

**US Army Corps
of Engineers**®

DRAFT
Amended Supplement II Environmental Assessment
for the
Middle Rio Grande Restoration Project, Recreation Phase,
Bernalillo and Sandoval Counties, New Mexico

Prepared by

U.S. ARMY CORPS OF ENGINEERS
ALBUQUERQUE DISTRICT
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

May 25, 2017

**U.S. ARMY CORPS OF ENGINEERS
ALBUQUERQUE DISTRICT**

**DRAFT FINDING OF NO SIGNIFICANT IMPACT
to the
SUPPLEMENT II ENVIRONMENTAL ASSESSMENT
for the
MIDDLE RIO GRANDE RESTORATION PROJECT, RECREATION
PHASE, BERNALILLO AND SANDOVAL COUNTIES, NEW MEXICO**

The U.S. Army Corps of Engineers, Albuquerque District (Corps) is proposing to construct additional recreation features and make improvements to existing restoration areas in the Middle Rio Grande Restoration Project. The proposed action would provide a more permanent and environmentally sound structure for recreation activities through formalizing and stabilizing trails, eliminating redundant trails, and providing new features, such as interpretive signs, picnic tables, benches, trash receptacles, doggie stations, kiosks, river overlooks, canoe launch sites, and improvements to parking facilities. The original Environmental Assessment and Feasibility Study for the Middle Rio Grande Restoration Project, Bernalillo and Sandoval Counties, New Mexico dated June 2011(EA) discussed some of the recreational features already being constructed and the potential effects of those features. This Supplement II EA discusses potential effects of recreation features not discussed in the original EA. This proposed action and the No Action alternative were considered in this Draft Supplement II Environmental Assessment (DSEA). If the No Action Alternative was chosen, this work would not be completed in order to benefit public recreation activities in the Rio Grande bosque.

The Corps has determined that the proposed action has no effect on the New Mexico meadow jumping mouse, no adverse effect on the Yellow Billed Cuckoo, and no adverse effect on the Southwestern Willow Flycatcher. The Corps has determined that the proposed action may affect but is not likely to adversely affect the Rio Grande silvery minnow. In order to comply with the Endangered Species Act, the Corps would continue to implement the Reasonable and Prudent Measures identified by the U.S. Fish and Wildlife Service in the Middle Rio Grande Bosque Restoration Project Biological Opinion (BO, dated April 15, 2011). The terms and conditions identified for construction in this 2011 BO would be implemented for the proposed action.

This project is in compliance with the National Historic Preservation Act of 1966, as amended [16 U.S.C. 470 *et seq.*]. Cultural resources surveys have been conducted on all of the proposed action areas. Section 106 consultation with the New Mexico State Historic Preservation Officer has been completed. A letter has been sent to the State Historic Preservation Officer requesting concurrence to No Historic Properties Affected determination on XX 2016.

The Clean Water Act (CWA) provides for protection of waters of the United States from impacts associated with discharges of dredged or fill material in aquatic habitats, including wetlands, as defined under Section 404 of the CWA. This proposed action would include construction of canoe launch facilities which would entail temporary construction at the bank of the river. These facilities were also constructed in the original project. This construction would be performed during low flow but some dewatering may need to occur by installing a coffer dam at the edge of the river within the work area. The Corps has determined that this work shall be conducted under Nationwide 33 (Temporary Construction, Access, and Dewatering) and Nationwide 36 (Boat Ramps) (Appendix B). Conditions in these Nationwide permits would be followed during construction of the canoe ramp on the west side of the river north of Central and on the east side of the river north of Rio Bravo. All other proposed features are not within or adjacent to Waters of the U.S. This document is being sent to the New Mexico Environment Department Surface Water Quality Bureau for their review and comment in regard to Section 401 of the CWA and water quality certification.

Conditions to be adhered to during the implementation of these activities includes: 1) project activities within the bosque will occur only between August 15 and April 15 of any given year, and 2) all conditions listed in the original EA would continue to be adhered to.

The planned action would result in only minor and temporary impacts on air quality, water quality, and noise levels during implementation due to some heavy equipment use. The following elements have been analyzed and would not be significantly affected by the planned action: socioeconomic environment, air quality, water quality, noise levels, floodplains, riparian areas, wetlands, waters of the United States, cultural resources and biological resources. These elements were analyzed in the original EA.

The planned action has been fully coordinated with Federal, tribal, and local governments with jurisdiction over the ecological, cultural, and hydrologic resources of the project area. Based upon these factors and others discussed in the original EA and this SEA, the planned action would not have a significant effect on the human environment. Therefore, an Environmental Impact Statement will not be prepared for this project.

Date

James L. Booth
Lieutenant Colonel, U.S. Army
District Commander

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION.....	1
1.1 BACKGROUND.....	1
1.2 AUTHORIZATION, PURPOSE AND NEED.....	1
1.3 PUBLIC REVIEW.....	2
2.0 DESCRIPTION OF PROPOSED ACTION AND LOCATION.....	4
2.1 REACH 1 AREA IMPROVEMENTS.....	4
2.1.1 Romero Road.....	4
2.1.2 Dixon Road.....	4
2.1.3 La Entrada Road.....	4
2.1.4 Andrews Lane.....	5
2.2 REACH 2 AREA IMPROVEMENTS.....	5
2.2.1 Arroyo De Las Calabacillas.....	5
2.3 REACH 3 AREA IMPROVEMENTS.....	6
2.3.1 Aldo Leopold Trail.....	6
2.3.2 Campbell Road.....	6
2.4 REACH 4 AREA IMPROVEMENTS.....	6
2.4.1 Sunset and Central.....	6
2.4.2 Rio Bravo.....	7
2.5 REACH 5 AREA IMPROVEMENTS.....	8
2.5.1 Valle Del Oro NWR.....	8
3.0 EXISTING CONDITIONS.....	14
3.1 Water Quality.....	14
3.2 Hazardous, Toxic and Radiological Waste.....	14
3.3 Vegetation Communities.....	15
3.3.1 Reach 1.....	15
3.3.2 Reach 2.....	15
3.3.3 Reach 3.....	15
3.3.4 Reach 4.....	15
3.3.5 Reach 5.....	16
4.0 FORESEEABLE EFFECTS AND CUMULATIVE IMPACTS.....	16
4.1 Cultural Resources.....	16
4.2 Water Quality.....	18
4.3 Hazardous, Toxic and Radioactive Waste.....	18
4.4 Threatened and Endangered Species.....	18
4.4.1 Southwestern Willow Flycatcher.....	18
4.4.2 Yellow-billed Cuckoo.....	19
4.4.3 New Mexico Meadow Jumping Mouse.....	21
4.4.4 Rio Grande Silvery Minnow.....	21
5.0 CONCLUSIONS.....	23
5.1 Summary of Effects.....	23
5.2 No Action Alternative.....	24

6.0 PREPERATION, CONSULATION, AND COORDINATION.....	25
6.1 Notification/Public Review.....	25
6.2 Preparers and Reviewers.....	26
6.2 Consultation and Coordination.....	26
6.3 Mailing List for DSEA.....	26
7.0 REFERENCES.....	28

List of Figures

Figure 1. Middle Rio Grande Restoration Project Recreation Improvements.....	3
Figure 2. Bosque Education Sign.....	4
Figure 3. Corrales Preserve Bosque Location Designation Sign.....	4
Figure 4. Trash Receptacle and Doggie Waste Station.....	5
Figure 5. RGVSP Bosque Location Designation Sign.....	5
Figure 6. Timber Park Bench.....	6
Figure 7. Trail Marker.....	7
Figure 8. Monument.....	8
Figure 9. Kiosk.....	8
Figure 10. Romero Road Area Improvements.....	9
Figure 11. Dixon Road Area Improvements.....	9
Figure 12. La Entrada Road Area Improvements.....	10
Figure 13. Andrews Lane Area Improvements.....	10
Figure 14. Arroyo De Las Calabacillas Area Improvements.....	11
Figure 15. Aldo Leopold Trail Area Improvements.....	11
Figure 16. Campbell Road Area Improvements.....	12
Figure 17. Sunset and Central Area Improvements.....	12
Figure 18. Rio Bravo Area Improvements.....	13
Figure 19. Valle Del Oro NWR Area Improvements.....	13

List of Tables

Table 1. Summary of Effects.....	23
----------------------------------	----

Appendices

- Appendix A. Cultural Resources Coordination
- Appendix B. Public and Agency Comments

1.0 Introduction

1.1 Background

The *Middle Rio Grande Restoration Project, Bernalillo and Sandoval Counties, New Mexico Environmental Assessment (EA) and Feasibility Study* was completed in June 2011. A Biological Opinion for the project was also completed in April 2011. A supplemental EA for additional restoration features; *Final Supplemental EA-Middle Rio Grande Phase II* was completed in September, 2014. These documents are available at the Albuquerque District website under “FONSI/Environmental Assessments”) at: <http://www.spa.usace.army.mil/Missions/Environmental/EnvironmentalComplianceDocuments/EnvironmentalAssessmentsFONSI.aspx>. This Draft Supplement II EA (DSEA) addresses details and information for area improvements including additional public recreation features. The Feasibility Study and EA included an analysis of various restoration measures and alternatives to help address key hydrologic and ecological problems along the Rio Grande, and also addressed recreational improvements. Restoration features included improving habitat quality and increasing the amount of native bosque (riparian) plant communities, implementing measures to reestablish fluvial processes, creating new wetland habitat, reducing fire hazard, re-creating hydraulic connections, protecting and enhancing areas of potential habitat for listed species, and creating opportunities for educational and recreational features. The education, interpretive, and recreation aspects of the bosque are critical to long-term restoration and sustainability. These additional improvements would greatly enhance this resource. Involving the community through educational and recreational features would help to insure that a healthy bosque remains a priority for environmental sustainability. Establishing formal points of access and trails would restore more of the bosque to quality habitat as well as reclaiming and revegetation of duplicate trails through core wildlife areas. Alternatives, including these features were proposed at 17 locations within Reaches 1 through 5 (Sites 1A, 1B, 1C, 1D, 1E, 1F, 1G, 2A, 3A, 4A, 4B, 4C, 5A, 5B, 5C, 5D, and 5E) in the bosque along the Rio Grande in Bernalillo and Sandoval Counties (Figure 1).

The challenges regarding habitat loss, a reduction in different habitat types, invasion by non-native vegetation, and changes in the hydrologic cycle and inundation were proposed to be met by the recommended plan. A Finding of No Significant Impact (FONSI) was signed on June 6, 2011; and project implementation began in November 2011.

1.2 Authorization, Purpose and Need

The authority for this study was derived from a series of Congressional actions authorizing studies for projects on the Rio Grande, particularly in the Middle Rio Grande. Section 401 of the Water Resources Development Act of 1986 (Public Law 99-662) dated 17 November 1986, authorized studies in the Middle Rio Grande. Additional authorization is contained in House of Representatives Resolution 107-258, 2002. This authorization provides funds to evaluate environmental restoration, to include recreational components.

The purpose of the proposed action is to provide a more permanent and environmentally sound

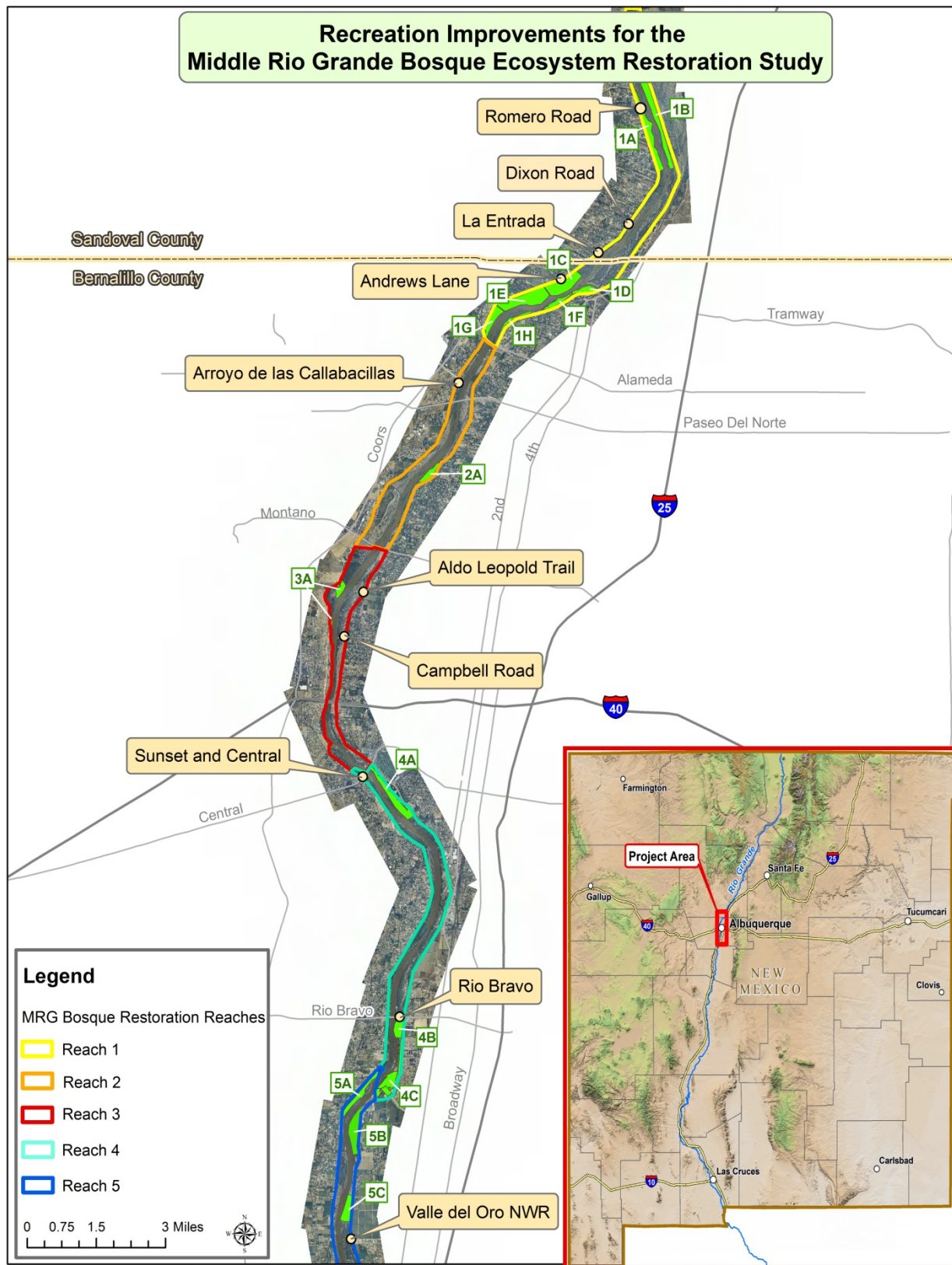
structure for recreation activities through formalizing and stabilizing trails, eliminating redundant trails, treating non-native vegetation, and providing new features, such as interpretive signs, picnic tables, benches, trash receptacles, doggie stations, kiosks, river overlooks, canoe launch sites, and improvements to parking facilities. Without the addition of these recreational features, a permanent and environmentally sound structure for recreational uses would not be constructed which could lead to further disturbance of the bosque and accelerate its decline.

