US Army Corps of Engineers®

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

Prepared by

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

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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, 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

Patrick J. Dagon
Lieutenant Colonel, U.S. Army
District Commander

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Draft SUPPLEMENT II ENVIRONMENTAL ASSESSMENT
for the
Middle Rio Grande Restoration Project, Bernalillo and Sandoval Counties, New Mexico

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: 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 shall occur from May 9 through June 8, 2016. A public meeting will be held on May 19, 2016 at the Open Space Visitor Center, 5:30pm to 7:00pm. Comments are due by 4:00pm on June 8, 2016.

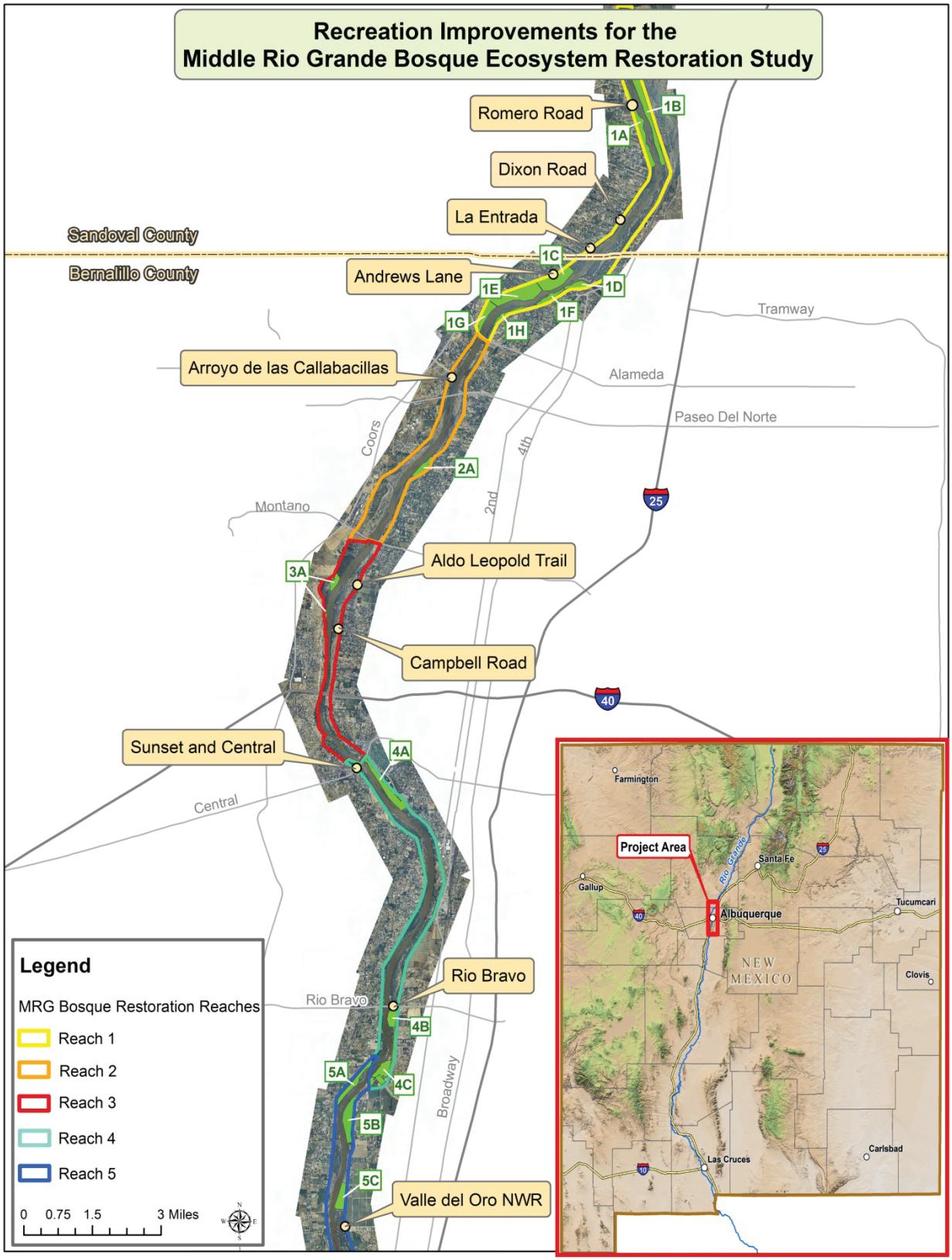

Figure 1. Middle Rio Grande Bosque Restoration Project Recreation Improvements.

