to the designated or otherwise approved areas and would be shown on the construction drawings for construction areas, staging access, and borrow use. Corps approval of any additional areas will be required regardless of their ownership or distance to the construction sites to ensure protection of vegetation, water quality, threatened and endangered species, cultural resources and other significant resources. The Corps' Contracting Officer will coordinate with the Corps Environmental Resources Section to approve any changes in access routes, non-commercial borrow sites, staging areas, disposal sites, and other high-use areas.
- 7) Both water and sanitary sewer lines exist in the residential roads surrounding the proposed Pond 187. The Albuquerque Bernalillo County Water Utility Authority

will be notified in regard to the horizontal/vertical alignment for conveyance pipelines taking surface storm water into Pond 187.

A Biological Assessment (BA) was submitted to the USFWS and concurrence was received on July 28, 2010. The species addressed in the BA were the Rio Grande silvery minnow and the Southwestern Willow Flycatcher, two species found in the Middle Rio Grande. However, these species do not occur in the proposed action area. Therefore, the Corps has determined that the proposed action would have no effect on listed species or their designated critical habitats.

The proposed action would result in only minor, temporary, adverse impacts to soils, water quality, air quality, noise levels, vegetation, floodplains, fish and wildlife, and waters of the United States during construction. The project would have minimal long-term adverse impact to water quality, floodplains, and recreational resources. There would be no adverse impacts, short or long-term, to climate, special status species, wetlands, Indian Trust Assets, socioeconomics, or cultural resources. There would be minor, long-term benefits to vegetation, fish and wildlife, wetlands, federally listed species, environmental justice, and land use. There would be long-term benefits to aesthetics, human health and safety, land use and recreational resources. There would be no adverse cumulative effects to the environment from the proposed project.

The proposed action has been fully coordinated with Federal, State of New Mexico, tribal, and local governments with jurisdiction over the ecological, cultural, and hydrological resources within the Project Area. Based upon these factors, and others discussed in detail in the SEA-II, the proposed action would not have a significant effect on the human environment. Therefore, an Environmental Impact Statement would not be prepared for this proposed action.

20 Dec 2013 Date

Antoinette R. Gant Lieutenant Colonel, U.S. Army District Commander

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## SUPPLEMENT II to the ENVIRONMENTAL ASSESSMENT for the Southwest Valley Flood Damage Reduction Project Albuquerque, Bernalillo County, New Mexico

#### 1.0 INTRODUCTION

#### 1.1 Background and Location

The United States Army Corps of Engineers, Albuquerque District (Corps), in cooperation with and at the request of the Albuquerque Metropolitan Area Flood Control Authority (AMAFCA) and Bernalillo County, New Mexico, is planning a project that would improve stormwater drainage and reduce the potential for flooding within the Southwest Valley Project Area (Project Area), which is located in the southwest corner of Albuquerque and Bernalillo County (Figure 1).

The Final Feasibility Report and Environmental Assessment for the Southwest Valley Flood Damage Reduction Project, Albuquerque, Bernalillo County, New Mexico (2004 FFR/EA; USACE 2004) was completed in 2004. The Southwest Valley Flood Damage Reduction Project Environmental Assessment Supplement (2010 SEA) was completed in 2010 in order to document the changes made to alignments and configurations of several different components of the Southwest Valley Flood Damage Reduction Project. Both documents are available on the Corps' website at:

http://www.spa.usace.army.mil/Missions/Environmental/EnvironmentalComplianceDocu ments/EnvironmentalAssessmentsFONSLaspx. The current Supplemental Environmental Assessment II (SEA-II) describes the slight change in design of the features at Pond 187, the redesigned inflow channel to Pond 187, and the use of the Arenal Acequia as a haul route with the construction of a temporary haul road to the west of the acequia.

The proposed action is located west of the intersection of Don Andres Road and Tapia Road. Pond 187 would be excavated immediately south of Don Andres Road on what is currently an agricultural field. The main construction access for the pond excavation would be along the Arenal Acequia from Arenal Road downstream to Don Andres Road (see Figure 2). This access would be used for transporting waste sediment for disposal at a nearby location. A new inflow channel pipe into Pond 187 would be placed within a section of the Arenal Acequia easement, and that easement would provide temporary construction access. Once the proposed action is completed, the acequia would continue to provide irrigation water while a separate conveyance pipe would take surface stormwater from the north into Pond 187. Construction is proposed to take place beginning in 2014.



Figure 1. Map of Southwest Valley Flood Damage Reduction Project Area, as originally proposed.



Figure 2. Map showing location of Pond 187 and Arenal Acequia haul road.

The current proposed construction is described in Section 2.0 of this SEA-II. Construction is proposed to take place beginning in 2014.

# 1.2 <u>Purpose and Need</u>

The original and continued purpose of the project is to reduce flood damages in the Project Area using existing irrigation acequias and drains that are owned and operated by the U.S. Bureau of Reclamation (Reclamation) and the Middle Rio Grande Conservancy District (MRGCD). Both of these agencies are charged with irrigation activities. In order for the project to be possible, Reclamation and MRGCD have granted approval for this additional use and issued a Right-of-Use License. Both agencies are cooperating agencies as outlined in the Council of Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 CFR Part 1500 *et seq.*).

The current SEA II describes the slight change in design of the features at Pond 187 and the inlet channel to Pond 187, in order to improve the Southwest Valley stormwater conveyance system.

# 1.3 <u>Cooperating Agencies</u>

The project co-sponsors, Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and Bernalillo County have been involved in the design of the project and review of the Supplemental Environmental Assessment II. A letter dated February 3, 2010 (see 2010 SEA) was sent to Reclamation and MRGCD asking for their participation as Cooperating Agencies in the NEPA process. They accepted the invitation by email dated February 8, 2010, from Reclamation and a letter dated February 8, 2010, from MRGCD. An email dated July 8, 2013 was also sent to confirm their continued desire to be a Cooperating Agency. An affirmative reply was received.