This DSEA includes features that would meet the original study intent above. The original EA and Feasibility Study addressed recreational improvements at a number of sites. This DSEA addresses recreational improvements at locations that were not discussed in the original EA and Feasibility Study.

1.3 Public Review

Public review of the Draft Supplement II Environmental Assessment occurred from May 9 through June 8, 2016. Copies were made available at the Albuquerque Main Library, Los Griegos Library, Taylor Ranch Library and Corrales Community Library. A Notice of Availability was published in the Albuquerque Journal on May 8, 2016 and an affidavit of publication was received. A public meeting was held on May 19, 2016 at the Open Space Visitor Center.

Since this time there has been a change in location of the proposed recreation features at Sunset and Central. Therefore, a 15-day public review of the *Amended Draft Supplement II Environmental Assessment for the Middle Rio Grande Restoration Project, Recreation Phase*, will occur from June 8, 2017 through June 22, 2017. Copies will be made available on the Albuquerque District website (under "FONSI/Environmental Assessments") at: <http://www.spa.usace.mil>.



2.0 Description of Proposed Action and Alternatives

The following paragraphs describe details of proposed activities combined into sub-plans for individual area improvements.

2.1 Reach 1 Area Improvements

2.1.1 Romero Road

The proposed action is to install a new educational sign along the existing interior trail and a new Corrales Preserve bosque location designation sign at the existing pedestrian entrance located at the east end of Romero Road. Both the education and bosque location signs would be attached to two primed and painted 4x4 wood posts (examples of the proposed signs are provided in Figures 2 and 3 below). Both signs would be installed by digging a hole using a post-hole digger or back hoe and set in concrete. A map showing the location of the new signs at Romero Road is provided in Figure 10. Romero Road recreation features are located within Middle Rio Grande Restoration Site 1A. The original plan for 1A included 35 acres of non-native treatment and revegetation, 26 acres of water features, and 16 acres of bank destabilization.



Figure 2. Bosque trail education sign.

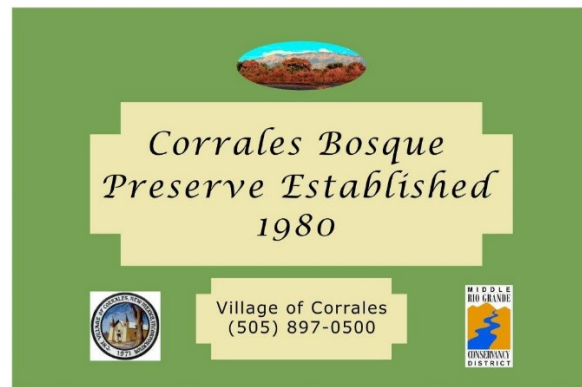


Figure 3. Corrales Bosque Location Designation sign.

2.1.2 Dixon Road Area Improvements

The proposed action is to install a new bosque location designation sign at the east end of Dixon Road. A map showing the location of the new sign at Dixon Road is provided in Figure 11. The location of the new sign lies between Middle Rio Grande (MRG) sites 1A and 1C and is a public access point for the bosque trails that connect to these sites. The original plan for site 1C included 38 acres of non-native treatment and revegetation, 23 acres of bank destabilization, 18 acres of water features, and 10 acres of swales. The original plan for site 1A is discussed above.

2.1.3 La Entrada Road Area Improvements

The proposed action is to install a new bosque location designation sign at the east end of La Entrada Road. A map showing the location of the new bosque location designation sign is provided in Figure 12. The east end of Dixon Road serves as public access point for the bosque trails. The La Entrada Road area is just north of MRG site 1C. The original plan for site 1C is discussed above.

2.1.4 Andrews Lane Area Improvements

The proposed action is to install a new bosque location designation sign at the east end of Andrews Lane. A map showing the location of the new bosque location designation sign is provided in Figure 13. Andrews Lane is used for public access to the bosque trails via the foot bridge over the MRGCD Levee. The new sign would be installed at Site 1C. The original plan at site 1C is discussed above.

2.2 **Reach 2 Area Improvements**

2.2.1 Arroyo De Las Calabacillas

The proposed improvements for Arroyo the De Las Calabacillas area includes the following:

- Install six rustic fieldstone picnic tables to reflect the standard table per City of Albuquerque standards.
- Install a Bosque Location Designation Sign per City of Albuquerque standards (see Figure 5 below).
- Install two doggie stations and two trash receptacles. The doggie station is a pet waste receptacle for people walking pets and would be placed next to the trash receptacles. The trash receptacles would be secured by welding a chain to a steel jetty jack, with a firm closing lid per COA standards (see Figure 4 below).
- Clean and restore the existing horse walkover.
- Install a new Americans with Disabilities Act (ADA) accessible concrete sidewalk with associated ADA accessible parking stall and ADA parking sign.
- Install new timber wheel stops along the parking area, secured by attaching to two 24”-long rebar, and openings in the existing guard rails would be provided for pedestrian access, the openings would then be finished with guardrail end sections.
- Rehabilitate an existing trail with stabilized crusher fines.
- Remove an existing dirt pile measuring approximately 1,200 square yards and distribute over the existing parking lot.

A map showing locations of the recreation features at Arroyo De Las Calabacillas is provided in Figure 14.

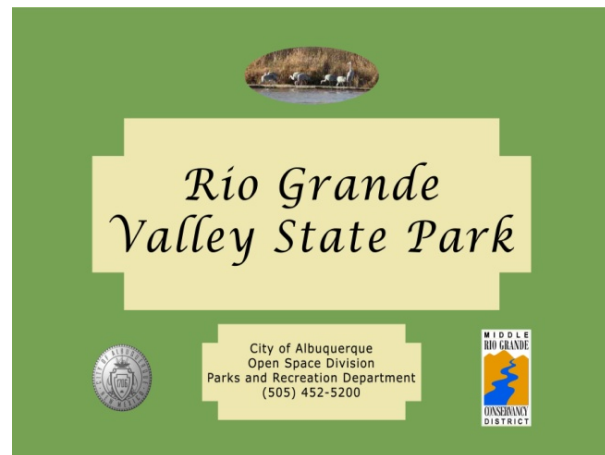


Figure 4. Trash receptacle and doggie station.

Figure 5. Bosque Location Designation Sign.

2.3 Reach 3 Area Improvements

2.3.1 Aldo Leopold Trail Area Improvements

The proposed action is to install a timber park bench (see Figure 6 below) per City of Albuquerque Open Space standards and a bosque location designation sign at the connection to the Aldo Leopold trail - adjacent to the Paseo Del Bosque trail and within the Rio Grande Nature Center State Park boundaries. A map showing locations of the proposed recreation features at the Aldo Leopold Trail is provided in Figure 15.



Figure 6. Timber park bench.

2.3.2 Campbell Road Area Improvements

The proposed action is to install an education sign, bosque location designation sign, trash receptacle and doggie station, picnic table, park bench, river overlook, and a split rail fence around the trash receptacle and doggie station area. The existing natural timber benches would be removed and replaced in kind, and with a new covered trellis. A map showing locations of the proposed recreation features at Campbell Road is provided in Figure 16.

2.4 Reach 4 Area Improvements

2.4.1 Sunset and Central Area Improvements

The proposed improvements for the Sunset and Central area includes the following:

- Install two trash receptacles and doggie stations at the entrances to the two interior bosque trails from the parking area.
- Install a bosque location designation sign next to the access gate on the MRGCD levee road.
- Install timber wheel stops at the existing parking areas.
- Install basalt boulders measuring approximately 3' to 4' in diameter at the vehicle parking area.
- Install a canoe launch on the west side of Central at the river's edge; the canoe launch would consist of pre-fabricated concrete material sections fastened together creating a

continuous surface. Wooden or PVC slats would then be added on top of the concrete pad for a New Mexico Boater-friendly surface.

- Install a new fence connecting with the existing gate along Sunset Road for pedestrian access.
- Construct a new stabilized crusher fine ADA accessible trail to connect the parking area with the existing interior bosque trail.
- Install a new trail marker to direct pedestrians to the official trail; the trail marker would consist of a single 4x4 wood post primed and painted prior to install per City of Albuquerque Open Space standards (see Figure 7 below).

A map showing locations of the proposed recreation features at Sunset and Central is provided in Figure 17.

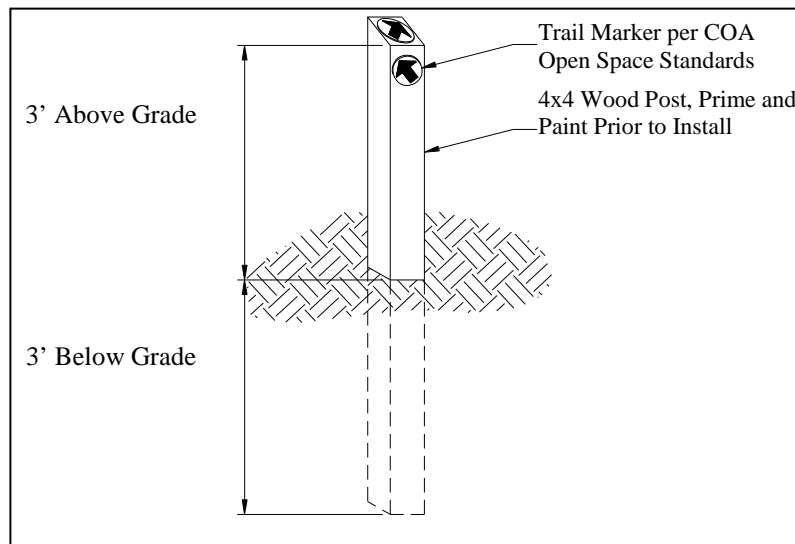


Figure 7. Sketch diagram of Trail Marker.

2.4.2 Rio Bravo Area Improvements

The proposed improvements for the Rio Bravo area includes the following:

- Install both a trash receptacle and doggie station at the existing ADA fishing pier and one each along the existing interior bosque trail.
- Install split rail fencing around the trash receptacle and doggie station along the interior trail.
- Close off an existing trail and revegetate using native trees and shrubs.
- Install a monument at the MRGCD access gate on the north side of Rio Bravo (see Figure 7 below).
- Install a kiosk next to the entrance of the Poco Loco day-use area (see Figure 8 below).
- Install a bosque location designation sign south of Rio Bravo next to the access gate on the MRGCD levee road.
- Install two trail marker posts; one located at the entrance to the official trail, and one located at the entrance of the closed off trail.

A map showing the locations of the proposed recreation features at Rio Bravo is provided in Figure 18. The proposed area improvements Rio Bravo are located at the northern end of MRG Site 4B. The original plan for Site 4B included 4.35 acres of swales, and 24 acres of non-native

treatment and revegetation.

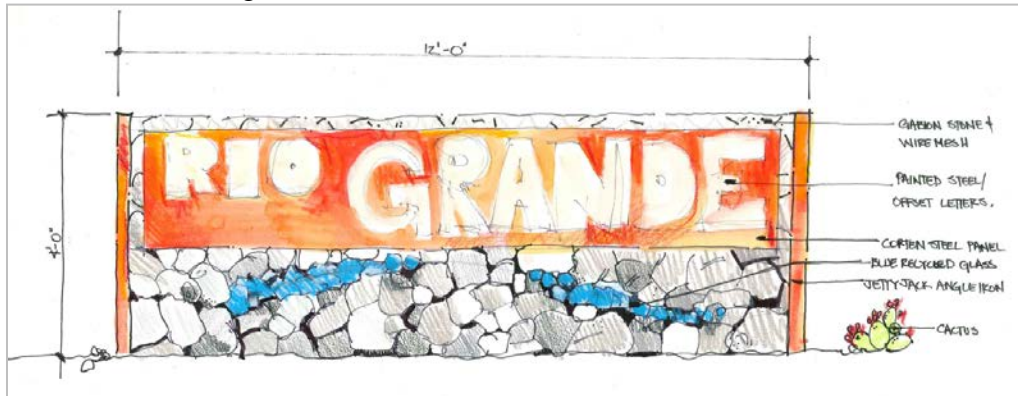


Figure 8. Diagram of Monument Sign.



Figure 9. Kiosk.

2.5 Reach 5 Area Improvements

2.5.1 Valle Del Oro National Wildlife Refuge Area Improvements

The proposed improvements for the Valle Del Oro National Wildlife Refuge (Refuge) includes installing a bosque location designation sign and trash receptacle adjacent to the MRGCD levee road at the connection to the Bosque from the south end of the Refuge. A walking trail through the Bosque approximately 0.8 miles in length would be constructed. The trail would begin at the south end of the Refuge and continue north then loop back to the north end of the Refuge. A map showing locations of the proposed recreation features is provided in Figure 19. The proposed improvements at Valle Del Oro are located approximately 0.35 miles south of MRG site 5C. The original plan for site 5C included 33 acres of non-native treatment and revegetation, and 4.67 acres of moist soil swales.