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.

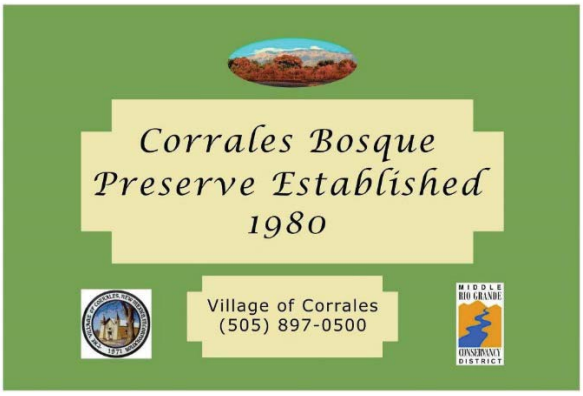

Figure 3. Corrales Bosque Location Designation sign.

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.

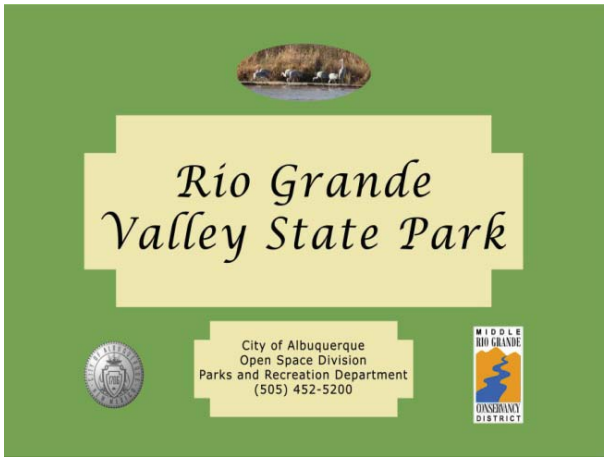

Figure 5. Bosque Location Designation Sign.

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 each, one set would be installed on the west side of Central along the edge of the MRGCD levee road and one set at the entrance to the interior trails next to the parking area.
- Install two bosque location designation signs, one located on the west side of Central along the MRGCD levee road and one on the east side of Central next to the access gate on the MRGCD levee road.
- Install four timber wheel stops at the existing parking areas.
- Install basalt boulders measuring approximately 3’ to 4’ to protect PNM equipment from vehicles on the west side of Central.
- Install a canoe launch and river viewing overlook 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.

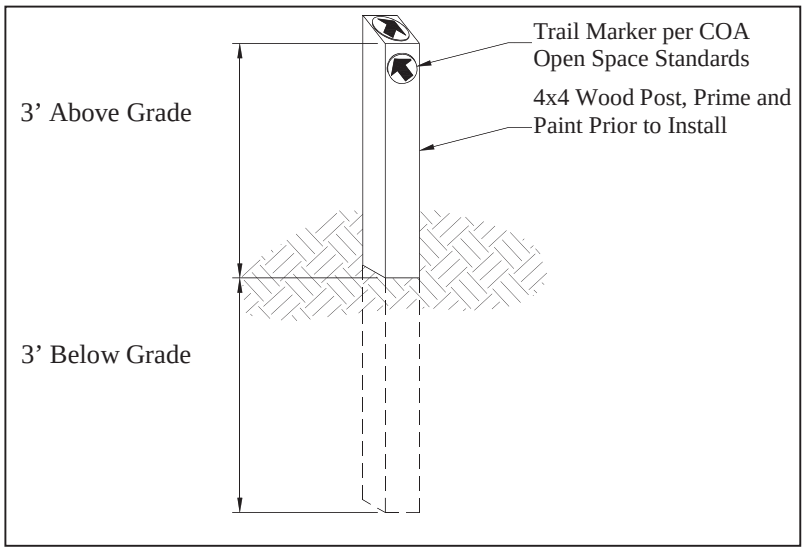

Figure 7. Sketch diagram of Trail Marker.