# 1.4 <u>Regulatory Compliance</u>

This SEA-II was prepared by the Corps, in compliance with all applicable Federal statutes, regulations, and Executive Orders, as amended, including the following:

- National Historic Preservation Act (16 U.S.C. 470 et seq.)
- Archaeological Resources Protection Act (16 U.S.C. 470aa et seq.)
- Clean Water Act (33 U.S.C 1251 *et seq.*)
- Clean Air Act (42 U.S.C. 7401 *et seq.*)
- Endangered Species Act (16 U.S.C. 1531 *et seq.*)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations
- Executive Order 11988, Floodplain Management
- National Environmental Policy Act (42 U.S.C 4321 *et seq.*)
- CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Part 1500 *et seq.*)

- Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 *et seq.*)
- Executive Order 11593, Protection and Enhancement of the Cultural Environment
- Executive Order 11990, Protection of Wetlands
- U.S. Army Corps of Engineers' Procedures for Implementing NEPA (33 CFR Part 230; ER 200-2-2)
- Farmland Protection Policy Act (7 U.S.C. 4201 *et seq.*)
- Executive Order 13112, Invasive Species
- Federal Noxious Weed Act (7 U.S.C. 2814)
- Energy Independence and Security Act of 2007, P.L. 110-140, Section 438, 121 Stat. 1492, 1620 (2007)
- Flood Control Act of 1948 (P.L. 858)

This SEA-II also reflects compliance with all applicable State of New Mexico, tribal and local regulations, statutes, policies, and standards for conserving the environment such as water and air quality, endangered plants and animals, and cultural resources. This SEA-II abides by the original 2004 FFR/EA.

## 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The current proposed action is located west of the intersection of Don Andres Road and Tapia Road. Pond 187 would be excavated south of Don Andres Road (currently an agricultural field – see Figure 3). The main construction access for the pond excavation would be along the west side of Arenal Acequia from Arenal Road downstream to Don Andres Road (see Figure 2). A temporary haul road would be constructed west of the southerly portion of the acequia. The temporary haul road would be approximately 2,100 feet long.

The currently proposed construction is described below. Construction is proposed to take place beginning in 2014. Construction would be performed mainly outside of the irrigation season that begins on March 1. If work occurs during the irrigation season, flows would be diverted so that irrigation to adjacent land owners is not disrupted. The staging area for all work described below is proposed at the northeast corner of Pond 187, while soil stockpiling locations are proposed on the south side of Rio Grande High School (see Figure 2).

#### Pond 187 (see Figure 4)

The pond would be excavated in order to hold up to 60 acre-feet of stormwater. This would generate approximately 162,000 yd<sup>3</sup> of excavated excess soil material. The material removed would be distributed as follows: a) 20,000 yd<sup>3</sup> would be placed on property owned by Albuquerque Public School and AMAFCA on the south side of Rio Grande High School, to fill in a low area (see Figure 2); b) 15,400 yd<sup>3</sup> would be stockpiled topsoil that would be used in construction of an island in Pond 187; c) 12,000 yd<sup>3</sup> would be used for the perimeter maintenance road at Pond 187; and d) the remainder would be hauled off site. The perimeter maintenance road would be approximately 12 feet wide. Between excavation of the material and permanent use as described above, the soil would be temporarily stockpiled in the soil placement areas shown on Figure 2.

Side slopes of the pond would vary between 3:1 and 6:1 (horizontal:vertical). The top 18 inches of topsoil would be stockpiled and placed in the bottom of the pond for planting. An island would be created in the middle of the pond for wildlife habitat. The island would be approximately 4.3 acres in size, with side slopes of 6:1. Some of the excavated spoil material would be placed on top in various locations to create shelves and variable topography (varying 4-8 feet in height) (see Figure 4). Plantings in the island area would include Rio Grande cottonwood (*Populus deltoids* var. *wislizenii*) False Indigo (*Amorpha fruticosa*), New Mexico olive (*Forestiera neomexicana*), saltgrass (*Distichlis spicata*) and rushes (*Carex* species). These plantings would be watered for the first year and receive intermittent water from storm flows.

The existing concrete lateral ditch on the south side of the agricultural field (where Pond 187 would be constructed) is no longer maintained and would be removed (it would not connect correctly to Pond 187 at this time). A new concrete ditch would be constructed at the northeast corner of Pond 187 and continue along the east boundary of AMAFCA property and end at the southeast corner of AMAFCA property to serve local irrigators

located southeast of the project area. No staging would occur on Don Andres Road, as proposed in the 2004 FFR//EA.

#### Arenal Acequia (see Figure 5)

The Arenal Acequia would be mostly maintained within its current alignment (approximately 80 feet wide right-of-way) from Arenal Road on the north and Don Andres Road on the south, with the exception of the southerly approximately 700 feet, near Don Andres Road. This portion would be temporarily filled in to accommodate the haul road and facilitate the construction of conveyance pipes into Pond 187. The inflow channel pipes would be placed adjacent to the acequia and then the acequia would be reexcavated at the end of construction. Some trees (approximately seven) along this southerly alignment would need to be removed. The majority of these are Siberian elm (*Ulmus pumila*) which is a non-native species.

The remainder of the acequia's west side service road would be used in its current condition as a haul road during construction. One check gate with a pedestrian platform exists in this stretch and would not be removed during construction. A total of fifteen (15) irrigation service tap gates, all of relatively new installation, occur along the 2,540-foot segment of the Arenal Acequia; twelve (12) along the east side of the ditch and three (3) along the west side. Of these, five (5) tap gates, two (2) on the east and all three (3) on the west, will be removed and salvaged, re-installed, or if necessary, replaced. Work along the acequia would take place during the non-irrigation season when the acequia would be dry. Construction of the inflow channel to Pond 187, Pond 187, and the haul road along the Arenal Acequia are planned to be completed so as not to impact the irrigation season that begins on March 1 of each year.

The new pipe inflow channel into Pond 187 carrying stormwater flows would be constructed under the irrigation ditch. During construction of the pipe inflow channel to Pond 187 and Pond 187, temporary stop signs would be installed on Don Andres Road and construction traffic from Pond 187 to Arenal Road would have the right of way across Don Andres Road. At times during construction of the Pond 187 inflow channel, Don Andres may be reduced to one lane of traffic. This portion of the construction would take approximately 4-6 months beginning in 2014. A flagman, along with signage, would be on site for traffic control. A flagman and signage would also be present on Arenal Road when construction is in that area.

The cost of the proposed action is approximately \$2M. Construction of the Southwest Valley Project, including the proposed action and all other components is scheduled to be completed in 2015. The portion of work proposed in and around the Arenal Acequia will be completed so as not to interfere with irrigation delivery.

No other changes from the 2004 FFR/EA, the 2010 SEA or to the Southwest Valley Flood Damage Reduction Project have been proposed at this time. Refer to the 2004 FFR/EA and 2010 SEA for descriptions of additional project elements.



Figure 3. Photo of agricultural field where Pond 187 would be constructed



Figure 4. Detail of Pond 187 design



Figure 5. Photo of Arenal Acequia

# 2.1 <u>Alternatives Considered</u>

The proposed action is a preferred alternative design for Pond 187 and its inflow channel based upon local sponsor preference and coordination with various affected stakeholders. No other structural alternatives were proposed.

# 2.2 <u>The No-Action Alternative</u>

Under the No-Action Alternative, Pond 187 and the inflow channel would be constructed as originally described in the 2004 FFR/EA. The original proposed volume capacity for Pond 187 was 325 acre-feet. The original inflow channel ran along the south side of Rio Grande High School (see Figure 2).