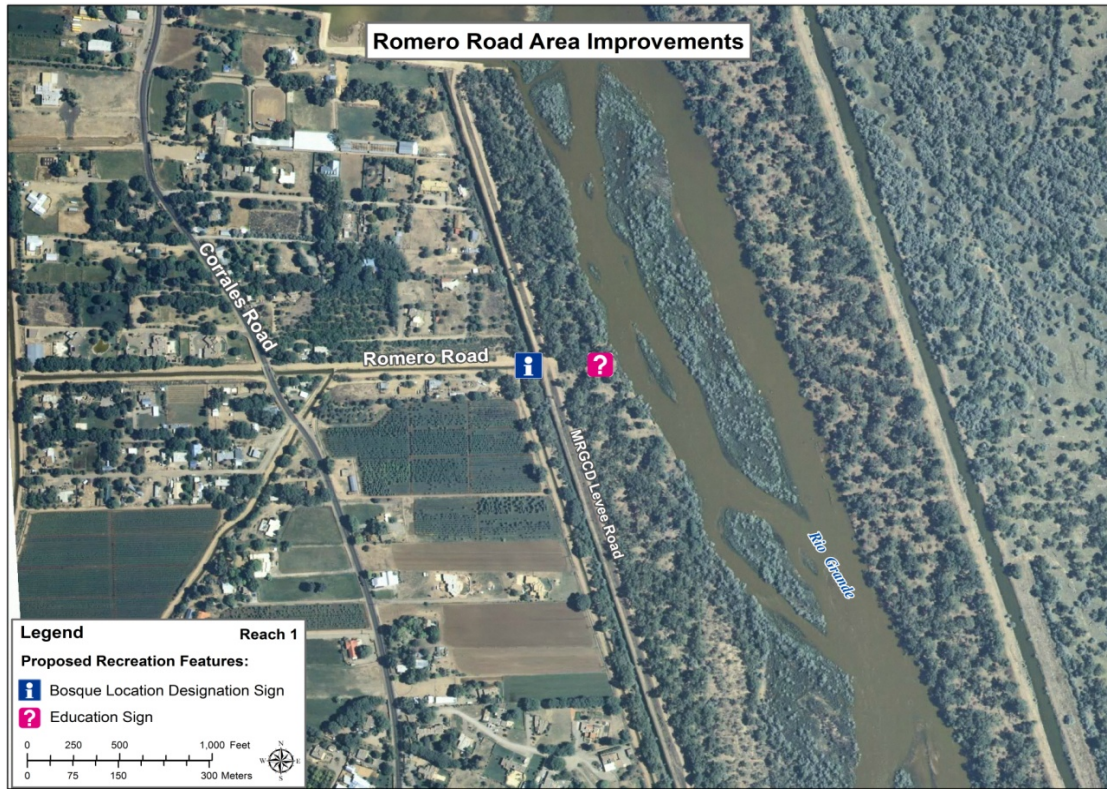


Figure 10. Romero Road Area Improvements.



Figure 11. Dixon Road Area Improvements.



Figure 12. La Entrada Road Area Improvements.



Figure 13. Andrews Lane Area Improvements.



Figure 14. Arroyo de las Calabacillas Area Improvements.



Figure 15. Aldo Leopold Trail Area Improvements.

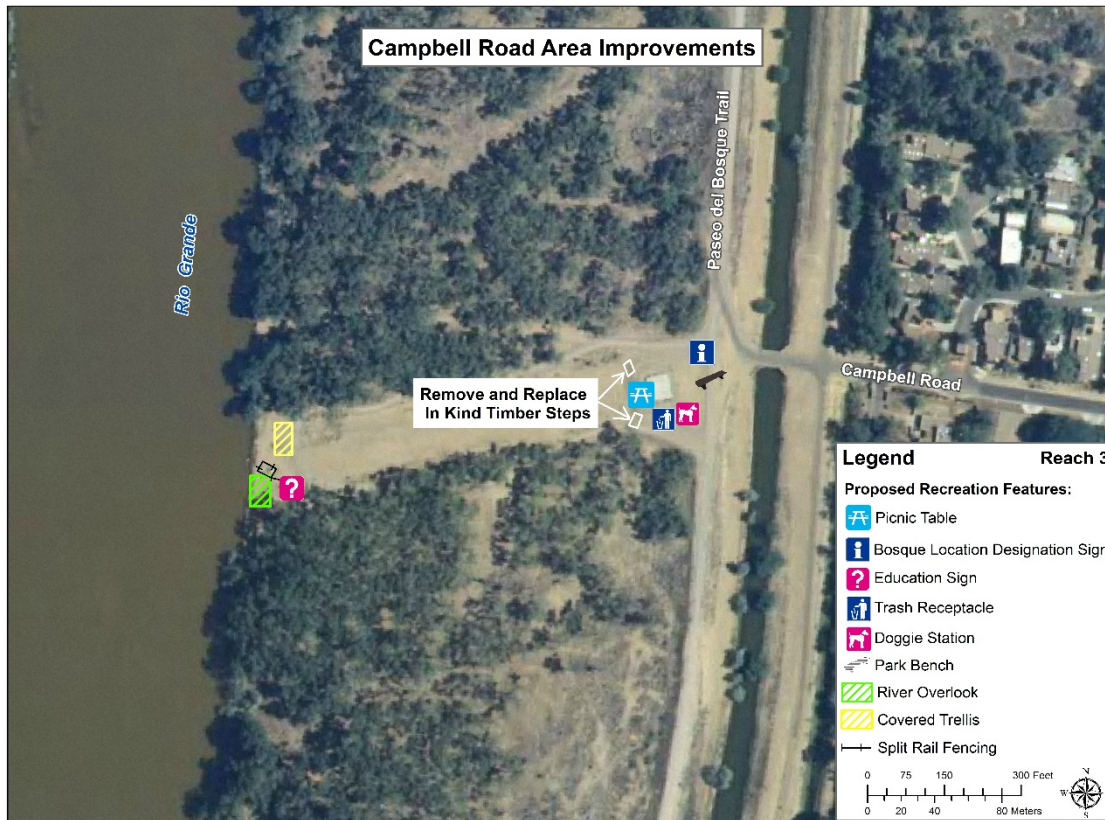


Figure 16. Campbell Road Area Improvements.



Figure 17. Sunset and Central Area Improvements.

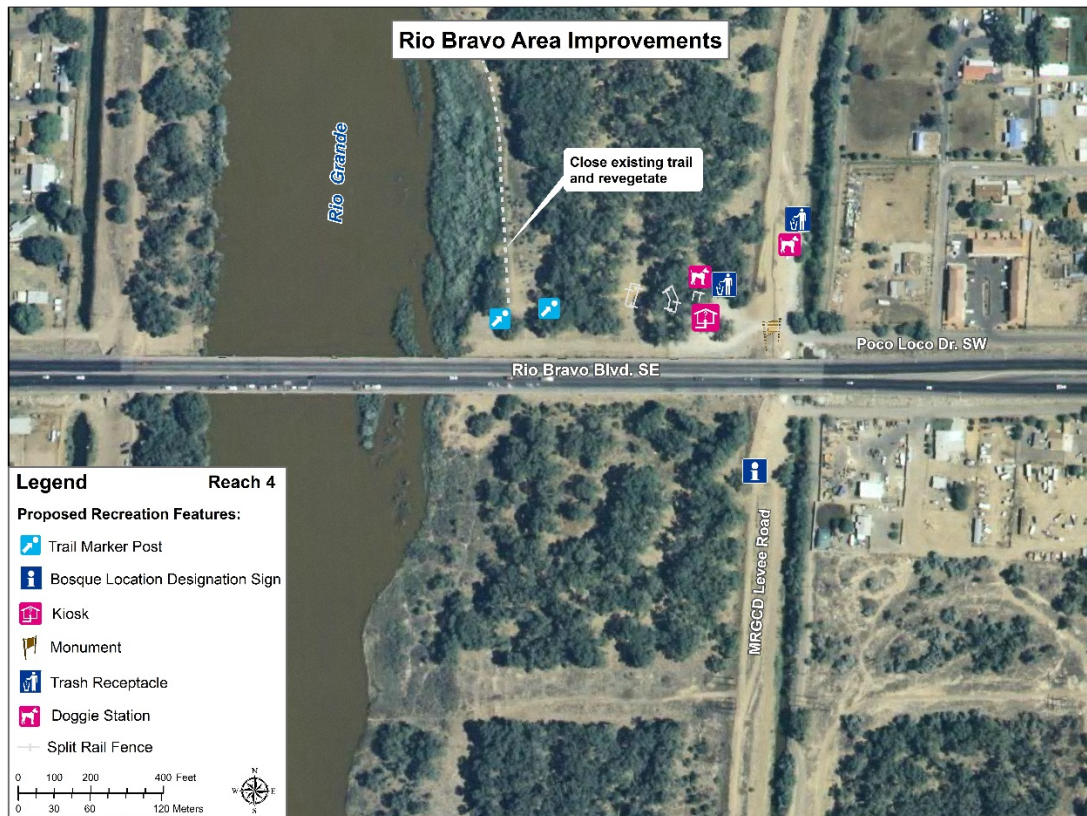


Figure 18. Rio Bravo North and South Area Improvements.

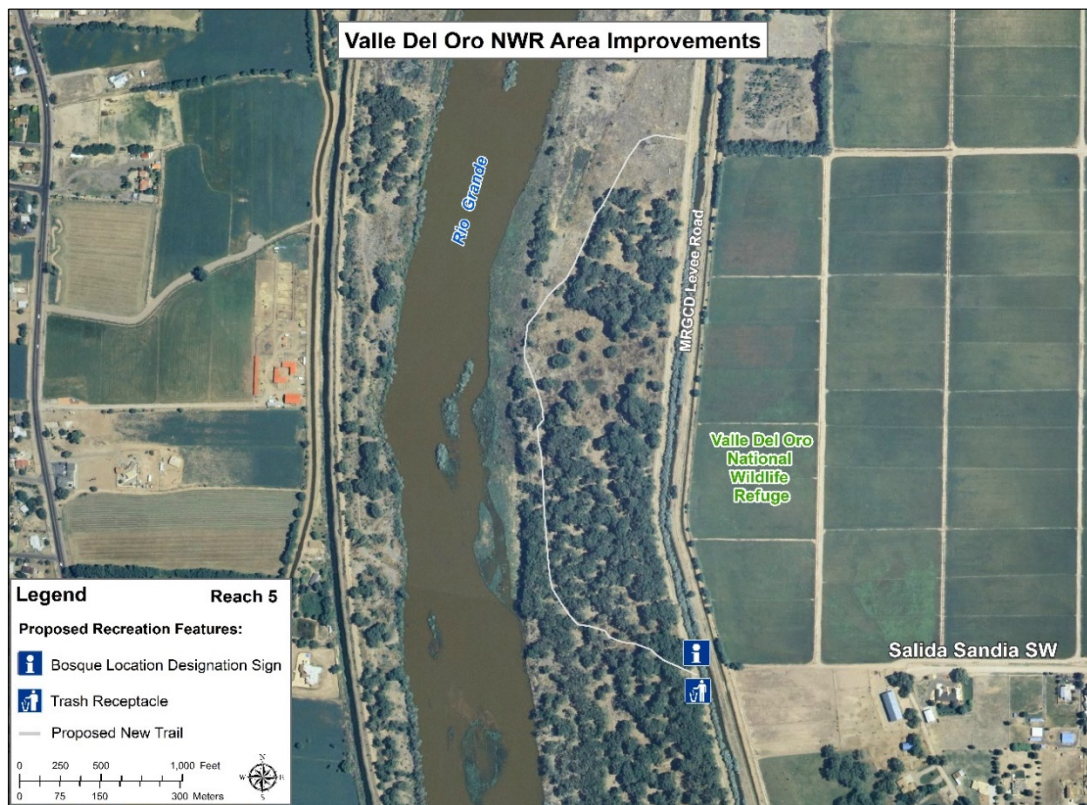


Figure 19. Valle Del Oro National Wildlife Area Improvements.

3.0 Existing Conditions

3.1 Water Quality

Under the No Action Alternative, there would be no potential improvement to water quality.

The New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) identified *E. coli* as a pollutant of concern, based on exceedances of New Mexico water quality standards (New Mexico Water Quality Control Commission 2000) for secondary contact. The assessment unit between the Alameda Bridge and Isleta Pueblo boundary exceeded the *E. coli* water quality standard in 25% of samples collected during the 2005 survey (NMED 2010). The presence of *E. coli* bacteria is an indicator of the possible presence of other bacteria that may limit beneficial uses and present human health concerns. There are probable nonpoint and point sources of *E. coli* bacteria throughout the basin that could be contributing to the *E. coli* levels. Pet waste contains bacteria that can contaminate a watershed, posing health risks to humans and other animals, potentially causing the spread of disease, such as *Giardia* and *E. coli*. A single gram of dog feces can contain 23 million fecal coliform bacteria (Van der Wel 1995). Dogs can also be significant hosts of both *Giardia* and *Salmonella* (Pitt 1998). It was also noted in a 1982 study of Baltimore, Maryland catchments that dog feces were the single greatest contributor of fecal coliform and fecal strep bacteria (Lim et al. 1982). A recent study determined that 21.9% of the total fecal source and 45% of the Hemolytic *E. coli* (e.g. strain O157:H7 can cause serious illness in humans) estimates of the MRG between Angostura and Isleta Diversion Dam are of canine origin (Parsons 2005). Canines were determined to be the second greatest source of total *E. coli*, behind avian sources (33.5%) during the study (Parsons 2005).

The existing parking areas are unimproved with poor grading and infiltration. Local incision suggests sediment transport off-site during precipitation events. Local ponding often results in conditions that are not suitable for parking. As a result, parking occurs outside of the designated parking area, which disturbs adjacent undisturbed areas. The No Action Alternative will result in continued degradation of the existing parking areas and continued non-point source water quality degradation.

3.2 Hazardous, Toxic and Radiological Waste

The hazardous, toxic, and radiological waste (HTRW) section of the EA (Section 3.17) sufficiently characterizes the regulatory setting for this resource.

An alternative would be considered to have a significant effect if it would involve substances identified as potentially hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act; the Resource, Conservation, and Recovery Act; and/or 40 CFR Parts 260 through 270. A significant effect would be: 1) exposure of workers to hazardous substances in excess of Occupational Safety and Health Administration (OSHA) standards, or 2) contamination of the physical environment, thereby posing a hazard to humans, animals, or plant populations by exceeding Federal exposure, threshold, or cleanup limits.

No HTRW sites are known to exist within the soil of the proposed project locations. Therefore,

the Future With-Project Alternative would not affect HTRW.

3.3 Vegetation Communities

3.3.1 Reach 1

Proposed recreation improvements within Reach 1 includes Romero Road, Dixon Road, La Entrada, and Andrews Lane. The vegetation is comprised of riparian habitat with a mixture of native and non-native vegetation present. The habitat is mainly cottonwood (*Populus deltoids* ssp. *wislizenii*) and Goodding's willow (*Salix gooddingii*) overstory with an open understory. Patches of native understory exist, consisting of New Mexico olive (*Forestiera neomixicana*), coyote willow (*Salix exigua*), and some Russian olive (*Elaeagnus angustifolia*) and saltcedar (*Tamarix chinensis*). Area improvements in Reach 1 would consist of installing four bosque location designation signs at four public access points (Romero Road, Dixon Road, La Entrada Road, and Andrews Lane) to the bosque adjacent to the existing levee road, and one educational sign along the interior trail at the Romero Road area. The edge of the existing levee supports a narrow row of cottonwood / Siberian Elm (*Ulmus pumila*) overstory and a variety of scattered annual and herbaceous vegetation.

3.3.2 Reach 2

Proposed recreation improvements within Reach 2 includes the Arroyo De Las Calabacillas area. The vegetation is comprised of a cottonwood overstory with little to no understory and the existing graveled parking area. The area adjacent to the parking area is comprised of scattered sand sage (*Artemisia filifolia* Torrey) with no overstory.