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.
- Install both a viewing overlook deck and a canoe launch at the edge of the river.
- 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.

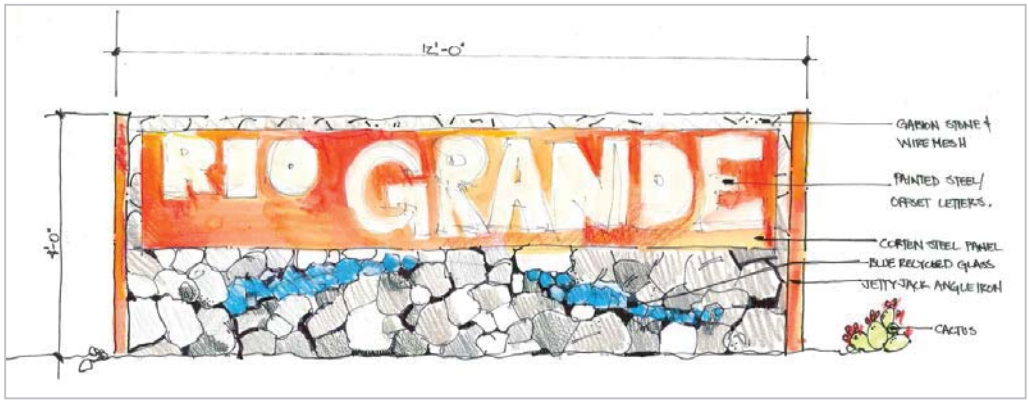

Figure 8. Diagram of Monument Sign.


Figure 9. Kiosk.

2.5 Reach 5 Area Improvements

2.5.1 Valle Del Oro National Wildlife Refuge (NWR) Area Improvements

The proposed improvements for the Valle Del Oro NWR includes installing a bosque location designation sign and trash receptacle adjacent to the MRGCD levee road at the connection to the bosque from Valle del Oro NWR. A new trail approximately 0.6 miles in length would be constructed from the NWR connection and continue north through the bosque to join up with the existing trail. A map showing locations of 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 swales.