# 3.0 EXISTING ENVIRONMENT AND FORESEEABLE EFFECTS OF THE PROPOSED AND NO-ACTION ALTERNATIVES

Existing conditions described below pertain only to the construction of the Arenal Acequia inflow channel and Pond 187. In addition to these general effects and impacts, a discussion of site specific foreseeable impacts for the updated proposed action only, follows.

# 3.1 <u>Physiography, Geography, and Soils</u>

There would be short term soil disturbance associated with construction because of excavation, grading, and other activities. As described, some of the spoil material would be placed at Rio Grande High School and some would be used at the berms and island of Pond 187. The material used for berms at Pond 187 would be utilized as the maintenance road around the pond. The material used on the island would be planted as described in Section 3.4. The remaining material waste material would be required for all appropriate laws regarding the treatment and disposal of waste material. The Corps would ensure compliance.

Prior to construction, all environmental protection measures as expressed by contract clauses, design drawings, or other means would be reviewed with the contractor at a preconstruction conference. Best Management Practices referenced in paragraph 3.3.2 would be utilized during construction. All construction activities would be in compliance with all applicable Federal, State and local regulations. Local soil disturbance permits would be acquired from the City of Albuquerque by the contractor prior to the start of ground disturbing activity. Replanting the banks of the Arenal Acequia and berms of the pond with native grasses and other vegetation would reduce most of the short-term disturbance impacts. Therefore, there would be a temporary, short-term adverse effect to soils during construction of the proposed action. Consistent with current regular MRGCD maintenance operations, the Arenal Acequia would be dredged periodically to remove excess sediment.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA and would still include excavation and removal of soil material but no stockpiling on site. Therefore, the No-Action alternative would still have a short-term disturbance impact during construction but would not involve waste material.

## 3.2 <u>Hydrology and Hydraulics</u>

The proposed work is not expected to adversely affect flow or delivery of irrigation water through the Arenal Acequia. The Arenal Acequia will not be used for stormwater conveyance. The corridor of the Arenal Acequia will be shared for stormwater conveyance using storm drainage conduits to Pond 187. These storm drainage conduits

will convey stormwater independent from the Arenal Acequia. Stormwater hydraulics for the proposed system have been analyzed relative to the overall project design.

# 3.3 <u>Water Quality and Best Management Practices</u>

# 3.3.1 Clean Water Act Compliance

Section 404 of the Clean Water Act, (CWA; 33 U.S.C. 1251 et seq.) as amended, regulates the discharge or placement of dredged or fill material into waters of the U.S., including wetlands. Construction within the Arenal Acequia (southern 700 feet) qualifies for Nationwide Permit 33: Temporary Construction, Access, and Dewatering (see Appendix A) as discussed in the 2010 SEA. It is not anticipated that any other element of the proposed work will involve Section 404 regulated discharges. No wetlands currently exist in the Project Area, therefore there will be no impact to wetlands. Operation and maintenance activities by the non-Federal sponsors will not require section 404 compliance as they will only be excavating and not filling the drains and diversions in the Project Area to maintain the elevations and remove sediment buildup.

Section 401 of the CWA, as amended, requires that a Water Quality Certification Permit be obtained for anticipated discharges associated with Section 404 of the CWA activities. Section 401 of the CWA does apply to this project, as there will be discharge into waters of the U.S. A Water Quality Certification Permit was obtained on April13, 2012 (Appendix A).

Section 402(p) of the CWA as amended regulates point-source discharges of pollutants into waters of the United States and specifies that stormwater discharges associated with construction activities shall be conducted under National Pollutant Discharge Elimination System (NPDES) guidance. Construction activities associated with stormwater discharges are often characterized by activities such as clearing, grading, and excavation, subjecting the underlying soils to erosion by stormwater. The NPDES general permit guidance would apply to this project because the total project area is approximately twelve acres. Therefore, a Stormwater Pollution Prevention Plan (SWPPP) is required and would be prepared by the contractor for construction of this project.

Non-Federal project sponsors are responsible for developing the SWPPPs and obtaining the NPDES general permits for portions of the proposed action they would be operating and maintaining after construction. AMAFCA is currently operating under a NPDES permit from the Environmental Protection Agency (EPA) Region VI for the Albuquerque Municipal Separate Storm Sewer System (MS4; Permit No. NMS000101; see Appendix A of this SEA-II) which is good until 2017.

All applicable permits and regulations would be followed during construction. Therefore, water quality impacts from storm-water and sedimentation due to the proposed work are expected to be negligible and short-term during construction only.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA and would still include excavation and minor discharges. Therefore, the No-Action alternative would still have a short-term impact during construction only.

3.3.2 Best Management Practices (BMPs) and Stormwater Pollution Prevention Features

To protect surface waters and other environmentally sensitive areas, construction activities would be accomplished applying standard Corps' BMPs.

- Construction access would be from existing surface streets, acequia maintenance roads, powerline maintenance roads, and agricultural roads.
- All staging areas, including the stockpiling of construction materials, and equipment parking for vehicle and equipment not in use, would be included in the project SWPPP.
- Fuel, oil, hydraulic fluids and other similar substances would be appropriately stored and would have a secondary containment system to prevent spills if the primary storage container leaks.
- A Fugitive Dust Control Permit would be obtained from the City of Albuquerque.
- Appropriate erosion control measures would be utilized to prevent surface water drainage and erosion material from leaving the construction site. Water dispersal equipment would be used to minimize dust during construction activities.
- Activities would be limited to the designated or otherwise approved areas and would be shown on the construction drawings for construction areas, staging, access, and borrow use. The Corps' Project Engineer on site would coordinate with the Corps Environmental Resources Section, and Bernalillo County Public Works, to approve any changes in access routes, non-commercial borrow sites, staging areas, and other high-use areas.
- Both water and sanitary sewer lines exist in the residential roads surrounding the proposed Pond 187. The Albuquerque Bernalillo County Water Utility Authority will be notified in regard to the horizontal/ vertical alignment for conveyance pipelines taking surface storm water into Pond 187.

Prior to the onset of construction activities, all environmental protection measures as expressed by contract clauses, contract drawings, permits, or other means would be reviewed with the contractor at the pre-construction conference. The construction contractor would be required to submit an Environmental Protection Plan acknowledging and incorporating these protection measures during construction of the project. The Corps, or their representatives, would monitor and inspect any contractor's compliance with project specifications regarding the conditions set forth under the CWA or other permits and any best management practices employed to conform to those permit conditions.