3.3.3 Reach 3

Proposed recreation improvements within Reach 3 includes the Aldo Leopold Trail and Campbell Road, both are on the eastside of the Rio Grande near the Rio Grande Nature Center. The vegetation at the Aldo Leopold Trail (which is within the Rio Grande Nature Center State Park boundaries) is comprised of riparian habitat with a mixture of native and non-native vegetation. The area where the new park bench and bosque location sign would be installed consists of scattered annual and herbaceous vegetation with a cottonwood/elm overstory. The vegetation at Campbell Road is a relatively open and disturbed section of the bosque south of the Rio Grande Nature Center State Park. Scattered cottonwood and willow poles - recently planted by the Albuquerque Open Space Division and scattered sand sage, along with annual and herbaceous vegetation present. The area is mostly open after construction of the City of Albuquerque drinking water pipeline was installed to run under the river.

3.3.4 Reach 4

Proposed recreation improvements within Reach 4 includes the Sunset & Central and Rio Bravo sites. Sunset & Central is comprised of open, disturbed areas along the levee road and parking area. Throughout the area, there are scattered annual and herbaceous plants present. Rio Bravo is comprised of riparian habitat with native cottonwood canopy and a relatively open understory with patches of native and non-native vegetation. The area along the edge of the levee consists of native cottonwood overstory with patches of non-native understory. Annual and herbaceous vegetation is also present.

3.3.5 Reach 5

Proposed recreation improvements within Reach 5 includes the Valle del Oro NWR. This area is comprised of riparian habitat with native cottonwood overstory and a relatively open understory with patches of native and non-native vegetation as described above. The area along the edge of the levee consists of native cottonwood overstory with patches of non-native understory vegetation with scattered annual and herbaceous vegetation present.

4.0 Foreseeable Effects and Cumulative Impacts

General effects and impacts that are discussed in the original EA and Feasibility Study are also described in Table 1. A detailed discussion of proposed action-specific foreseeable impacts follows.

4.1 Cultural Resources

Pursuant to 36 CFR 800.2, original scoping for the MRG Ecosystem Restoration Project was conducted in 2008. No tribal concerns were identified at that time. To date, the Corps has received no indication of tribal concerns with the project. As necessary for specific project areas, the Corps has been coordinating project work with the Pueblos of Sandia and Isleta. Subsequent to the documentation provided in the original EA, the Corps initiated planning to proceed with planned restoration activities as well as the currently proposed Recreation Phase construction. Recreation Phase project areas were recently identified in consultation and coordination with the Project Sponsors. There are no changes in the project description for the Recreation Phase construction and since all of these project areas are small and generally have been disturbed in the past, no new scoping letters have been sent to tribes that may have concerns within Bernalillo and Sandoval Counties. No traditional cultural properties are known to occur within or immediately adjacent to Recreation Phase construction areas. Other than surface water flows in the Rio Grande, no Indian Trust Assets are known to occur in or adjacent to the project areas; river flows in the Rio Grande would not be affected by the project.

As documented in the original EA, the Corps contracted with the University of New Mexico's Office of Contract Archeology (OCA), Albuquerque, to conduct the original archaeological survey for the MRG Ecosystem Restoration Project. The proposed restoration project's Area of Potential Effect (APE) covers approximately 668 acres in 16 project area parcels. The archaeological survey was conducted between September 2 and 8, 2008, by OCA (Cordero et al., 2009). On March 4, 2009, the New Mexico State Historic Preservation Officer concurred with the Corps determination of "No Historic Properties Effected" for the MRG Restoration Project (HPD Consultation No. 086258). The Recreation Phase of the project also includes project areas that were surveyed for cultural resources during the Corps' Bosque Wildfire Project; this archaeological survey was also conducted by OCA (Estes 2005). The Corps also received no indication of tribal concerns for the Bosque Wildfire Project. On November 28, 2005, the New Mexico State Historic Preservation Officer concurred with the Corps determination of "No Adverse Effect to Historic Properties" for the Bosque Wildfire Project (HPD Consultation No. 076136).

In addition to project areas that were previously surveyed, the Recreation Phase includes two

small project areas that had not been previously surveyed for cultural resources. These are referred to as Survey Areas 1 and 2. Survey Area 1 is located at the eastern end of La Entrada (road) in Corrales, and Survey Area 2 is located on the south side of and at the eastern end of Calabacillas Arroyo, at its confluence with the Rio Grande. On August 26, 2015, prior to the archaeological survey, the Corps reviewed the New Mexico Cultural Resources Inventory System (NMCRIS) database and map server for both project areas. While several archaeological surveys have been conducted in the vicinity of these project areas, no historic properties have been previously documented to occur within the immediate vicinity of these project areas.

Both of these areas were surveyed by a Corps archaeologist on December 15, 2015 (Everhart 2016; Appendix A) and the archaeological survey covered the entirety of both of these project areas plus a buffer. Pursuant to 36 CFR 800.4, the area of potential effect (APE) for both projects areas is a total of approximately 2.30 acres.

At Project/Survey Area 1, the project plans to install a single, new Bosque Location Description Sign east of the private property fence line on the west side of the Corrales Riverside Drain. For Survey Area 1 the APE is approximately 0.1 acre. No artifacts or other cultural resources were observed during the survey of the 0.1 acre Survey Area 1.

At Project/Survey Area 2, a total of 6.10 acres were surveyed; the proposed construction area and APE is 2.2 acres. This project area is the location of an existing recreation area that includes a rather large parking area with highway guardrail for fencing, picnic tables, trash receptacles, and trail access points with signage. The active Calabacillas Arroyo channel is located immediately adjacent to the north side of the existing recreation area; prior to modern maintenance of the arroyo channel, arroyo flood flows likely affected the project area numerous times in the past. The project plans to rehabilitate the entire recreation area with grading and new gravel to level the parking area; provide additional trails and trail access points through the existing guardrail; new picnic tables, trash receptacles, and doggie stations; as well as adding a new concrete ADA accessible parking place and sidewalk; and new trail signage. No archaeological sites or other historic properties were observed during the survey. One isolated occurrence, IO No. 1, a historic trash dump was documented during the survey of Project/Survey Area 2. IO No.1 is located outside of the proposed Calabacillas Arroyo construction area and would not be affected by the proposed construction of recreation facilities. IO No. 1 is a scatter of primarily glass artifacts and other household debris that appear to be the result of one or two dumping events. Based upon a fragmented base of a Clorox bottle that dates between 1945 and 1950, the historic artifacts at IO No. 1 were dumped sometime at least after 1945 (The Clorox Company 2016). The Corps archaeological survey report for the La Entrada road and Calabacillas Arroyo survey areas is entitled *A Cultural Resources Inventory of 6.2 Acres for the MRG Ecosystem Restoration Project, Recreation Phase, Bernalillo and Sandoval Counties, New Mexico* (Corps Report No. USACE-ABQ-2016-001, NMCRIS No. 135187; Appendix _A).

Based upon the results of the NMCRIS data search and negative survey results and since IO No.1 is outside of the planned Calabacillas Arroyo construction area, the Corps has determined that the proposed Recreation Phase construction would result in No Historic Properties Affected. At this time, the Corps anticipates that the New Mexico State Historic Preservation Officer will concur with the Corps determination of No Historic Properties Effectuated.

4.2 Water Quality

Temporary soil disturbance (greater than 1 cumulative acre) will occur during construction. Thus, the contractor's work would be in accordance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). The Contractor and local sponsor will apply for coverage under the CGP in the form of a Notice of Intent to U.S. Environmental Protection Agency (U.S. EPA) Region VI. A Storm Water Pollution Prevention Plan (SWPPP) will be developed by the contractor for implementation until final stabilization. The SWPPP will include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC. This requirement applies to discharges both during construction and after construction operations have been completed.

Parking lot improvements will improve drainage and reduce ponding of water after precipitation events. Re-grading, compaction, and addition of four to six inches of base course over non-woven filter fabric will improve storm water, reduce sediment transport, and reduce parking in non-designated areas.

Proposed signage and dog waste station receptacles, if used properly, may reduce the canine waste within the MRG floodplain and watershed. Signage and receptacles have been found to encourage dog waste cleanup (Blackshaw et al. 1995).

4.3 Hazardous, Toxic and Radioactive Waste (HTRW)

The hazardous, toxic, and radiological waste (HTRW) section of the EA (Section 3.17) sufficiently characterizes the regulatory setting for this resource. An alternative would be considered to have a significant effect if it would involve substances identified as potentially hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act; the Resource, Conservation, and Recovery Act; and/or 40 CFR Parts 260 through 270. A significant effect would be: 1) exposure of workers to hazardous substances in excess of Occupational Safety and Health Administration (OSHA) standards, or 2) contamination of the physical environment, thereby posing a hazard to humans, animals, or plant populations by exceeding Federal exposure, threshold, or cleanup limits.

No HTRW sites are known to exist within the soil of the proposed project locations. Therefore the Future With-Project Alternative would not affect HTRW.

4.4 Threatened and Endangered Species

4.4.1 Southwestern Willow Flycatcher

The Endangered Southwestern Willow Flycatcher (*Empidonax traillii extimus*; "flycatcher") was discussed in the original EA. The flycatcher is known to use the Rio Grande riparian habitat in the project area as a migratory pathway but no breeding has occurred at any of the proposed

sites. The closest known flycatcher breeding area is at Isleta Pueblo approximately 25 miles south of the project site. Migrants have been detected throughout the Albuquerque Reach. There is no potential habitat for the flycatcher within the recreation area improvement areas. Implementation would be performed between August 15 – April 15, outside of the flycatcher migratory and nesting season. Therefore, there would be no negative effect on the species by the proposed actions. There is no potential habitat within the recreation improvement sites.

Therefore, there would be no effect on the species by the proposed action.

4.4.2 Yellow-Billed Cuckoo

On October 3, 2014, the U.S. Fish and Wildlife Service (USFWS) published the final rule to list the Western U.S. Distinct Population Segment (“DPS”) of the Yellow-billed Cuckoo (*Coccyzus americanus*; “cuckoo”) as a federally threatened species (USFWS 2014a). Generally, the Service identified cuckoos west of the Continental Divide as a DPS based on physical, biological, ecological and behavioral factors; but in central and southern New Mexico, the boundary of the western DPS is along the crest of the southern Rocky Mountains (USFWS 2014b). The current distribution in the western U.S. is difficult to delineate because cuckoos often wander widely before and after breeding (Hughes 1999). Cuckoos currently breed in California, Arizona, New Mexico, Utah, Wyoming, Colorado, Idaho, and Texas (USFWS 2014a). In New Mexico, Western DPS cuckoos breed along the major river valleys, including the San Juan, Rio Grande, San Francisco, and Gila (Howe 1986).

Critical habitat for the Western U.S. DPS was proposed on August 15, 2014 (USFWS 2014b) in 80 separate units in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming. Proposed Critical Habitat in the action area is within Unit 52, NM-8, and includes the Rio Grande floodway throughout the extent of the study area.

The Primary Constituent Elements of critical habitat for the cuckoo include:

“(1) Primary Constituent Element 1—*Riparian woodlands*. Riparian woodlands with mixed willow-cottonwood vegetation, mesquite-thorn-forest vegetation, or a combination of these that contain habitat for nesting and foraging in contiguous or nearly contiguous patches that are greater than 325 ft (100 m) in width and 200 ac (81 ha) or more in extent. These habitat patches contain one or more nesting groves, which are generally willow-dominated, have above average canopy closure (greater than 70%), and have a cooler, more humid environment than the surrounding riparian and upland habitats.

“(2) Primary Constituent Element 2—*Adequate prey base*. Presence of a prey base consisting of large insect fauna (for example, cicadas, caterpillars, katydids, grasshoppers, large beetles, dragonflies) and tree frogs for adults and young in breeding areas during the nesting season and in post-breeding dispersal areas.

“(3) Primary Constituent Element 3—*Dynamic riverine processes*. River systems that are dynamic and provide hydrologic processes that encourage sediment movement and deposits that allow seedling germination and promote plant growth, maintenance, health, and vigor (*e.g.* lower gradient streams and broad floodplains, elevated

subsurface groundwater table, and perennial rivers and streams). This allows habitat to regenerate at regular intervals, leading to riparian vegetation with variously aged patches from young to old.” (USFWS 2014b)

In the Southwestern United States, cuckoos typically arrive at their breeding grounds by late-May/early-June and initiate migration back to wintering grounds by late-August (Halterman *et al.* 2000). In New Mexico, nesting activities typically begin in mid-June and end in late August (Hughes 1999). Fall migration from its breeding grounds in New Mexico generally occurs from late-August through mid-September (Halterman *et al.* 2000).

The cuckoo nests almost exclusively in low-to moderate-elevation riparian woodlands with native, broadleaf trees and shrubs that are at least 50 acres in size and at least 325 ft (100 m) in width (USFWS 2013). Areas with strips of habitat less than 325 feet in width are rarely occupied by cuckoos (USFWS 2014b). Nests are typically associated with dense patches of broad-leaved deciduous trees, usually with a relatively thick understory (Hughes 1999). In New Mexico, the species nest in large patches of riparian vegetation with a cottonwood (*Populus deltoides*) / Goodding’s willow (*Salix gooddingii*) overstory (Ehrlich *et al.* 1988) with a dense understory that may include saltcedar (*Tamarix* spp.), Russian olive (*Elaeagnus angustifolia*) or native vegetation (e.g. *Salix* spp.) (Sechrist *et al.* 2009). Territories range in size from 4 to 40 ha (Halterman 2001), with an average home range size of 82 ha (Sechrist *et al.* 2009). The cuckoo prefers patch dimensions larger than 100 × 300 m, and exceeding 80 ha in area (USFWS 2014b). In New Mexico, nesting activities typically begin in mid-June and end in late August (Hughes 1999). Fall migration from its breeding grounds in New Mexico generally occurs from late-August through mid-September (Halterman *et al.* 2000).

The cuckoo requires large patches of multi-layered riparian forest comprised of cottonwood and willow with dense foliage — especially within 33 ft. (10 m) of the ground — and moist soil conditions (Hughes 1999). Cuckoo nest locations on the Sacramento River in California have been positively correlated with large willow-cottonwood patches, dense understories, high local humidity, low local temperature, and proximity to slow or standing water (Laymon 1980, Halterman 1991). A healthy forest understory is likely a critical component of cuckoo foraging areas (Wiggins 2005). Cuckoos travel long distances in search of prey items, and may be dependent on the location and abundance of large insects, but rarely traverse distances across unwooded spaces greater than 0.25 miles in their daily foraging activities (USFWS 2014b). On the South Fork Kern River in California, cottonwoods are very important for foraging; two male cuckoos equipped with radio transmitters foraged more in cottonwoods even though willows were the predominant species within the home range (Laymon and Halterman 1985).