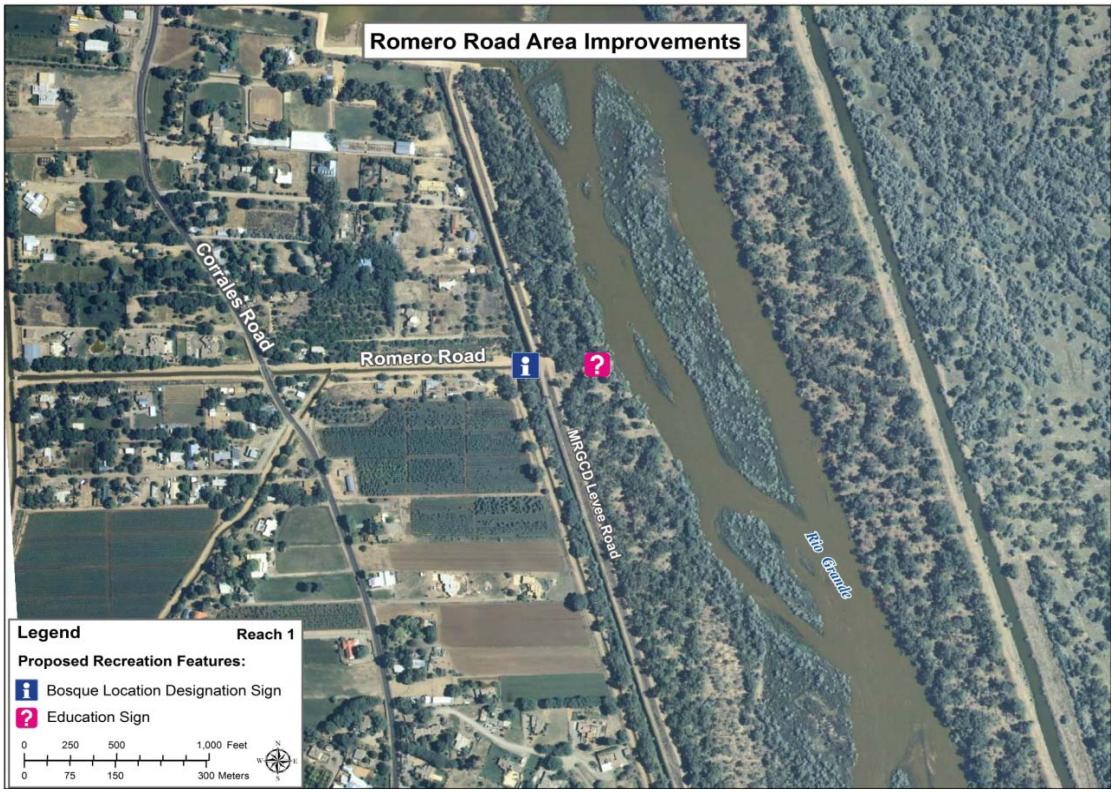

Figure 10. Romero Road Area Improvements.

Figure 11. Dixon Road Area Improvements.

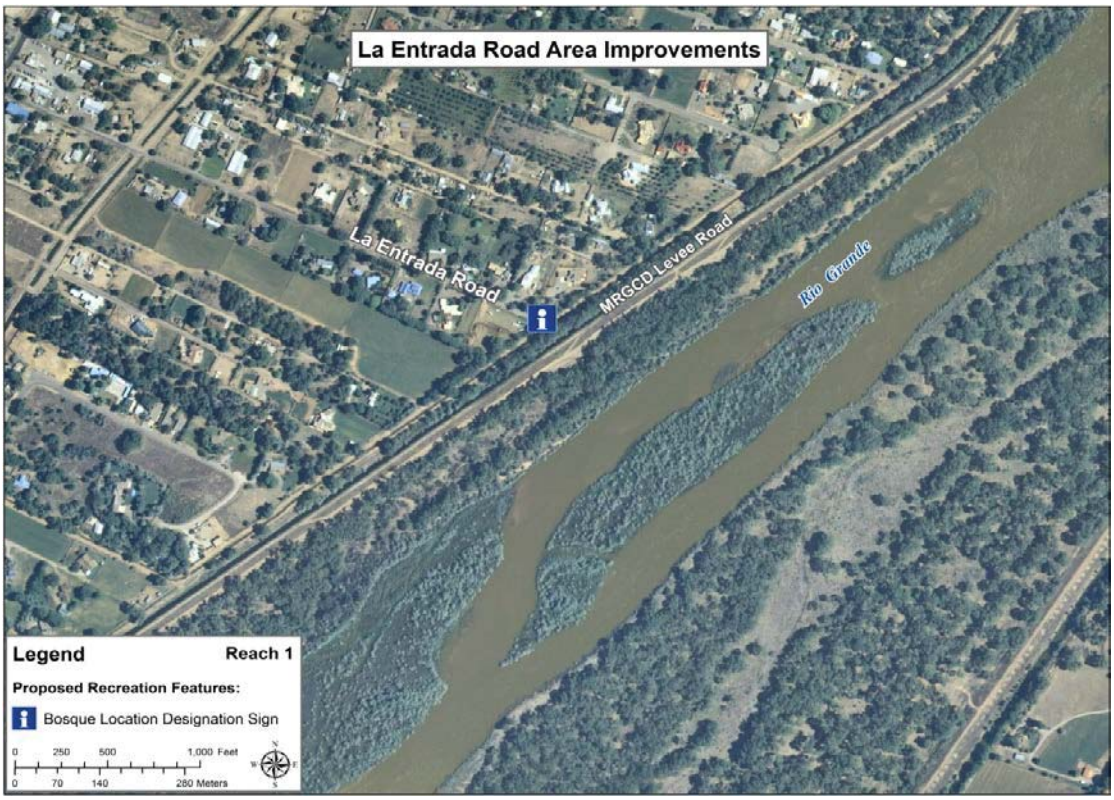

Figure 12. La Entrada Road Area Improvements.