# 3.4 <u>Vegetation Communities</u>

Most of the elements addressed in this SEA-II, the construction of the Arenal Acequia, and the construction of the Pond 187 elements all occur in areas that have been developed

and previously disturbed. There would be minimal effects to existing vegetation, as described below.

There are trees along either side of the Arenal Acequia, mainly non-native Siberian elm. The majority of these trees would be removed during construction.

The majority of the area for Pond 187 is an agricultural field that currently has alfalfa growing on it. Along the west side of the fields, the existing trees (Siberian elm and cottonwood) would remain. A few trees are present along other margins of the field and would be removed during construction and replaced with native Rio Grande cottonwood.

Also, a 4.3 acre island would be constructed in the center of the agricultural field (see Figure 4) by excavating the pond around it and using some of the excavated material in order to build up the island which would provide habitat for wildlife. Vegetation to be planted in the island would include: cottonwood, false indigo, New Mexico olive, other native trees and shrubs, saltgrass, and native rushes. The planted vegetation would be watered the first year in order to ensure survival. After that time, intermittent rain and storm flows should maintain the vegetation.

Therefore, there would be short-term negative effects to vegetation during construction with long-term positive effects by removing non-native trees and replacing them with native trees and creating island habitat in the pond.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA and would still include removal of vegetation along the southern end of the Arenal Acequia and within Pond 187. Therefore, the no-action alternative would still have a short-term disturbance impact during construction.

# 3.5 <u>Wildlife</u>

Wildlife species that inhabit agricultural areas of the Middle Rio Grande Valley are typical in this area. Avian species that frequent the area include: Cooper's Hawk (Accipiter cooperii), Turkey Vulture (Cathartes aura), Greater Roadrunner (Geococcyx californianus), Downy Woodpecker (Picoides pubescens), Belted Kingfisher (Ceryle alcyon), White-Crowned Sparrow (Zonotrichia leucophrys), American Crow (Corvus brachyrhynchos), White-Breasted Nuthatch (Sitta carolinensis), Black-Headed Grosbeak (Pheucticus melanocephalus), House Finch (Carpodacus mexicanus), American Robin (Turdus migratorius), Canada Goose (Branta canadensis), and various waterfowl. In addition, various mammals and reptiles such as mice, rabbits, skunks, coyote and lizards, also inhabit and transit the proposed action area.

Most of the proposed construction occurs in previously developed areas. Therefore, the number of terrestrial animals displaced during construction would be minimal. Also, the island habitat created from the project would create habitat for these and other species that may not currently use the area. The pond basin will be intermittently inundated in the future, and the new island habitat will provide dry refugia for surface dwelling animals

during storm flow events. Therefore, there would be a short term negative impact to wildlife during construction with a potential long term benefit to wildlife.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA. Therefore, the No-Action alternative would still have a short-term disturbance impact during construction.

## 3.6 <u>Hazardous, Toxic and Radioactive Waste (HTRW)</u>

A visual inspection of the proposed action area was conducted in June and July 2013. These inspections were conducted by Corps personnel from the Environmental Engineering Section who are trained in identifying the presence of and impacts from hazardous, toxic, and radioactive waste (HTRW).

The visual inspection included the areas for Pond 187 and the Arenal Acequia realignment.

<u>Pond 187 Area</u> – The perimeter and interior of the proposed excavation of Pond 187 was inspected. The perimeter is lined with mature deciduous trees with no visible contamination other than a small pile of old railroad ties in the northwest corner of the perimeter. These railroad ties would be disposed of at an appropriate landfill. The interior of the agricultural field is planted with alfalfa and grasses which have been recently bailed. Several tree lines cross the Pond 187 area which were also free of contamination. No hazardous, petroleum, or special wastes were noted. No signs of releases of hazardous wastes, hazardous substances, or petroleum products such as distressed vegetation or soil staining have been observed.

<u>Arenal Acequia</u> – This is an irrigation canal with dirt roads on both sides of the canal. The proposed action is to realign and prepare one of the west side service/access roads for use by trucks hauling the excavated soils from Pond 187. The area surrounding the east side of the Arenal Acequia is residential; the west side is not developed, north to the Rio Grande High School. The irrigation canal is clear of debris and the ground to the east/north is clear of trash or any obvious contamination. No hazardous, petroleum, or special wastes were noted. No signs of releases of hazardous wastes, hazardous substances, or petroleum products such as distressed vegetation or soil staining have been observed.

Current standard environmental record sources were reviewed to identify reported sites of known or potential environmental concern within a minimum of one mile of the project site boundaries. A Computerized Environmental Report (CER) was purchased from Environmental Data Resources (EDR), Inc (Appendix B). EDR is a privately owned vendor of environmental data, which they obtain from many public agency regulatory databases. A review of the CER by Corps personnel did not identify any listed sites of known or potential environmental concern in the vicinity of the project boundaries. During the realignment of irrigation canals and any excavation within the proposed action area, all waste encountered would be removed and disposed of according to local regulations before conducting any excavation or leveling. Therefore, there would be no adverse effect from HTRW to the proposed action area.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA. Therefore, the No-Action alternative would have no adverse effect from HTRW.

# 3.7 Special Status Species

A Biological Assessment (BA) was submitted to the USFWS in April 2010 as required by Section 7 of the Endangered Species Act. After informal consultation with the USFWS, a revised BA was submitted in July 2010 and concurrence was received on 28 July 2010. The species addressed in the BA were those found along the Rio Grande. While there are no threatened or endangered species in the action area, the BA documentation is provided in the Appendix of the 2010 SEA. The Corps has determined that the proposed action would have no affect on listed species or their designated critical habitats.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA which also does not include any threatened or endangered species in the area of Pond 187 and Arenal Acequia. Therefore, the No-Action alternative would have no effect on listed species or their designated critical habitats.

## 3.8 <u>Noxious Weeds and Invasive Species</u>

Executive Order 13112 directs Federal agencies to prevent the introduction of invasive (exotic) species and to control and minimize the economic, ecological, and human health impacts that invasive species cause. In addition, the State of New Mexico, under administration of the New Mexico Department of Agriculture (NMDA), designates and lists certain weed species as being noxious (NMDA 2009). "Noxious" in this context means plants not native to New Mexico that may have a negative impact on the economy or environment and are targeted for management or control.

The only invasive species currently in the area is Siberian elm. While there are no state listed noxious weeds in the area, this are *Kochia* spp, Russian thistle (*Salsola* spp.), and purple nightshade (*Solanum xanti*) present on site.