Extensive presence / absence surveys for the cuckoo have been performed south of the proposed action area along the Middle Rio Grande from Los Lunas to Elephant Butte Reservoir (e.g., Carstensen *et al.* 2015). However, no formal cuckoo surveys have been conducted in the action area. There is little to no potential habitat as described above. The proposed sites were surveyed for Southwestern Willow Flycatcher by Corps Biologists during the 2015 breeding season and no cuckoos were detected during that time. No habitat is being removed for construction of the proposed features. **Therefore, there would be no negative effect to the Yellow-Billed Cuckoo or its proposed Critical Habitat.**

4.4.3 New Mexico Meadow Jumping Mouse

The New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) was listed as an endangered species under the Endangered Species Act of 1973 on June 10, 2014. The jumping mouse is a habitat specialist that nests in dry soils, but uses moist riparian and wetland habitats with dense vegetation for foraging. The jumping mouse utilizes persistent emergent herbaceous wetlands, especially patches of tall dense sedges on moist soil along the edge of permanent flowing water. The jumping mouse is generally nocturnal, and is active only during the growing season of the grasses and forbs on which it depends. It hibernates about nine months out of the year, longer than most other mammals (USFWS 2012).

The New Mexico meadow jumping mouse has exceptionally specialized habitat requirements to support life history needs and maintain adequate population sizes. The species appears to only utilize two wetland community types: 1) persistent emergent herbaceous wetlands (i.e., a marsh composed of beaked sedge (*Carex rostrata*) and reed canarygrass (*Phalaris arundinacea*) alliances; and 2) scrub-shrub wetlands (riparian areas along perennial streams that are composed of willows (*Salix* spp.) and alders (*Alnus* spp.). Microhabitat requirements are characterized by tall (averaging at least 61 cm (24 in), dense herbaceous riparian vegetation. The herbaceous vegetation is composed primarily of sedges (*Carex* spp. or *Schoenoplectus pungens*) and forbs. This suitable habitat is likely only found when wetland vegetation achieves full growth potential associated with perennial flowing water (E. Hein, USFWS, personal communication 4/19/2013). Jumping mouse habitat does not exist in the proposed action areas. **Therefore, there would be no affect to New Mexico meadow jumping mouse.**

4.4.4 Rio Grande Silvery Minnow

The Endangered Rio Grande silvery minnow (*Hybognathus amarus*; “minnow”) (minnow) was discussed in the original EA. The minnow is known to occur throughout all reaches of the proposed project and is within Critical Habitat of the minnow.

As discussed in the original EA, project features such as bank terracing provide potential habitat for the minnow. In a Biological Opinion for this project dated April 15, 2011, the U.S. Fish and Wildlife Service (USFWS) provided Reasonable and Prudent Measures (RPMs) to minimize impacts of incidental take of the silvery minnow resulting from the proposed action. **These RPMs would continue to be followed during construction of the proposed canoe launch features at Sunset & Central, and Rio Bravo.** All other features are not within or adjacent to the river.

Therefore, the Proposed Action may affect but is not likely to adversely modify designated Critical Habitat of the Rio Grande silvery minnow. The Proposed Action may affect but is not likely to adversely affect the Rio Grande silvery minnow.

In summary, the Corps has determined that the proposed actions do not have any effect on any of the listed species. The Corps has determined that the proposed action has no effect on the New Mexico meadow jumping mouse, no adverse effect on the Yellow Billed Cuckoo, and no adverse effect on the Southwestern Willow Flycatcher. The Corps has also determined that the proposed actions at Sunset & Central, and Rio Bravo ‘may affect but is not likely to adversely affect,

modify' designated Critical Habitat of the Rio Grande silvery minnow and 'may affect but is not likely to adversely affect' the minnow. **Concurrence on these determinations has been requested from the USFWS by submittal of this DSEA to the USFWS.**

5.0 CONCLUSIONS

5.1 Summary of Effects

Consistent with analysis in the 2011 EA, the following Foreseeable Effects and Cumulative Impacts are anticipated by the addition of this proposed action.

Table 1. Summary of Effects

<i>Existing Environment</i>	<i>Foreseeable Effects</i>
Hydrology and Hydraulics	No negative effects on river H&H, potential positive effects by reconnecting the floodplain
Water Quality	Potential Short-term adverse effect during construction at Central and Rio Bravo
Air Quality and Noise	Short-term adverse effects during construction
Aesthetics	Short-term negative effects during construction with long-term positive effects
Vegetation Communities	Minor short-term negative effects during construction with long-term positive effects
Floodplains and Wetlands	Long –term positive effect; Minor adverse effect during construction
Fish and Wildlife	Short-term negative effects during construction with long-term positive effects
Hazardous, Toxic and Radioactive Waste	Long-term positive effects to safety. No adverse HTRW impacts.
Endangered and Protected Species	No adverse effect to: Southwestern Willow Flycatcher, Yellow-Billed Cuckoo, New Mexico meadow jumping mouse. Rio Grande silvery minnow critical habitat or proposed Yellow-Billed Cuckoo Critical Habitat; May affect but is not likely to adversely affect Rio Grande silvery minnow
Cultural Resources	No adverse effect to Historic Properties
Socioeconomic Considerations	Short-term positive effects with increase in construction jobs; Long-term positive effects on improved aesthetics, access and recreation.
Land Use and Recreational Resources	No adverse effect with long-term positive effects
Indian Trust Assets	No effect
Environmental Justice	No adverse effect
Noxious Weeds	Positive short and long term effects
Cumulative Effects	Positive effect of this project and others in the area

Best Management Practices (BMPs) that were discussed in the original EA and Feasibility Study and would be implemented under this proposed action include: (1) construction sequencing as described in Section 2; (2) sediment management; (3) equipment inspection; (4) compliance with water quality permits; (5) adherence to schedule and best management practices to avoid impacts to endangered, protected, or avian nesting species; (6) equipment cleaning prior to entering and before leaving project areas to avoid transfer of weed seed; (7) adherence to all recommendations in the Fish and Wildlife Coordination Act Report and Biological Opinion; and (8) oversight by a qualified biologist to monitor adherence to these conditions during construction.

5.2 No-Action Alternative

The No Action alternative has not changed from the original EA. Throughout the Middle Rio Grande Valley, the river, floodplain, and associated fish and wildlife populations would be expected, in general, to continue to experience adverse effects from new and ongoing Federal, State, and private water resource development projects. Increasing urbanization and development within the historic floodplain, moreover, would continue to eliminate remnant riparian areas located outside the levees, putting increased pressure on the habitat and wildlife in the riparian zone within the floodway. Without the addition of education, interpretation, and recreation features of the project, a permanent and environmentally sound structure for recreational uses would not be constructed which could lead to further disturbance of the bosque and accelerate its decline.

6.0 Preparation, Consultation, and Coordination

6.1 Notification/Public Review

As mentioned in Section 1.3, public review of the Draft Environmental Assessment occurred from May 9 through June 8, 2016. A public meeting was held on May 19, 2016 at the Open Space Visitor Center. Comments received with the Corps responses is provided in Appendix C. Below is the Notice of Availability that was released to the public in the local newspaper, in the neighborhood coordination newsletters and via email to the Middle Rio Grande stakeholders. Letters of notification were also mailed to the distribution list provided in Section 6.3.

Notice of Availability
Draft Supplement II Environmental Assessment for the
Middle Rio Grande Restoration Project, Bernalillo and Sandoval Counties,
New Mexico

The U.S. Army Corps of Engineers (Corps), Albuquerque District, has completed the **Draft Supplement II Environmental Assessment for the Middle Rio Grande Bosque Restoration Project, Bernalillo and Sandoval Counties, New Mexico (DEA)**. The Corps is proposing to construct additional recreation features and make improvements to existing restoration areas in the Middle Rio Grande Restoration Project. The proposed action would provide a more permanent and environmentally sound structure for recreation activities through formalizing and stabilizing trails, eliminating redundant trails, and providing new features, such as interpretive signs, picnic tables, benches, trash receptacles, doggie stations, kiosks, river overlooks, canoe launch sites, and improvements to parking facilities. The original Environmental Assessment and Feasibility Study for the Middle Rio Grande Restoration Project, Bernalillo and Sandoval Counties, New Mexico dated June 2011(EA) discussed some of the recreational features already being constructed and the potential effects of those features. This Supplement II discusses potential effects of recreation features not discussed in the original EA. This proposed action and the No Action alternative were considered in this Draft Supplement II Environmental Assessment (DSEA). If the No Action Alternative was chosen, this work would not be completed in order to benefit public recreation activities in the Rio Grande bosque. Project construction would occur beginning August 15, 2016 and be completed by April 15, 2017.

A public meeting will be held to provide additional information and answer questions about the proposed recreational features. This meeting will be held on **Wednesday, May 18, 5:30-7pm** at the Open Space Visitor Center, 6500 Coors NW, Albuquerque, NM.

The DSEA is electronically available for viewing and copying at the Albuquerque District website (under “FONSI/ Environmental Assessments”) at:

<http://www.spa.usace.army.mil>

Due to a change in location of the proposed recreation features at the Sunset and Central Area a 15-day public review of the amended Draft Supplement Environmental Assessment is scheduled to occur from June 8, 2017 through June 22, 2017. The amended Draft Supplement II Environmental Assessment for the MRG Bosque Restoration Project will be available for viewing or copying at the Albuquerque District website (under "FONSI/Environmental Assessments") at: <http://www.spa.usace.mil>.

6.2 Preparers and Reviewers

Stephen Ryan, Biologist - Environmental Resources Section
Gregory Everhart, Archaeologist - Environmental Resources Section
Justin Reale, Environmental Engineer – Environmental Engineering Section
Lynette Giesen, Project Manager – Civil Project Management Branch
Jason Woodruff, Civil Engineer – General Engineering Section
Jeremy Decker, Archaeologist – Environmental Resources Section, Quality Control
Michael Porter, Fishery Biologist - Environmental Resources Section, Quality Control
George Macdonell – Chief, Environmental Resources Section, Quality Control

6.2 Consultation and Coordination

The following entities were consulted and/or coordinated with regarding this project:

U.S. Fish and Wildlife Service
U.S. Bureau of Reclamation
New Mexico State Historic Preservation Office
City of Albuquerque Open Space Division
Albuquerque Bernalillo County Water Utility Authority
New Mexico Interstate Stream Commission
Bosque School Village of Corrales
Corrales Fire Department
Middle Rio Grande Conservancy District
Albuquerque Metropolitan Arroyo Flood Control Authority

6.3 Mailing List for Draft Supplement Environmental Assessment

U.S. Bureau of Reclamation, Ms. Jennifer Faler, Mr. Hector Garcia
U.S. Environmental Protection Agency, Ms. Rhonda Smith
U.S. Fish and Wildlife Service, Mr. Wally Murphy, Ms. Jennifer Owen-White
Pueblo of Sandia, Honorable F. Isaac Lujan
Middle Rio Grande Conservancy District, Mr. Mike Hamman
New Mexico Interstate Stream Commission, Ms. Grace Haggerty, Ms. Page Pegram
New Mexico Forestry Division, Ms. Daniela Roth
New Mexico Department of Game and Fish, Mr. Matt Wunder, Mr. Mike Sloane
New Mexico Surface Water Quality Bureau, Mr. Neal Schaeffer
Rio Grande Nature Center State Park, Ms. Beth Dillingham
Bernalillo County Public Works Division, Mr. Brian Kent
Ciudad Soil and Water Conservation District, Ms. Carol Moritz

City of Albuquerque, Open Space Division, Dr. Matt Schmader
Albuquerque Bernalillo County Water Utility Authority, Mr. Rick Billings
Albuquerque Metropolitan Arroyo Flood Control Authority, Mr. Jerry Lovato, Mr. Kurt
Wagner
Corrales Fire Department, Mr. Anthony Martinez
Village of Corrales, Mayor Scott Kominiak, Mr. John Avila
North Valley Coalition of Neighborhood Associations
South Valley Coalition of Neighborhood Associations
Westside Coalition of Neighborhood Associations
Sierra Club, Richard Barish
New Mexico Kayak Instruction, Kelly Gossett
Quiet Water Paddling Adventures, Michael Hayes
New Mexico State Parks, Stephen Verchinski

7.0 References

- Blackshaw, J. K., Marriott, J., and Pty, H. J. 1995. Public open space and dogs: A design and management guide for open space professionals and local government. Petcare Information and Advisory Service.
- Carstensen, D., D. Ahlers, and D. Moore. 2015. Yellow-billed Cuckoo Study Results – 2014: Middle Rio Grande from Los Lunas to Elephant Butte Reservoir, New Mexico. U.S. Bureau of Reclamation, Technical Service Center, Denver, CO.
- Cordero, Robin M., Tracy Steffgen, and Patrick Hogan. 2009. *A 667.6 Acre Cultural Resource Survey of the Rio Grande Floodway for the Middle Rio Grande Bosque Restoration Feasibility Project, Bernalillo and Sandoval Counties, New Mexico*. OCA-UNM Report No. 185-996 (NMCRIIS No. 111640). University of New Mexico, Office of Contract Archeology, Albuquerque. Prepared for U.S. Army Corps of Engineers, Albuquerque District, Contract No. W912PP-06-D-0001, Delivery Order No. 0010.
- Estes, Robert J. 2005. *Cultural Resources Survey for the Bosque Wildfire Project: Fire Prevention Phase in Bernalillo and Sandoval Counties, New Mexico*. OCA-UNM Report No. 185-839 (NMCRIIS No. 89833). University of New Mexico, Office of Contract Archeology, Albuquerque. Prepared for U.S. Army Corps of Engineers, Albuquerque District, Contract No. DACW47-99-D-0023, Delivery Order No. 0015.
- Everhart, Gregory D. 2016. *A Cultural Resources Inventory of 6.2 Acres for the MRG Ecosystem Restoration Project, Recreation Phase, Bernalillo and Sandoval Counties, New Mexico* (Corps Report No. USACE-ABQ-2016-001, NMCRIIS No. 135187). Prepared for the U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.
- Halterman, M.D., D.S. Gilmer, S.A. Laymon, and G.A. Falxa. 2000. Yellow-Billed Cuckoo Study Methodology in California 1999-2000. Southern Sierra Research Station, Weldon, CA.
- Halterman, M.D. 2001. Population Status of the Yellow-billed Cuckoo at the Bill Williams River NWR and Alamo Dam, Arizona, and Southern Nevada: Summer 2000. Southern Sierra Research Station, Weldon, CA.
- Hein, Eric. Personal Communication. 4/19/13.
- Howe, W. H. 1986. *Status of the Yellow-Billed Cuckoo (Coccyzus americanus) in New Mexico*. New Mexico Department of Game and Fish, Santa Fe, New Mexico.
- Hughes, J.M. 1999. Yellow-billed Cuckoo (*Coccyzus americanus*). A. Poole (ed.). The Birds of North America Online. Cornell Lab of Ornithology, Ithaca, NY. <<http://bna.birds.cornell.edu/bna/species/418>>.
- Laymon, S.A. 1980. Feeding and nesting behavior of the Yellow-billed Cuckoo in the Sacramento Valley. Admin. Rep. 80-2. California Dept. of Fish and Game, Wildlife Management Branch, Sacramento, CA.
- Lim, S.-H., Olivieri, V. P., and Council, R. P. 1982. Sources of microorganisms in urban runoff. The

Council.