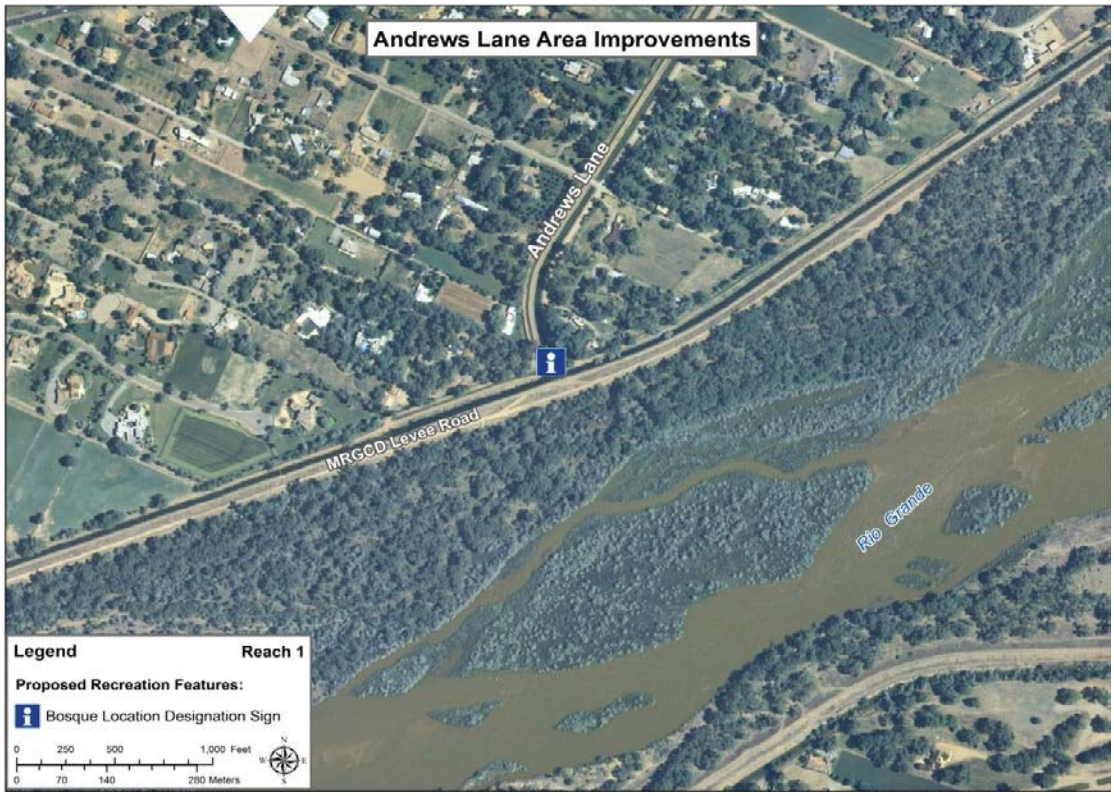

Figure 13. Andrews Lane Area Improvements.