In order to prevent new infestations of noxious weeds and invasive species, all equipment would be cleaned with high-pressure water prior to initially entering the project area. Equipment should be cleaned again before re-entering the site if it has been to another project area. Following construction, native species would be planted, minimizing the opportunity for invasive species to colonize the area. To minimize the spread of Siberian elm and other invasive species that may have escaped detection, the contractor would also be required to clean equipment upon leaving the proposed action area. Areas where vegetation is removed during construction would be reseeded with native vegetation once construction is complete, where possible. This would take place in disturbed areas – along the side slopes of the pond berms and along temporary haul roads. Therefore, the proposed action is in compliance with Executive Order 13112. The No-Action alternative, which would follow the original design proposed in the 2004 FFR/EA, would also be in compliance with Executive Order 13112.

#### 3.9 <u>Cultural Resources</u>

The Corps has previously conducted archaeological surveys for the Southwest Valley Flood Damage Reduction Project including Vaughan and Chapman (2004) and Lundquist and Schelberg (2010). These previously surveyed project areas are immediately adjacent to and south of the proposed construction areas currently being discussed.

During construction, excess earthen material from the excavation of Pond 187 would be distributed as discussed in Section 2. The Corps previously consulted with the State Historic Preservation Office (SHPO) on the excavation of Pond 187 (HPD Consultation No. 96491; 2010 SEA). For the proposed project modifications, a portion of the excavated earthen material from Pond 187 is planned to be wasted to vacant AMAFCA land and/or into an existing, nearby storm water retention pond, both located immediately south of Rio Grande High School. The school retention pond, a component of the AMAFCA storm water drainage system, is located between the school's baseball fields. The school retention pond is school property and is approximately 3-5 feet deep. The vacant land, immediately south of the school pond, was acquired by AMAFCA for construction of the storm water detention facilities (Figure 1). The additional excess earthen material from the excavation of Pond 187 is to be hauled to a Corps-approved commercial disposal site, or in a landfill.

The current action also proposes to affect a 618-foot segment of the Arenal Acequia, at the southern end of the project area. Reclamation and MRGCD own and manage the Arenal Acequia. Construction modifications include the installation of storm water drainage pipes adjacent to and below (under) the existing acequia alignment: to accomplish this construction, the existing ditch will be filled in and utilized for a haul road and construction area. Upon completion of this storm water pipe construction, the 618-foot segment of the acequia will be re-constructed to its original alignment and grade with reshaped ditch banks for a trapezoidal channel, and concrete ditch lining installed. A total of fifteen (15) irrigation service tap gates, all of relatively new installation, occur along the 2,540-foot segment of the Arenal Acequia; twelve (12) along the east side of the ditch and three (3) along the west side. Of these, five (5) tap gates, two (2) on the east and all three (3) on the west, will be removed and salvaged, re-installed, or if necessary, replaced. The remaining tap gates and one (1) check gate, located near the mid-point of the 2,540-foot segment, would not be affected by the construction modifications. The existing service road along the west bank of the Arenal Acequia will be used to provide access to the Pond 187 and the vacant land/school pond project areas.

On June 25, 2013, a Corps archaeologist conducted a review of the New Mexico Archaeological Records Management Section's (ARMS), New Mexico Cultural Resources Information System (NMCRIS) database and map server that showed that the Arenal Acequia alignment had not been previously surveyed for cultural resources. However, in 1989-1990, Marshall and Marshall (1990: 5, 18 [Figure 9]; NMCRIS No. 32685) conducted an archaeological survey of 185 miles of MRGCD canal system for Reclamation. A review of that report found that no cultural resources were observed along the Arenal Acequia (4.8 miles) during their survey. The June 25 NMCRIS database map server search and e-mail correspondence with ARMS staff on July 23, 2013, found that the existing school pond has not been previously surveyed for cultural resources. The vacant area immediately south of the school pond was previously surveyed for cultural resources by Lundquist and Schelberg (2010). The closest known historic property to the Pond 187-Arenal Ditch-school pond project area is the archaeological site LA720, known as the Shipman Pueblo, a Pueblo IV roomblock/mound that is approximately 1,000 meters from the project area. LA720 would not be affected by the proposed construction modifications.

A Corps archaeologist conducted surveys of the 2,540-foot segment of the Arenal Acequia alignment on July 12, 2013, and the school's retention pond on July 26, 2013. No artifacts or cultural features were observed during either survey other than the Arenal Acequia itself. The Arenal Acequia survey covered the right-of-way from fenced property lines on both sides to the ditch (approximately an 80-foot wide right-of-way), from Arenal Road on the north, downstream to Don Andres Road on the south, covering approximately 3.95 acres. The existing school retention pond was originally excavated at some unknown time in the past. The school pond, planned to be filled at some time in the future to provide for a level rather than sloping school sports practice field, covers a total area of approximately 3.3 acres. However, because this is a thickly-grassed school sports field, the Corps survey covered only the open ground surface along the west and south sides of the field, covering about 0.67 acres. The total area (the 2,540-foot acequia segment and margins of the school pond) surveyed is 4.62 acres.

The Arenal Acequia is a functioning irrigation ditch that is a component of the historic 1930s MRGCD irrigation and drainage system. The MRGCD irrigation (canals, primary laterals and drainage ditches) was reconstructed in the 1950s and 1960s by Reclamation, and numerous rehabilitation projects conducted by MRGCD and others in recent years have updated segments of the system. The MRGCD actively conducts operations and maintenance activities on the structural components to maintain functionality of the system. The extensive MRGCD system is widely recognized by the Federal, State, and local cultural resources and historic preservation community as being eligible for nomination to the National Register of Historic Places under criteria a, b, and d of 36 CFR §60.4. These facilities have had far-reaching impacts on water usage, management, and politics from the time of their construction to the present day.

Historic acequias in New Mexico are considered to have three elements that contribute to their eligibility for nomination to the National Register of Historic Places: their alignment, aesthetic quality (*i.e.*, physical form), and function. The currently proposed

project modification that plans to reconstruct a 618-foot segment of the Arenal Acequia is considered to have a negligible effect on the Arenal Acequia and the MRGCD system. The proposed modifications to the Arenal Acequia would affect approximately 0.02 percent of the 4.8-mile acequia. Reconstruction involves the reshaping of the existing near-vertical ditch banks to sloped banks to form a trapezoidal channel and the installation of concrete ditch lining. This reconstruction would have an effect upon the aesthetic quality (physical form) of the historically earthen ditch. However, the proposed project modifications to the existing 618-foot segment of the acequia would not affect the alignment of the acequia and would maintain the historic function of the ditch, the delivery of irrigation water.