New Mexico Water Quality Control Commission 2000. State of New Mexico standards for interstate and intrastate streams. New Mexico Environment Department. Santa Fe, New Mexico.

NMED 2010. U.S. EPA-approved Total Maximum Daily Load (TMDL) for the Middle Rio Grande watershed. Surface Water Quality Bureau, Santa Fe, New Mexico.

Parsons 2005. Middle Rio Grande microbial source tracking assessment report. Parsons Water & Infrastructure Inc., Austin, TX 78754. Prepared for: New Mexico Environment Department, Albuquerque Metropolitan Arroyo Flood Control Authority and Bernalillo County.

Pitt, R. 1998. Epidemiology and stormwater management. *Stormwater Quality Management* 18:12-27.

Sechrist, J., V. Johanson, and D. Ahlers. 2009. Western Yellow-billed Cuckoo Radio Telemetry Study Results – Middle Rio Grande New Mexico – 2007-2008. Bureau of Reclamation, Denver, CO.

U.S. Fish and Wildlife Service (USFWS). 2012. Endangered Species Program. Species Profile – New Mexico meadow jumping mouse (*Zapus hudsonius luteus*).
<<http://ecos.fws.gov/speciesProfile/profile/speciesPfofile.action?spcode=A0BX>>

U.S. Fish and Wildlife Service (USFWS). 2013. Endangered and Threatened Wildlife and Plants: Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Proposed Rule. Federal Register 78(192):61622-61666.

U.S. Fish and Wildlife Service (USFWS). 2014a. Endangered and threatened wildlife and plants: Determination of threatened status for the western distinct population segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule. Federal Register 79(192):59992-60038.

U.S. Fish and Wildlife Service (USFWS). 2014b. Endangered and threatened wildlife and plants: Designation of critical habitat for the western distinct population segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule. Federal Register 79(158):48548-48652.

Van der Wel, B. 1995. Dog pollution. *The magazine of the hydrological society of South Australia* 2:1.

Wiggins, D. 2005. Yellow-billed Cuckoo (*Coccyzus americanus*): a technical conservation assessment. [Online]. USDA Forest Service, Rocky Mountain Region.
<<http://www.fs.fed.us/r2/projects/scp/assessments/yellowbilledcuckoo.pdf>>

APPENDIX A
Public and Agency Comments



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Governor

Jim Noel

Cabinet Secretary

Karen Garcia

Deputy Cabinet Secretary

David J. Simon

Division Director

State Parks



December 29, 2010

U.S. Army Corps of Engineers,
Albuquerque District Environmental Resources Section
Attn: CESP-PM-LE (Ondrea Hummel)
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109-3435

Dear Ms. Hummel:

The New Mexico State Parks Division (NMSPD) would like to thank the U.S. Army Corps of Engineers (ACE) for the opportunity to comment on the Draft Environmental Assessment for the Middle Rio Grande Bosque Restoration Project (DEA-MRGRBP).

The Middle Rio Grande Bosque Restoration Project is an important initiative that NMSPD supports. The project will improve the ecological health of the bosque as well as support recreational and educational benefits. Significant portions of the project area would affect the Rio Grande Valley State Park, and the entire initiative ties into NMSPD's major programs and objectives in the middle Rio Grande to promote the protection and restoration of the river and bosque ecosystem and to expand river-based recreation and outdoor education.

The Rio Grande is a priceless natural, cultural, and recreational resource. NMSPD has statutory duty to develop, maintain, manage and supervise all state parks and state-owned or state-leased recreation areas, and the responsibility for preparing the federally-required State Comprehensive Outdoor Recreation Plan (SCORP). NMSPD also administers the New Mexico Boat Act [Section 66, Article 12 NMSA 1978] on waters of the State (including the Rio Grande), promotes motorized and non-motorized boating, and promotes boating safety.

NMSPD's comments in this letter are focused on non-motorized river-based recreation and boating safety, which have received less attention relative to other issues. Throughout its course, the Rio Grande still has considerable potential to support additional recreation use, which can expand quality-of-life and economic benefits. This is particularly true for the middle Rio Grande, which has the largest population center in the state.

NMSPD's comments and concerns are based on the professional expertise of our boating officers, and are also informed by two listening sessions that NMSPD hosted in November and December 2010. The listening sessions were originally conceived to get a sense of the recreation needs and safety concerns of the paddle craft user community statewide, but the sessions also focused especially recreational paddle craft use in the stretch of the Rio Grande from north



Corrales to the Isleta Reservation (just south of the I-25 bridge). The listening sessions were followed by field visits to various locations within this stretch.

NMSPD's comment and recommendations reflect both agency and public input from this process and they are consistent with the policies for the Rio Grande Valley State Park and those supporting NMSPD's boating safety objectives for safe paddle craft boating within the reach of the Draft Environmental Assessment. Those policies include the permitting and ensuring accommodation for compatible uses with the waterways and floodplain management such as canoeing. (RGVSP Management Policies C1, C3, C9, C10). The public input also stressed the need for safe supporting facilities consistent with recreational use of the Rio Grande. NMSPD and representatives of paddle craft users are mindful that facilities should be located and designed to minimize environmental/habitat impacts and in ways that are sustainable from an operations stand-point.

NMSP comments cover the following aspects of the DEA impacting paddle craft:

- Launch Access and Construction
- High Flow Channel Bridges
- High Flow Channel Construction
- Jetty Jack Removal
- Riverside Drain Bosque Bridge(s)
- Trails Integrated with Paddle craft Emergency Bail Out Points
- Augmenting existing and potentially new recreation opportunities safely.

Launch Access and Construction: Having reviewed the DEA, NMSPD finds that launch access points are not spaced adequately along the 25 miles of the MRGBRP. Optimal concern for safety and emergency river access, as well as for enhancing recreational access, would space access points about every four miles. This spacing system is the standard recommended by national river management expert authorities, such as the National Park Service. Obviously, in a primitive or wilderness river setting, fewer access points are needed and desired. The stretch of the Rio Grande within the MRGBRP area, however, is within a major urban area. Recreation users obviously benefit from more access options, but emergency first responders really need direct access. The disposition of access points should include a put-in at the northern boundary of the Project and a take-out at the southern boundary.

Our recommendations for the best launch access locations are as follows, based on site visits and public input from the recreation paddle-craft community:

- 1P. NW side of Rio Grande just above the Corrales Diversion Canal;
- 2P. NW sides of Alameda at the Corrales Diversion Canal outfall drain on both sides of the drain outfall;
- 3P. NW side of Montano at Bridge Drain or about 100' south of the SW side of Montano or both providing water level launch options;
- 4P. NW side of Central Ave at the Orillia Drain;
- 5P. NW side of Bridge @ 150' north at the high water flow channel outfall,
- 6Pa. NW side of Rio Bravo Blvd by existing parking area; and/or
- 6Pb. NE side of Rio Bravo @300' west of existing parking area;
- 7P. Prices Dairy and potential Bosque Campsite;

8P. NE or SE side of I-25 north of the Isleta Reservation boundary.

In most cases, less obtrusive and safer launch facilities can be constructed than some of those proposed in the DEA. Design manuals and guidance for similar river situations are available from several good sources, including from the Iowa Department of Natural Resources (www.iowadnr.gov/riverprograms/rivertrails.html) and from the National Park Service, Rivers and Trails Conservation Assistance Program (<http://www.nps.gov/nrcr/programs/rtca/helpfultools/launchguide.pdf>).

Costs and safety concerns regarding the proposed access point at Central Ave (northeast side), as well as the inability of this location to access the river channel when it is used at flows under 500 cfs are strong reasons to recommend that this launch access and its design be abandoned. In all cases, however, preliminary and final access point and launch point designs should be vetted with the paddle craft community as each individual launch access point is advanced. Some members of the paddle craft community even expressed interest in assisting with the construction of such facilities as community volunteer projects to reduce costs, increase the number of formal launch access points, and foster partnerships and community involvement.

NMSPD recognizes that there are legitimate concerns about the operation and maintenance of river access points (e.g. agency staffing and funding limitations). These concerns, however, should not limit the vision at this time for a fully-accessible river corridor. Operating protocols designed to limit administrative burdens (e.g. by time-year, time-of-day, loading/unloading only restrictions), take advantage of collaboration among agencies, draw on the private recreation/paddling sector for some responsibilities, and utilizing volunteer assistance are strategies that can be combined to manage a robust system of access points.

High Flow Channel Bridges: NMSPD supports the objective of increasing recreation access to portions of the project area and understands that existing and future high flow channels are both beneficial for bosque/river/endangered species management and are interesting features to the public. These proposed recreation amenities for trail crossings of seasonal water features are a safety concern, however, since the channels themselves can be attractive for paddle craft. If steps are not taken to block physical access to the channels themselves, they will get used. Trying to block all access to the high flow channels, however, will require extensive effort and may prove difficult.

A site visit to the high flow channel bridge installed north of Bridge Street on the west side of the Rio Grande determined that this particular bridge was constructed with inadequate clearance for kayaks and canoes. Constructing and installing such bridges should be limited and only when the bridges provide adequate clearance. ACE should further consider the long-term impacts of installing bridges along the flood channels. There is a question of cost relative to recreational need, since most of the year the channels would be dry and no foot bridge would be necessary. The bridges also could become long term safety hazards (like jetty jacks) and might require future removal.

High Flow Channel/Drains Water Features Construction: Water features can provide opportunities for safe launch access sites. Access points can be constructed at the tail end of the high flow channels where they flow back into the main body of the Rio. Such features can also serve as emergency bail-out locations with eddy out zones integrated by design during bank destabilization. They should serve both safe recreational boating and environmental purposes

where ever possible. Those locations identified that can serve depend on whether they are existing (N. of Bridge High Flow Channel) or proposed (Reach 1 – Feature 1C. Dixon Road Bail out, 1G. Alameda West Side at Corrales Drain Launch Access, Reach 4 – Feature 4C. South Diversion Trail Picnic Ground Bail out).

Jetty Jack Removal: This is a commendable goal and will improve water safety if done during the process for targeted areas. It would be desired to remove those hazards to navigation found within the riverbed, to remove them at locations close to launch access such as at NW Alameda, and to remove them along the portage zone necessary for the San Juan Drinking Water Diversion for both the safe take out and the safe put in on the east side of the Rio. NMSPD also believes, however, that there is a environmental education benefit to leaving a few jetty jacks in place—particularly close to locations that already serve as environmental education nodes—as they are a part of telling the story of the river, its historic management, and its restoration.

Riverside Drains Bosque Access Bridges: The provision of these over the Drains/Canals should be located not only to provide fire service access to the bosque but also sited where launch access or bail-out points are identified. Two locations identified here are: ¼ mile west of Lagunitas Road SW by Prices Dairy (for over both the Irrigation Canal and Riverside Drain) and over the Riverside Drain at the MRGCD access road just north of I-25. The MRGBRP should also recognize that there is existing popular recreational boating use of some of the Clear Ditches/Drains. Given this existing compatible use in certain sections, and possible future area recreation section considerations for wildlife observation, whenever bridges are built there should be canoe/kayak clearances provided for high normal water flows for safety and clear spans to eliminate debris piles that may cause a hazard.

Trails Integrated with Recreational Boating Bail Out Points: Trail construction, reconstruction, relocation and/or elimination should not be done without integration of riverside access bail-out points for boating emergencies and for other emergency services access (fire/water rescue). Points to consider for boating safety include:

- Reach 1 – Romero Road Corrales, Dixon Road Corrales
- Reach 2 – Shining River Paseo Del Norte Los Ranchos, Montano Aldo Leopold Clear Ditch Rapid to Dietz Farm Rd.
- Reach 3 – Campbell Road COA, I-40 Galbodon Road
- Reach 4 – S. Diversion Channel Bern Co.
- Reach 5 – Isleta Blvd SW CR 4798, Prices Dairy, West Side I-25 and Rio Grande.

These can be simply marked with trail sign posts or posts with color inserted reflective paint and were identified as good volunteer project opportunities.

Augmenting Existing and Potentially New Recreation Opportunities Safely: Good signage is extremely important. NMSPD has committed to providing Launch Access Signage specifically to enhance navigational safety of paddle craft. Other way-finding signage will also be needed.

Recreational Use of Limited Surface Waters: NMSPD has observed that recreational use of both the main body of the river and in some locations, the associated Clear/ Riverside Drain, does occur. So far there have been no boating-related fatalities. NMSPD realizes that this use can be at odds with the MRGCD and Safe Kids Programs promotion of Ditch Safety. In the long run,

December 29, 2010

Page 5

however, replacing fear of water with skills and knowledge and directing uses it to where they are appropriate and desired is the best approach.

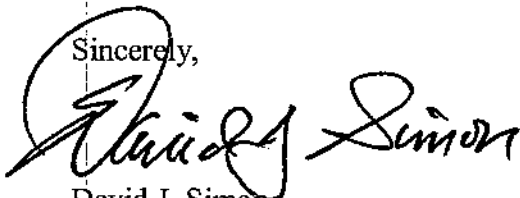
Managing agencies in the project area should work to promote safe boating by creation of new appropriate water features and by re-examining the existing limited surface water features for suitable use. Just as fishing use of drains outside of unsafe outfall areas or siphon locations is supported with recreation features such as fishing docks, canoe and kayak use should also with enhanced launch access, for example. In addition, if money for mitigation measures for projects within the bosque is available in the future, the paddle craft community has asked that some of it be directed to Tingley Beach for a new deeper water pond that can be used to teach safe kayaking and canoeing in a sheltered and safe outdoor setting.

Paddle craft recreation use has been steadily surging nationally. National Marine Manufacturing Association 2009 sales of canoes and kayaks increased to 343,600. The Albuquerque metro area and New Mexico in general, has enormous potential associated with the Rio Grande that can take advantage of our unique outdoor recreation resources to capitalize on this public interest and to grow economic activity based on river recreation.