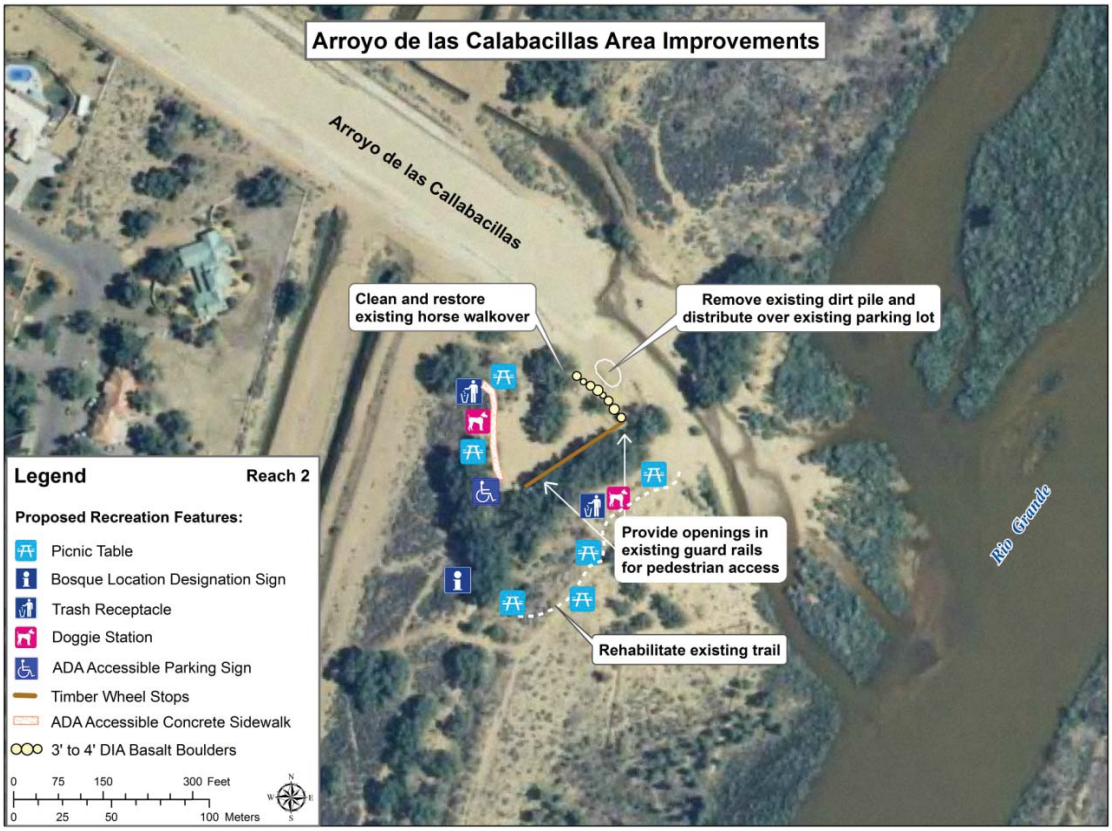

Figure 14. Arroyo de las Calabacillas Area Improvements.

Figure 15. Aldo Leopold Trail Area Improvements.