The Corps' archaeological survey report entitled *A Cultural Resources Inventory of 4.6 Acres for Phase II Project Modifications, Southwest Valley Flood Damage Reduction Project, Bernalillo County, New Mexico* (Corps Report No. USACE-ABQ-2013-010; NMCRIS No. 128254) was submitted to the SHPO (Appendix C). The Corps considers that the proposed use of the vacant AMAFCA land and/or the school retention pond for disposal of earthen material from the Pond 187 excavation would result in No Historic Properties Affected. In consideration of the extent of the Arenal Acequia and the huge MRGCD system, the Corps considers that the reshaping and concrete lining modifications to the Arenal Acequia would result in negligible effects to the Arenal Acequia and the MRGCD system, and therefore, would result in No Adverse Effect to Historic Properties. On November 14, 2013, the SHPO has concurred with the Corps determinations of No Historic Properties Affected and No Adverse Effect to Historic Properties as noted above (Appendix C).

The No-action alternative would follow the original design proposed in the 2004 FFR/EA and would result in No Adverse Effect to Historic Properties.

The modifications proposed in SEA-II are located within the same immediate vicinity as originally planned and designed; therefore, additional tribal scoping for the modifications was not conducted. To date, the Corps has received no indication of tribal concerns with the project. Traditional Cultural Properties and Indian Trust Assets are not known to occur within or adjacent to the project area. If there are changes to the project in future construction phases, additional survey and consultation may be required.

#### 3.10 Indian Trust Assets

Indian Trust Assets (ITAs) are a legal interest in assets held in trust by the United States Government for Indian tribes or individuals. The United States has an Indian Trust Responsibility to protect and maintain rights reserved by or granted to Indian tribes or individuals by treaties, statues, executive orders, and rights further interpreted by the courts. The Secretary of the Department of the Interior (DOI), acting as the trustee, holds many assets in trust. Some examples of ITAs are lands, minerals, water rights, hunting and fishing rights, titles and money. ITAs cannot be sold, leased, or alienated without the express approval of the United States Government. The Indian Trust Responsibility requires that all Federal agencies take all actions reasonably necessary to protect such trust assets. The Department of Defense's American Indian and Alaska Native Policy, signed by Secretary of Defense William S. Cohen on October 20, 1998, and DOI's Secretarial Order 3175 and Reclamation ITA Policy require that the Corps, as the project's Lead Federal Agency, and Reclamation, as the Federal Land Managing Agency, consult with tribes and assess the impacts of its projects on ITAs. If any ITAs are identified and are to be impacted, further consultation on measures to avoid or minimize potential adverse effects will take place. If the project results in adverse impacts, consultation regarding mitigation and/or compensation will take place.

While several tribes have reservation lands and water rights within Bernalillo County, no specific concerns or ITAs have been brought to the attention of the Corps. Tribal scoping letters were sent to tribes on February 17, 2010 (see 2010 SEA). Neither the proposed action nor the No-Action Alternative would affect reservation lands or to any ITA's such as water rights.

# 3.11 Land Use and Recreation

The maintenance road along the Arenal Acequia is used for maintenance of the acequia but is also used as a hiking/walking trail by the adjacent neighborhoods. The proposed action would relocate the Arenal Acequia on the south end but it would still be used as a maintenance road and could still be utilized as a trail.

The current land use on the property where Pond 187 could be constructed is agricultural. The property is not categorized as prime and unique farmland under the Farmland Protection Policy Act (FPPA, 7 U.S.C 4201). This agricultural field would be converted to a stormwater drainage pond once construction is complete. Some vegetation would still persist in the bottom of the pond and an island would be created in the middle.

Therefore, there would be minor changes to land use and recreation along the Arenal Acequia. The purpose of the agricultural field where Pond 187 would be constructed would change, but similar land use would exist once construction is complete. Therefore, there would be short term impacts to land use at the agricultural field during construction.

The No-Action alternative would follow the original design proposed in the 2004 FFR/EA and would still include excavation along the south end of the Arenal Acequia and within Pond 187. Therefore, the No-Action alternative would still have a short-term disturbance impact to land use at the agricultural field during construction.

## 3.12 <u>Cumulative Impacts</u>

NEPA defines cumulative effects as "...the impact on the environment which results from the incremental impact of the action when added to other, past, present, and reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such other actions." The AMAFCA *et al.* studies (SWCA 2003, Parsons 2000) concluded that the constituents of their stormwater systems were not combining individually or cumulatively to produce substantially toxic effects to aquatic life on the Middle Rio Grande or the surrounding area.

## Proposed Action

The footprint of the proposed action lies within an urban/semi-urban residential area that has little, if any, resemblance to what was present prior to urbanization. Since the construction work primarily involves expansion of existing storm drain facilities, most environmental impacts associated with the proposed action would have been incurred during the original construction of the acequias. These impacts have stabilized and have been considered the baselines against which impacts of the proposed action and the overall Southwest Valley Project have been compared.

The two areas of construction described in this SEA-II involve disturbance to the existing agricultural field and an existing acequia. This would not significantly impact the current conditions of the local environment. The current state of the drainage system adequately, but not completely, reduces flood damages to residences and structures in the Southwest Valley Project Area. Positive flood prevention benefits are anticipated to occur from the proposed action and the Southwest Valley Project that would enhance the quality of life for residents and business owners in the area. BMPs to be implemented during construction as well as during operation and maintenance of the Proposed Project would treat stormwater and filter pollutants before it reaches the Rio Grande. For these reasons, the proposed action when combined past, present, or future activities in the Middle Rio Grande would not significantly add to or raise local cumulative environmental impacts to a level of significance.

## No-Action Alternative

Under the No-Action Alternative, Pond 187 and the inflow channel would be constructed as originally described in the 2204 FFR/EA. The original proposed volume capacity for Pond 187 was 325 acre-feet. The original inflow channel ran along the south side of Rio Grande High School. Cumulative effects of the No-Action Alternative are the same as those for the proposed action.

## 4.0 CONCLUSIONS AND SUMMARY

The current SEA-II describes the slight change in design of the features at Pond 187, inflow channel to Pond 187, and the use of the Arenal Acequia as a haul route with the construction of a temporary haul road to the west of the acequia. This recommendation was selected based upon local sponsor preference and coordination with various affected stakeholders. This document was developed in order to meet NEPA compliance for this proposed action.

This Supplemental Environmental Assessment II addresses changes to the Southwest Valley Flood Damage Reduction Project since the 2010 SEA and the 2004 FFR/EA. Adverse effects of the proposed action would be short-term while the beneficial effects of reduced flooding would be long-term. Consistent with the analysis in the 2010 SEA and the 2004 FFR/EA, the following Foreseeable Effects and Cumulative Impacts are anticipated.