In light of the growth of recreational paddle craft recreation, the MRGBRP Plan should consider and discuss the full recreational, economic benefits, and outdoor/environmental education benefits that would arise from significantly enhancing river access in order to support and expand recreational use of the Rio Grande in the project area.

Thank you for considering our comments. NMSPD looks forward to working with ACE and other federal, state and local agencies to realize an expanded vision for protecting and utilizing this stretch of the Rio Grande.

Sincerely,



David J. Simon

Director, New Mexico State Parks

Enclosures: Listening Session PowerPoint Presentation
List of Launch Access Points

cc: Julie Luna, Mid-Region Council of Governments
Wally Murphy, U.S. Fish and Wildlife Service
Yasmeen Najmi, Middle Rio Grande Conservancy District
Matt Schmader, Ph.D., City of Albuquerque Open Space Division

US Army Corps of Engineers
Albuquerque District Environmental Section
Attn: CESP-PM-LE (Ondrea Hummel)
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435

December 29, 2010

Re: Draft Environmental Assessment for the Middle Rio Grande Bosque Restoration Project

Hello Ms. Hummel,

My name is Kelly Gossett, owner of New Mexico Kayak Instruction, Inc. I am writing on behalf of the various outdoor communities and youth groups I work with, and would like to comment on their behalf regarding the MRG Bosque Draft Environmental Assessment (DEA). Thank you for considering our comments.

Throughout the DEA, the author recognizes a number of Bosque users, such as hikers, joggers, cyclist, roller bladders, equestrians and birders, but does not recognize the paddling community or users of the river (not necessarily the Bosque). Several large projects have taken place in the recent past, such as the \$400mm San Juan/Chama River Diversion Project, the \$187mm Buckman Direct Diversion Project, where significant alterations were made to the river, some of which are considered unsafe canoes, kayaks and rafts, but could have been designed to safely accommodate a growing community here in Albuquerque, boost the city's tourism and economic development, and – if done properly – host Olympic games. It is my hope that we can work together on these projects to safely meet each stakeholder's needs, while adding to the quality of life with the funds allocated to these massive projects.

Upon extensive review of the DEA, and collaboration with other paddlers and outdoor communities (including many kids programs), and active participation in the New Mexico State Parks listening sessions (Nov. 18 & Dec. 16, 2010; facilitated by Boating Safety Officer Stephen Verchinski), there are three areas of direct interest to these communities:

1. Improved canoe/kayak access to the Rio Grande at selected locations between Bernalillo and the Isleta Pueblo.
2. Additional ponds, such as those at Tingley Beach (which could be used for paddling, particularly with kids, seniors and those with disabilities – but are currently not intended for paddling).
3. Reconstruction of parts of the "Clear Ditch" - particularly the "outflows" where there is most gradient (which could include small whitewater features or a series of artificial rapids).

Comments to the USACE Draft Environmental Assessment for the Middle Rio Grande Bosque Restoration Project, from the paddling community, at large.

To understand the nature of these comments, it is necessary to understand the size and scope of the growing paddling community, and others we serve.

- Each year since 2008, I teach more than 400 adults how to kayak. I've noticed many people relocate to New Mexico, for one reason or another, and they're looking for any type of water-activity they can find. Kayaking is an affordable means of social and physical recreation for any average adult, child, senior, family or disabled person.
- Each year, I teach more than 300 Girl Scouts how to kayak, almost exclusively in City of Albuquerque indoor pools. Without exception, these girls want to apply their newly acquired skills and confidence in an outdoor environment.
- I continue to receive request, as a guest speaker, to teach Adaptive Kayaking PE classes for special needs kids at Albuquerque Public Schools, and after-school programs for Rio Rancho Public Schools, area charter and private schools, home school kids, and programs for kids with disabilities (UNM Center for Development & Disability, Special Olympics and Para Olympics, among others). As I teach these kids in City of Albuquerque indoor pools, the desire to kayak outdoors is a natural progression.
- In 2008, I started the Albuquerque Kayak Meetup Group and Santa Fe Kayak Meetup Group as a place for my former students to meet others, learn from one another, and explore New Mexico's scenic landscape from the seat of a kayak. Combined, the groups have more than 300 active members. We paddle through the Rio Grande often and have an annual Balloon Fiesta Float, assist in Open Space River Cleanups, and volunteer to support open-water triathlons throughout New Mexico.
- From 2005 – 2008, I was on the Board of Directors for the Adobe Whitewater Club. At that time, there were more than 400 active members.
- The "Great Raft Race" grew in size and popularity in 2008 & 2009. In 2009, the original race had more than 1,800 registered paddlers, prior to its cancellation following the Corbin Hayes accident.
- Albuquerque native Eric Southwick is a 2-time World Champion free-style kayaker, and 6-time US National (Olympic) Team Member. Eric acquired his skills from humble beginnings kayaking and 'playboating' in the Clear Ditch right here in Albuquerque, defeating competitors from around the world with far greater access to whitewater and opportunity to practice. In the "Land of Entrapment" – Eric is a prime example of how the youth of Albuquerque can acquire a skills and motivation to pursue any dream.

While this list does not include Boy Scouts, the New Mexico Adventure Racing Club, SCUBA divers, kayak anglers or other outdoor groups I work with, an active paddling

Comments to the USACE Draft Environmental Assessment for the Middle Rio Grande Bosque Restoration Project, from the paddling community, at large.

community does exist, and is significantly larger than my reach, which is primarily with beginner kayakers.

I believe the reason kayaking has gained so much momentum and popularity locally, particularly among youth, families and people with disabilities, is because I go to great lengths to deemphasize the adventure and adrenalin most people associate with whitewater kayaking. Instead, I teach kayaking as a social activity, where everyone is invited. I teach kids a kayak can take them places where roads and trails don't go, where they can access remote campsites, fishing holes and photograph wildlife. When possible, I incorporate Science, Technology, Engineering & Math to broaden their interest. I teach whitewater as a strategic game that anyone can play once they know the rules. These are messages that transcend the sport of kayaking and appeal to a broad range of every-day people, not just the extreme risk-takers.

With regard to access points, it is my understanding the Corps of Engineers has identified a few access points already. Suggestions from the community, facilitated through the New Mexico State Parks listening sessions outline improvements regarding safety, location of the points (upstream vs. downstream of bridges and other hazards) as well as logistics for improved use (minimizing distances from parking areas to river access). I have no comments to offer here, only to say – if these access points were added, our communities would appreciate them, and use them frequently. It is recommended, due to the number of disabled people I work with, that the access points be built in accordance with the Americans with Disabilities Act, and allow for adequate transportation to an area approximately near the river.

With regard to additional ponds – having access to a pond, such as those at Tingley Beach, or the 'water feature' described in Reach 1 (1E) and Reach 3 (3A), would be an ideal venue to teach boating safety, an intermediate step for kids between learning in the pool, and paddling on the river. The Rio Grande, while mostly mellow, is still an uncontrolled environment where hazards exist, and would be a challenge for many younger kids learning to kayak. A pond allows youth to continue learning one gradual step at a time, building confidence and courage at each step along the way.

Another consideration is the City of Albuquerque pools are already at critical mass. An outdoor pond would serve many people and free up already limited pool time. In 2008-09, Sandia Lakes was completely revamped for approximately \$4mm. This included three amazing lakes, conference and classrooms, a banquet room with kitchen, toilets and picnic tables for around \$1.3mm per lake. This is far less expensive than building a new pool, and given that the ponds are already included in the budget, it should come at little or no cost to designate one (or portions of one) for recreational use.

With regard to the outflows and reconstruction of the 'Clear Ditch,' it is our understanding one or more of these outflows may be reconstructed to minimize hazards and facilitate the wetland restoration. In ~2005, Mayor Martin Chavez and the City Council entertained the idea of building a whitewater park as a means of economic development, similar to those in other states. The City of Albuquerque's internal study

concluded that (1) there is not enough gradient in the Rio Grande and (2) the sediment load is so high, that any 'feature' would backfill with sediment in a short period of time. There are, however, other prime venues, including the Clear Ditch, where an Olympic venue can be built with as little as 80cfs (cubic feet/second flow-rate), and 1% gradient. The outflow at Tingley Beach, for example, has flow-rates varying from 50 – 200cfs, and 5ft of gradient. Reconstruction of an unsafe outflow could easily be rebuilt into a world-class training facility, providing locals, especially youth, with a controlled environment to learn water safety, and excel in a unique, adventurous life-long activity. Many whitewater parks sell ½-day, full-day, and season passes to offset the cost. A whitewater park along the flowing Clear Ditch could 9 – 12 months a year, adding significantly to the eco-tourism here in Albuquerque.

An example is the enclosed 'EPD Package Whitewater Course,' built for approximately the same price as one of the City of Albuquerque's skate parks.

A need exist for more controlled environments where these kids can practice, build confidence and learn life-lessons, such as better judgment, accountability for actions, respect for the environment, social awareness and social skills. The river can teach all this and more, while providing multi-purpose, multi-generational uses.

It is our hope that these comments will be considered as supplemental improvements to the projects already budgeted. While we realize these projects have associated cost, it has been proven time and time again, when the Corps of Engineers first recognizes the local paddling communities, then engages them, their projects can be designed for safe paddling, economic development and improving the character of today's urban youth.

Thank you,



Kelly Gossett
New Mexico Kayak Instruction, Inc.
5800 Osuna Rd NE #64
Albuquerque, NM 87109
505-217-2187 (office)
Kelly@newmexicokayakinstruction.com
www.newmexicokayakinstruction.com

Copies:

New Mexico State Parks
Attn: Dir. Dave Simon dave.simon@state.nm.us
P.O. Box 1147
Santa Fe, NM 87504

Comments to the USACE Draft Environmental Assessment for the Middle Rio Grande Bosque Restoration Project, from the paddling community, at large.

Middle Rio Grande Conservancy District
Attn. Yasmeen Najmi Planner yasmeen@mrgcd.us
1931 Second St SW
Albuquerque, NM 87102

City of Albuquerque Open Space Division
Attn. Matt Schmader, Ph.D. Open Space Superintendent mschmader@cabq.gov
Parks and Recreation
P.O. Box 1293
Albuquerque, NM 87103

Middle Rio Grande Council of Governments
Attn. Julie Luna Trails Planner jluna@mrcog-nm.gov
809 Copper Ave., NW
Albuquerque, NM 87102

US Fish and Wildlife Service
Attn. Wally Murphy Wally_Murphy@fws.gov
2105 Osuna NE
Albuquerque, NM 87113

Trust for Public Land
Attn. Jenny Parks newmexico@tpl.org
1600 Lena Street Bldg. C
Santa Fe, NM 87505

MRG Recreation Public Meeting 5/19/2016 Questions and Comments

- When installing benches consider orientation for good views (a bench in bosque is facing a wall of tall willows that grew over the years).
- Check the space between boardwalks to ensure wheelchair tires don't get stuck in between boards.
- Any plans to fix-up kiosks in poor condition?
- Some concerns that the boat launches will be used for commercial groups. Matt Schmader says the boat launches in this stretch of river will likely be used as take-out locations.
- Will the overlook decks be ADA accessible?
- Will benches be built in to the decks? It would be nice to have some sitting spots.
- Encourage additional dog waste stations because they really help. Would be good to place more not only at entrances to bosque, but also about 300' from entrances.
- Matt Schmader suggested a potential restroom at the biopark area.
- Lack of shrubs and grassy areas in bosque. Feels these are more important than planting cottonwoods.
- The Silvery Minnow signs are excellent.
- Who will do follow-up monitoring of birds?
- Dead trees in bosque, will Corps remove these?



Central New Mexico Group «» P.O. Box 25342, Albuquerque, N.M. 87125 «» 505/243-7767

June 8, 2016

By email only, ondrea.c.hummel@usace.army.mil
U.S. Army Corps of Engineers, Albuquerque District
Environmental Resources Section
Attn: CESP-PM-LE (Mrs. Ondrea Hummel)
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435

Re: Draft Supplement II Environmental Assessment for the Middle Rio Grande
Bosque Restoration Project, Bernalillo and Sandoval Counties, New Mexico, May 5, 2016

Dear Ms. Hummel:

I am writing on behalf of the Sierra Club and the Bosque Action Team (BAT) to comment on the Draft Supplement Environmental Assessment referenced above. Thank you for the opportunity submit these comment.

Our only comment concerns the .6 mile long trail to be constructed in the Bosque adjacent to Valle del Oro National Wildlife Refuge. Draft Suppl. EA, p. 8. The description of this trail states that the trail will "continue north through the bosque to join up with the existing trail." So far as I have been able to determine, the "existing trail" is not a "trail" at all, but is a road constructed by the Corps to access its restoration sites.

Development in the Bosque is governed by the Bosque Action Plan (BAP), which is a Rank II City of Albuquerque facilities plan. The Bosque in the Rio Grande Valley State Park south of a line a bit south of the outfall of the South Diversion Channel is designated as a "wildlife preserve." BAP, Corridor "E" map; see also, Policy 1-B (policy to establish wildlife preserves). The BAP was, of course, written and adopted long before the establishment of Valle del Oro National Wildlife Refuge. The Sierra Club and the BAT accordingly do not object to the construction of the .6 mile trail adjacent to the Refuge. The Club and the BAT agree that Refuge visitors should have the opportunity to enter and visit the Bosque west of the drain, and this area has many lovely cottonwoods that visitors will enjoy. However, the wildlife preserve status of the area north of the Refuge should be maintained.

I spoke to Jennifer Owen-White about this matter. I do not want to put words in her mouth, and the Corps can consult her itself, but she informed me that she agrees that the area

Ondrea Hummel
June 8, 2016
Page 2 of 2

north of the Refuge should be maintained as a wildlife preserve. She wants the trail to be a loop that returns to the north end of the Refuge, where they will construct a bridge across the drain to return to the Refuge. The trail should accordingly return to the Refuge, not join up with the "trail" north of the Refuge.

Further, the roads constructed by the Corps south of the South Diversion Channel should be reclaimed and restored. As the drafters of the Bosque Action Plan recognized, this is an area that gets little human use and is an ideal location for a preserve. The roads are in violation of this designation in the BAP. When I spoke to Ms. Owen-White, she volunteered that the Refuge's wonderful volunteers could even assist in the restoration of the Corps' roads.

The Sierra Club and the BAT accordingly urge the Corps (1) to revise the EA to reflect that the Valle del Oro trail will return to the Refuge, not connect to the "trail" north of the Refuge; and (2) as part of the Corps' Bosque work, to restore the roads it created in the Bosque south of the outfall of the South Diversion Channel.

Thank you again for the opportunity to submit these comments. The Sierra Club and the BAT appreciate all of the good work that the Corps has done in the Bosque and look forward to continuing to participate in this process.