Existing Environment	Foreseeable Effects	
Physiography, Geology, Soils	Short-term adverse effect on soils	
Hydrology and Hydraulics	No effect	
Water Quality	Short-term adverse effect on water quality	
Air Quality and Noise	Negligible, short-term adverse effects during	
	construction	
Aesthetics	Short-term negative effects during construction	
	with long-term positive effects	
Vegetation Communities	Short-term negative effects during construction	
	with long-term positive effects	
Floodplains and Wetlands	No effect	
Wildlife	Short-term negative effects during construction	
	with long-term positive effects	
HTRW	No adverse HTRW impacts	
Endangered and Protected Species	No effect to endangered and protected species	
Cultural Resources	No adverse effect to Historic Properties	
Socioeconomic Considerations	No adverse effect	
Land Use and Recreational Resources	Short-term negative effects during construction	
	with long-term positive effects	
Indian Trust Assets	No adverse effect	
Environmental Justice	No adverse effect	
Cumulative Effects	Positive effect of this project and others in the	
	area	

Table 1. Summary of Effects of the Proposed Action

## 5.0 PREPARATION AND QUALITY CONTROL

#### 5.1 Preparers and Project Delivery Team members

Jerry Nieto	Project Manager
Debbie Smith	Civil Engineer – General Engineering Section
Steve Boberg, P.E.	Hydraulic Engineer – Hydrology and Hydraulics Section
Ondrea Hummel	Ecologist – Environmental Resources Section
Gregory Everhart	Archaeologist – Environmental Resources Section
Steve Wagner	Environmental Engineer – Environmental Engineering Section

#### 5.2 Quality Control

Jerry Nieto, P.E.	Project Manager
Julie Alcon	Supervisory Ecologist – Environmental Resources Section
William DeRagon	Biologist – Environmental Resources Section
Jeremy Decker	Archeologist – Environmental Resources Section
Chris Velasquez, P.E.	Civil Engineer – General Engineering Section
Cecilia Horner	Environmental Engineer – Environmental Engineering Section
Ariane Pinson	Technical Writer/Editor – Plan Formulation Section

#### 6.0 COORDINATION AND PUBLIC REVIEW

#### 6.1 <u>Coordination</u>

The project co-sponsors, the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and Bernalillo County, have been involved in the design of the project and review of the Supplemental Environmental Assessment. A letter dated February 3, 2010 (see 2010 SEA) was sent to Reclamation and Middle Rio Grande Conservancy District (MRGCD) asking for their participation as cooperating agencies in the National Environmental Policy Act (NEPA) process. They accepted the invitation by email dated February 8, 2010, from Reclamation and a letter dated February 8, 2010, from MRGCD. An email dated July 8, 2013 was also sent to confirm their continued desire to be a Cooperating Agency. An affirmative reply was received.

Jerry Lovato, P.E.	AMAFCA
Brad Bingham, P.E.	AMAFCA
Kurt Wagener, P.E.	AMAFCA
Roger Paul, P.E.	Bernalillo County Public Works Department
Brad Catanach, P.E.	Bernalillo County Public Works Department
Jeanne Wolfenbarger,	P.E. Bernalillo County Public Works Department
Subhas Shah, P.E.	Middle Rio Grande Conservancy District
Ray Gomez, P.E.	Middle Rio Grande Conservancy District
Mike Hamman, P.E.	U.S. Bureau of Reclamation
Jennifer Faler	U.S. Bureau of Reclamation
Susan Woods	U.S. Bureau of Reclamation
Hector Garcia	U.S. Bureau of Reclamation

#### Art Valverde, P.E. U.S. Bureau of Reclamation

#### 6.2 <u>Distribution List for SEA-II</u>

Albuquerque Metropolitan Arroyo Flood Control Authority 2600 Prospect Ave NE Albuquerque, NM 87107

Albuquerque Area Office U.S. Bureau of Reclamation 555 Broadway Blvd NE, Suite 100 Albuquerque, NM 87102

U.S. Fish and Wildlife Service 2105 Osuna Road NE Albuquerque, NM 87113

New Mexico Interstate Stream Commission New Mexico Office of the State Engineer P.O. Box 25102 Santa Fe, NM 87504-5102

New Mexico Office of the State Engineer P.O. Box 25102 Santa Fe, NM 87504-5102

Surface Water Quality Bureau New Mexico Environment Department P.O. Box 5469 Santa Fe, NM 87502

Office of Planning and Coordination, Region 6 U.S. Environmental Protection Agency 1445 Ross Avenue, Suite 1200 Dallas TX 75202-2733

Navajo Nation Post Office Box 9000 Window Rock, Arizona 86515

Ohkay Owingeh Post Office Box 1099 San Juan Pueblo, New Mexico 87566

US Army Corps of Engineers Regulatory Division

US Bureau of Indian Affairs 6301 Indian School Rd NE, Suite 300 Albuquerque, NM 87110 Public Works Division Bernalillo County 2900 Broadway SE, Building N Albuquerque, NM 87102

Middle Rio Grande Conservancy District P.O. Box 581 Albuquerque, NM 87102

Conservation Services Division New Mexico Department of Game and Fish P.O. Box 25112 Santa Fe, NM 87504

New Mexico Interstate Stream Commission New Mexico Office of the State Engineer 121 Tijeras NE, Suite 2001 Albuquerque, NM 87102-3465

NM Forestry and Resources Conservation Division Energy, Minerals, and Natural Resources Dept P.O. Box 1948 Santa Fe, NM 87504-1948

Water and Waste Management Division New Mexico Environment Department P.O. Box 26110 Santa Fe, NM 87502

Pueblo of Sandia 481 Sandia Loop Bernalillo, New Mexico 87004

Pueblo of Laguna Post Office Box 194 Laguna, New Mexico 87026

Jicarilla Apache Nation Post Office Box 507 Dulce, New Mexico 87528

Ysleta del Sur Pueblo 117 S. Old Pueblo Rd. El Paso, Texas 79907 USDA Natural Resource Conservation Service 6200 Jefferson St. NE Albuquerque, NM 87109

White Mountain Apache Tribal Council Post Office Box 700 Whiteriver, Arizona 85941

Pueblo of Isleta Post Office Box 1270 Isleta Pueblo, New Mexico 87022

#### 6.3 Summary of Public Review Comments and Corps' Responses

The Draft Supplemental Environmental Assessment II (DSEA-II) for the Southwest Valley Flood Damage Reduction Project was available for public review and comment from September 16 to September 30, 2013. A Notice of Availability was published in the Albuquerque Journal on September 13, 2013. The DSEA-II was available on the Corps' website and at the South Valley Library in Albuquerque, NM.

A summary of the public and agency comments received is provided below. Copies of the letters are included in Appendix D.

Table 2. Summary of Public comments and Corps' response		
Commenter	Comment Summary	Corps Response
New Mexico Department of Game and Fish (NMDGF)	Construction areas and impervious surfaces can have significant impacts on surface waters by increasing the amount of sediment and other pollutants that are washed into surface waters, increasing the velocity and volume of water, and reducing infiltration into groundwater. Reducing the amount of impervious surfaces and phasing construction will reduce these impacts.	A Stormwater Pollution Prevention Plan (SWPPP) is required for this project. The SWPPP will address potential sediment and pollution issues during construction. Additional requirements from the Section 401 Water Quality Certification have been incorporated into construction specifications. Impervious surfaces are minimal. Most of the construction is in open land. The project is being phased.
NMDGF	Divert water around construction site whenever possible.	Requirements from the Section 401 Water Quality Certification, including a similar requirement to divert water around construction, have been incorporated into construction contract specifications. Work on the Arenal Acequia will take place during the non-irrigation season when the ditch is dry.
NMDGF	Preserve natural areas within the project site. Maintain the natural drainage system of the site, including natural stream channels, wetlands, and floodplains. Design, construct, and maintain the site to protect (or restore) the natural hydrology.	The site has been hydrologically altered historically. Complete restoration of hydrology is not feasible due to the developed nature of the area. However, Pond 187 has been designed to function as a natural area by holding water and allowing it to infiltrate.
NMDGF	Following construction, re-vegetate disturbed areas using native species that approximate pre-disturbance plant community composition or native plant communities likely to be found in the area. Use native seed mixes for temporary and permanent erosion control. Native plants and materials should be used for landscaping. All seed mixtures should be certified as weed-free.	The margins of Pond 187 and the island would be planted with native vegetation, including cottonwood, false indigo, New Mexico olive, and other native trees and shrubs, saltgrass, and rushes.
NMDGF	Maintain a vegetated buffer zone along all watercourses, including ephemeral arroyos, sufficient to minimize erosion and sediment delivery.	The watercourses existing within the project area are the Arenal Acequia, Isleta Drain and the Los Padillas Drain. Additionally, Pond

		187 will be constructed. There are no ephemeral arroyos within the project area. Areas disturbed by construction will be revegetated where appropriate, except gravel surfaced access roads and the pond bottom. The pond side slopes will be revegetated using native species and the pond island with be planted with native woody vegetation. The pond bottom will be planted with alfalfa at a later date by AMAFCA.
NMDGF	Use drainage swales and other vegetated channel systems instead of storm sewers, lined channels, curbs, and gutters.	The project would not construct new curbs and gutters but would reconstruct those that are affected by construction. The Los Padillas drain is not being lined. The concrete lining of a portion of the Arenal Acequia for 618 feet was a requirement from the Middle Rio Grande Conservancy District.
NMDGF	Vegetated swales should be gently sloped (4:1) so that small wildlife is able to maneuver them.	The side slopes of Pond 187 would be constructed at 6:1 (horizontal:vertical) slopes to accommodate wildlife. Reconstructed portions of the acequia and drain would need to conform to the existing slope because overall ditch width is constrained by the width of the easement.
NMDGF	Efforts should be made during construction to minimize impacts on vegetative communities. Existing roads and rights-of-way should be used for all transportation. Off-road driving should be avoided. Staging areas should be located in previously disturbed sties, where possible, and kept as small as possible.	Vegetative communities will be left in place when possible, especially around the edge of the pond and along the acequia. Existing maintenance roads are being used where possible. The staging area is located in the northeast corner of the field which is already a disturbed area.
Albuquerque Bernalillo County Water Utility Authority (ABCWUA), Water Resources, Planning & Engineering Division	Upon review of our facility map, it indicates that we do not have water nor sanitary sewer infrastructure within the proposed pond 187 limit and along the proposed temporary haul road to the west of Arenal Acequia or in the Arenal ditch extending from Arenal Road downstream to Don Andres Road. However, we have both water	Thank you for your comments. A note on the construction drawings states that utility lines shown are "best approximation" and that the contractor is responsible for verifying location of utilities. Also, the requirement for coordination with ABCWUA is noted and contact information is

	and sanitary sewer lines in the	provided. We will also make that
	residential roads surrounding the	note in the SEA-II. You will be
	proposed pond 187. Please notify me at	notified when the SEA-II is
	505-768-2598 or via email at	finalized.
	<u>pchang@abcwua.org</u> when you begin	imanzou.
	the preliminary horizontal/vertical	
	alignment design for conveyance	
	pipelines taking surface storm water	
	into Pond 187 for further utility	
	coordination and review.	
City of	The Program has concluded that	This has been noted in the Best
Albuquerque, Air	activities associated with this project	Management Practice's and has
Quality Program	may require a Fugitive Dust Control	been included in the project
Quality 110grain	Permit.	specifications.
Ysleta del Sur	We believe that this project will not	Thank you for your response. The
Pueblo, War	adversely affect traditional, religious or	Corps will consult with Ysleta del
Captain/Tribal	culturally significant sites of our	Sur Pueblo if any remains or
Historic and	Pueblo and have no opposition to it.	artifacts that fall under NAGPRA
Preservation	We request consultation should any	guidelines are discovered during
Officer	human remains or artifacts unearthed	this project.
	during this project be determined to fall	
	under the Native American Graves	
	Protection and Repatriation Act	
	(NAGPRA) guidelines.	
The Navajo	The Navajo Nation Historic	Thank you for your response.
Nation	Preservation Department-	The Corps will consult with the
	Traditional Culture Program	NNHPD-TCP is the proposed
	(NNHPD-TCP) has concluded the	project inadvertently discovers
	proposed undertaking/project will	habitation sites, plant gathering
	not impact Navajo traditional	areas, human remains or objects
	cultural resources. The NNHPD-	of cultural patrimony.
	TCP, on behalf of the Navajo	
	Nation has no concerns at this time.	

#### 7.0 REFERENCES

- Everhart, Gregory D. 2013. A Cultural Resources Inventory of 4.6 Acres for Phase II Project Modifications, Southwest Valley Flood Damage Reduction Project, Bernalillo County, New Mexico. Corps Report No. USACE-ABQ-2013-010 (NMCRIS No. 128254). U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.
- Lundquist, Lance, and John D. Schelberg. 2010. Addendum 1 to Southwest Valley Flood Damage Feasibility Study, Cultural Resources Inventory. USACE-ABQ-2010-001 (NMCRIS No. 116579). U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.
- Marshall, Michael, and Christina Marshall.1990. The 1989-1990 Middle Rio Grande Acequia Archaeological Survey Project. Prepared by Cibola Archaeological Consultants, Corrales, NM (NMCRIS No. 32685), for Complete Archaeological Service Associates, Cortez, CO. Submitted to U.S. Bureau of Reclamation, Upper Colorado Region, Salt Lake City, UT. Contract No. 9-CS-40-06920, Delivery Order No. 7.
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