Very truly yours,

THE SIERRA CLUB
THE BOSQUE ACTION TEAM,

By: Richard D. Barish
Richard D. Barish
Bosque Issues Chair
Central New Mexico Group Sierra Club

cc: Interested persons

Response to Public Comments

ID	Comment	USACE Response
OSD-01	Page 2, Figure 3: Just note that the figure shows Rio Grande Valley State Park under a section that is discussing the Village of Corrales	Thank you. Figure 3 on Page 2 has been corrected and updated to reflect the area as the Village of Corrales.
OSD-02	Page 5: Campbell Road area—we will need to go out and review where the City's new crusher fine trail ends and how that might affect the east end of the proposed COE improvements. It's fairly minor, but needs consideration to have the two projects stitch together nicely.	A site-visit was conducted with City Open Space personnel to determine where the City's new crusher fine trail ends, and it was determined that the proposed project and the City's trail would stitch together nicely.
OSD-03	Page 7, Figure 7: Please consider the selection of and use of a more aesthetic font for the monument sign. I assume this was for illustrative purposes only	The font for the monument sign (page, sec.) is for illustrative purposes only.
SC/BAT-01	Page 8. The description of the trail states that it will "continue north through the bosque to join up with the existing trail". However, the existing trail is actually a Corps service road and not a trail. Jennifer Own-White, the Valle del Oro NWR Manager, was consulted and stated that the new trail would be a loop that returns to the north end of the	The new trail was discussed with the Refuge Manager, and it was confirmed that the trail would be a loop to the north end of the Refuge, and not connect with an existing trail. In addition, the service road would be seeded and restored.
BOR-01	I'd like to see some benches for the new overlooks in general and the trellis at Campbell Road.	Thank you for the comment. The Corps will consider including some benches for the new overlooks.
BOR-02	I'm assuming the improved trail from the Paseo del Bosque to the new overlook at Campbell will be tied and transitioned in to the City's new crusher fine trail?	Yes. The trail would get tied in and transitioned to the City's new crusher fine trail.
BOR-03	It would be good to consult with our staff before final placement of signs on or along MRGCD access roads such as at Romero Road, Andrews Lane, etc. unless they will be attached to existing gates.	BOR was consulted with and coordinated with the placement of signs.
BOR-04	At Central SW the parking bumpers need to be placed against the embankment near Sunset to allow passage of trailers and heavy equipment to the east and through the gate. At Central NW same thing there needs to be adequate room for large equipment to pull off and on to Central safely and pass the boulders and parking area on the west side along the Atrisco Lateral or to the east on the levee road. The Corps contractors should check with our staff before installing any new gates again to check for clearance and turning radii.	Thank you for the information. Your staff will be consulted with before installation of any new gates for issues associated with clearance and turning radii for trailers and heavy equipment.

BOR-05	Is there a possibility to construct an ADA trail or boardwalk from the picnic area to the river bank at Calabacillas or are there hydrology or habitat limitations/concerns?	Yes. The Corps will consider constructing an ADA trail or boardwalk from the picnic area to the river bank at Calabacillas. Any hydrology or habitat limitations/concerns would be addressed prior to starting any work.
BOR-06	Will there be restoration around the new overlooks as was the case with the previous projects?	Yes. There is potential for restoration around the new overlooks similar to the previous MRG restoration projects.
BOR-07	Are there any potential issues with constructing a raised trail from the parking area at Central NW in terms of the ponding and overflow of water that exists between the storm water channel and the bridge?	Any potential issues with constructing a raised trail from the parking area at Central NW would be addressed prior to any work.

APPENDIX B
Cultural Resources



DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA NE
ALBUQUERQUE, NM 87109-3435

May 26, 2017

Planning, Project and Program Management Division
Planning Branch
Environmental Resources Section

105864
SPA Recd 6-2-2017
GDE

NMHPD Consultation Nos. 70294, 84449, 84750, 85054, 86258, and 103299

Dr. Jeff Pappas
State Historic Preservation Officer
Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, Suite 236
Santa Fe, New Mexico 87501

RECEIVED
AZ MAY 30 2017 FR
HISTORIC PRESERVATION DIVISION

Dear Dr. Pappas:

Pursuant to 36 CFR Part 800, the U.S. Army Corps of Engineers (Corps), Albuquerque District, is continuing our Section 106 consultation regarding the Middle Rio Grande (MRG) Ecosystem Restoration Project, located in the MRG Valley. The project covers portions of Sandia Pueblo, Bernalillo and Sandoval Counties, the City of Albuquerque, and Isleta Pueblo in central New Mexico. The Corps is proceeding with planning for the Recreation Phase of the project and is seeking your concurrence in our determination of No Historic Properties Affected for construction activities in the immediate vicinity of the Central Avenue (bridge) on the west side of the river (Enclosures 1 and 2). The project sponsor is the Middle Rio Grande Conservancy District (MRGCD).

The authority for this project was derived from a series of Congressional actions authorizing studies for projects on the Rio Grande, particularly in the Middle Rio Grande. Section 401 of the Water Resources Development Act of 1986 (Public Law 99-662) dated 17 November 1986, authorized studies in the Middle Rio Grande. Additional authorization is contained in House of Representatives Resolution 107-258, 2002. This authorization provides funding to evaluate and construct environmental restoration including recreational components.

The final project areas/designs have been determined for the Recreation Phase that primarily include existing areas where construction will have a negligible amount of disturbance, such as the installation of bosque location descriptions, educational signage, and kiosks; new trash receptacles and doggie stations; park benches and picnic tables; split rail fencing; several areas of site revegetation and about 3,200 linear feet of bosque hiking trail. This Recreation Phase work will also include the rehabilitation of the existing Arroyo de las Calabacillas Recreation Area and the construction of the new Central Avenue Recreation Area.

The Recreation Phase project areas include the bosque access locations at: 1). Romero Road, Corrales; 2). Dixon Road, Corrales; 3). La Entrada Road, Corrales; 4). Andrews Lane, Corrales; 5). Alameda Parking Area, Corrales; 6). Arroyo de las Calabacillas, Bernalillo County (Sites 1-6 are all on the west side of the river); 7). Aldo Leopold Trail Area, Albuquerque; 8). Campbell Road, Albuquerque (Sites 7 and 8 are both on the east side of the river); (there is no Site 9); 10). Central Avenue Recreation Area at Sunset Road, Albuquerque, on the west side of

the river; 11). Tingley Boardwalk and Overlook, Albuquerque; (there is no Site 12); 13 & 14). Rio Bravo Blvd. north and south areas, Albuquerque; (there is no Site 15); and 16). Valle del Oro Urban Refuge, Bernalillo County (Sites 11, 13 & 14, and 16 are all on the east side of the river) (for your convenience, see Enclosure 3).

All of these project areas have been previously surveyed for cultural resources during other phases of Corps' work for the MRG Bosque Wildfire, MRG Route 66 Restoration, or MRG Ecosystem Restoration projects (Marshall 2003; Estes 2005; Everhart 2004, 2006; Cordero, Steffgen, and Hogan 2009). More specifically for the MRG Restoration Recreation Phase, the Corps has previously conducted Section 106 consultation with your office for these MRG Restoration project areas (NMHPD Consultation Nos. 70294, 84449, 84750, 85054, 86258, and 103299). This current consultation is specifically in regard to the final design and location change in the Central Avenue Recreation Area from the north side of the bridge to the south side of the bridge as described below.

The project's Recreation Phase is planning to construct new recreation facilities adjacent to the Central Avenue Bridge at Sunset Road that preliminary designs planned to locate within the bosque on the west (right-hand) bank of the river on the northwest side of the Central Avenue Bridge. Due to real estate and right-of-way issues, the new recreation facilities are now being planned for construction within the bosque on the west (right-hand) bank of the river but on the southwest side of the Central Avenue bridge, rather than the northwest (Enclosure 2). The new project area on the southwest side of the bridge will have access and public safety benefits. The Central Avenue Recreation Area facilities will include some of the components as noted above as well as the construction of a new asphalt paved and fenced parking area, an approximately 360-foot ADA accessible trail that extends to a canoe-type boat launch/ramp. This Central Avenue project area is located within the Middle Rio Grande Valley State Park jointly managed by the City of Albuquerque's Open Space Division and the New Mexico State Parks Division, and is owned by the U.S. Bureau of Reclamation (USBR) / Middle Rio Grande Conservancy District (MRGCD).

Pursuant to 36 CFR 800.4, the area of potential effect for the project area is a total of approximately 0.83 acres. Access to the project area would be from the asphalt paved Central Avenue and Sunset Road, and from existing earthen roads into the bosque. On April 26 and May 1, 2017, the Corps reviewed the New Mexico Cultural Resources Inventory System (NMCRIS) database and map server and Corps archaeological records for the project area (Enclosure 4, For Official Use Only). The project area was previously surveyed for cultural resources during other phases of work for the Corps' MRG Restoration and Bosque Wildfire projects (Marshall 2003). The literature and data search found that four historic archaeological sites occur in the vicinity; however, they all occur on the west side of the river and on the northwest side of the bridge and would not be affected by the current project. These include LA138856, piling remnants of the historic 1930-1983 Central Avenue bridge; the related sites LA138858 and LA138859, remnants of the historic Atrisco and Ranchos de Atrisco acequia alignments and diversion; and LA159913, a segment of the abandoned Atrisco Riverside Drain. Also in the area are other portions of the extensive 1930s MRGCD irrigation (canals, primary laterals and drainage ditches) and spoil bank levee system that was reconstructed in the 1950s and 1960s by the USACE and USBR. The 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. No components of the MRGCD system would be affected by the project and the installation of signs, doggie stations, trash receptacles, picnic tables, etc., adjacent to the

MRGCD system would have a negligible effect on the system itself. There are no other historic properties known to occur within or adjacent to the project area.

Based upon the results of the 2003 Marshall survey, the NMCRIS literature and data search, and review of existing Corps archaeological records, the Corps has determined that the proposed Recreation Phase construction of the Central Avenue Recreation Area would result in No Historic Properties Affected. The Corps is seeking your concurrence with our determination.

Pursuant to 36 CFR 800.2, the Corps submitted tribal scoping letters in 2008 to Native American tribes with interests in Bernalillo and Sandoval Counties and has coordinated more specifically with Sandia and Isleta Pueblos on the projects within their reservations. The Corps has received no indication of tribal concerns for any of the MRG Bosque Wildfire, the MRG Route 66 Restoration, or the MRG Ecosystem Restoration projects.

Pursuant to 36 CFR 800.13, should previously unknown artifacts or historic properties be encountered during construction, work would cease in the immediate vicinity of the resource. A determination of significance would be made, and further consultation with your office and with Native American tribes interested in the project area would be conducted to determine the best course of action. If there are changes to the MRG Ecosystem Restoration project for future construction phases, additional survey and consultation may be required.

If you have any questions or require additional information concerning the Middle Rio Grande Ecosystem Restoration Project's Recreation Phase construction, please contact Gregory D. Everhart, archaeologist at (505) 342-3352 or by e-mail at gregory.d.everhart@usace.army.mil or me at (505) 342-3281 or by e-mail at george.h.macdonell@usace.army.mil. You may also provide comments to the above address.

Sincerely,



George H. MacDonell
Chief, Environmental Resources Section

5.31.17

Date

I CONCUR



JEFF PAPPAS
NEW MEXICO STATE HISTORIC
PRESERVATION OFFICER

Enclosures

Copy furnished w/Enclosures:

Mr. Ray Gomez
Middle Rio Grande Conservancy District
1931 Second Street, SW
Albuquerque, New Mexico 87105

Open Space Administration
Parks and Recreation
City of Albuquerque
Post Office Box 1293
Albuquerque, New Mexico 87103

Mark Hungerford, Archaeologist
U.S. Bureau of Reclamation
Albuquerque Area Office
555 Broadway Blvd., NE, Suite 100
Albuquerque, New Mexico 87102-2352

References

Cordero, Robin M., Tracy Steffgen, and Patrick Hogan

2009 **A 667.6 Acre Cultural Resource Survey of the Rio Grande Floodway for the Middle Rio Grande Bosque Restoration Feasibility Project, Bernalillo and Sandoval Counties, New Mexico.** OCA-UNM Report No. 185-996 (NMCRIS No. 111640). University of New Mexico, Office of Contract Archeology, Albuquerque. Prepared for U.S. Army Corps of Engineers, Albuquerque District, Contract No. W912PP-06-D-0001, Delivery Order No. 0010.

Estes, Robert J.

2005 **Cultural Resources Survey for the Bosque Wildfire Project: Fire Prevention Phase in Bernalillo and Sandoval Counties, New Mexico.** OCA-UNM Report No. 185-839 (NMCRIS No. 89833). University of New Mexico, Office of Contract Archeology, Albuquerque. Prepared for U.S. Army Corps of Engineers, Albuquerque District, Contract No. DACW47-99-D-0023, Delivery Order No. 0015.

Everhart, Gregory D.

2004 **A Cultural Resources Inventory of 127 Acres for Bosque Wildfire Restoration in Rio Grande Bosque Wildfire Burn Areas, Albuquerque, Bernalillo County, New Mexico.** Corps Report No. COE-2004-002 (NMCRIS No. 87583). Prepared for the U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.

2006 **Cultural Resources Documentation and an Inventory of 6.2 Acres for Five Emergency Access Bridges and Dry Hydrant Locations, Bosque Wildfire Project, in Sandoval and Bernalillo Counties, New Mexico.** Report No. COE-2006-002 (NMCRIS No. 98996). Prepared for the U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.

Marshall, Michael P.

2003 **A Cultural Resources Survey for the Proposed Middle Rio Grande Bosque Restoration Project, Bernalillo County, New Mexico: U.S. Army Corps of Engineers, 1135 Middle Rio Grande Bosque Ecosystem Restoration at Route 66.** Report No. 345 (NMCRIS No. 82701). Prepared by Cibola Research Consultants, Corrales, NM. Prepared for Bohannon-Huston Inc., Albuquerque. Submitted to the U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.

Enclosure 1. Vicinity Map. Middle Rio Grande Ecosystem Restoration Project, Recreation Phase, Central Avenue Project Area.



Enclosure 2. Project Location Map. Middle Rio Grande Ecosystem Restoration Project, Recreation Phase, Central Avenue Project Area.



Enclosure 3. Draft - Recreation Phase Plan Drawings. Middle Rio Grande Ecosystem Restoration Project, Recreation Phase, Central Avenue Project Area.

Enclosure 4. ARMS / NMCRIS database/map search 2017-04-26.

This page intentionally removed.

For Official Use Only

**Public Disclosure of
Archaeological Site Locations
is Prohibited by 54 U.S.C. 307103 (36 CFR 296.18)**