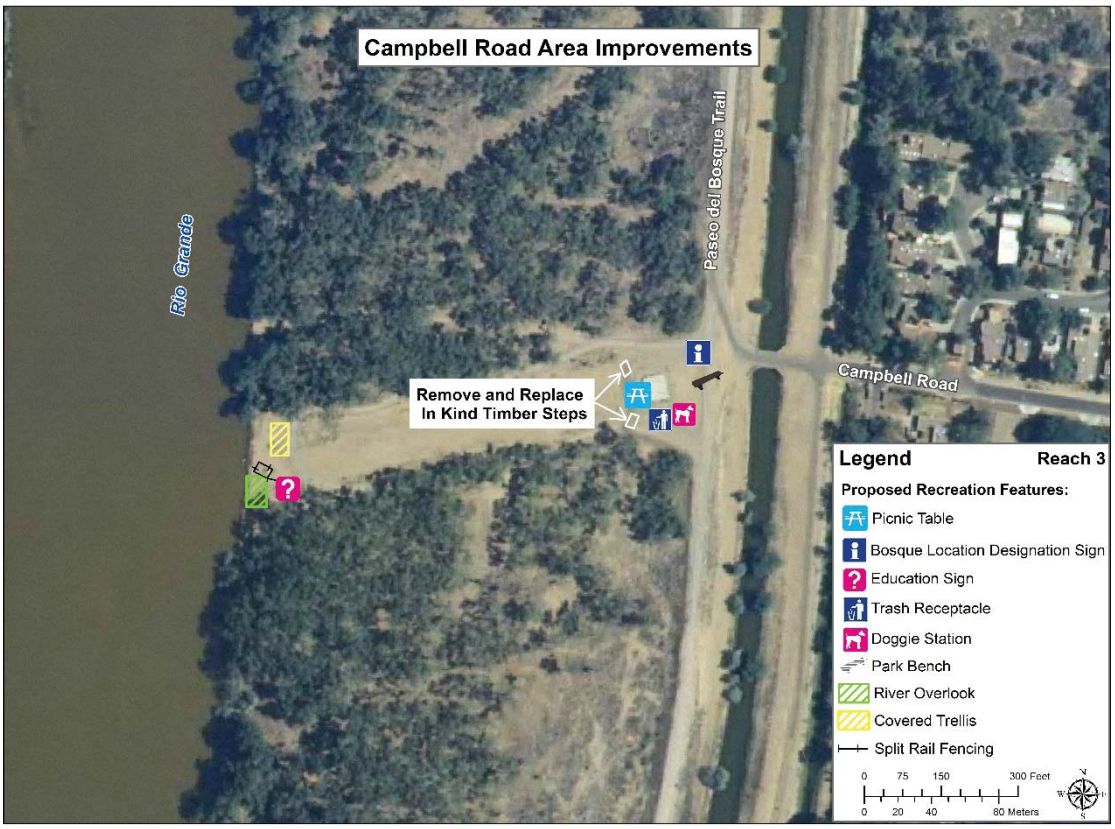

Figure 16. Campbell Road Area Improvements.

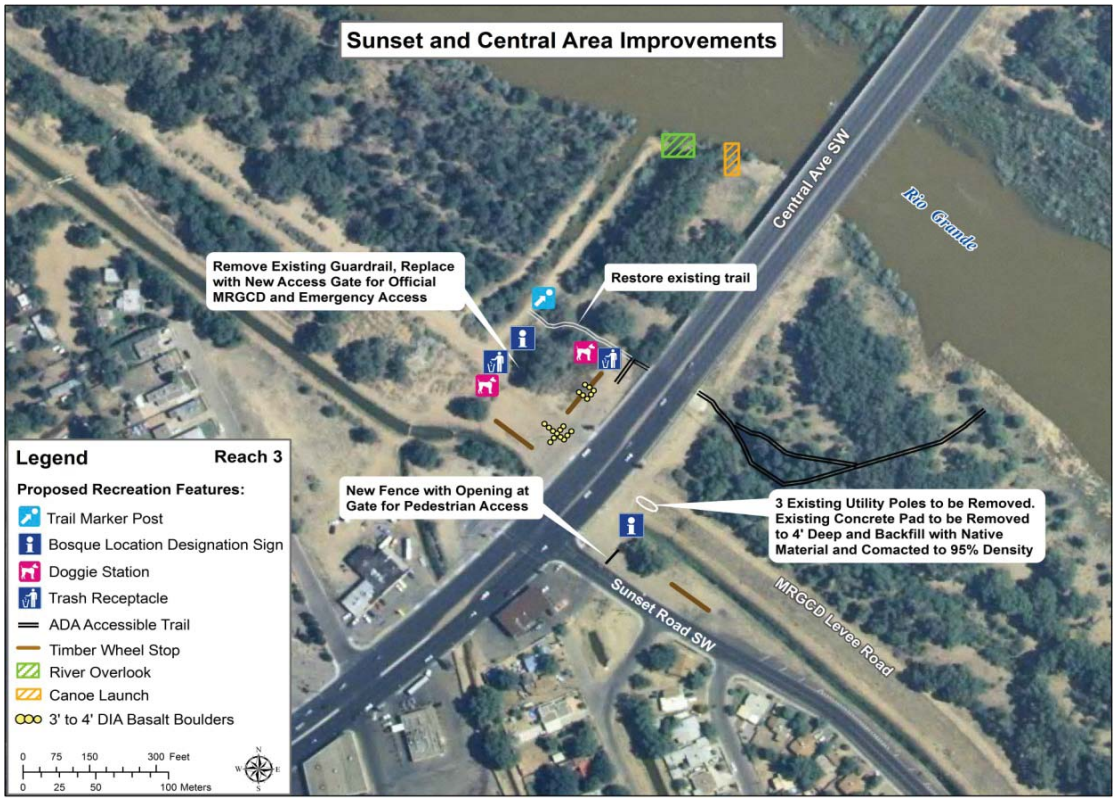

Figure 17. Sunset and Central Area Improvements.

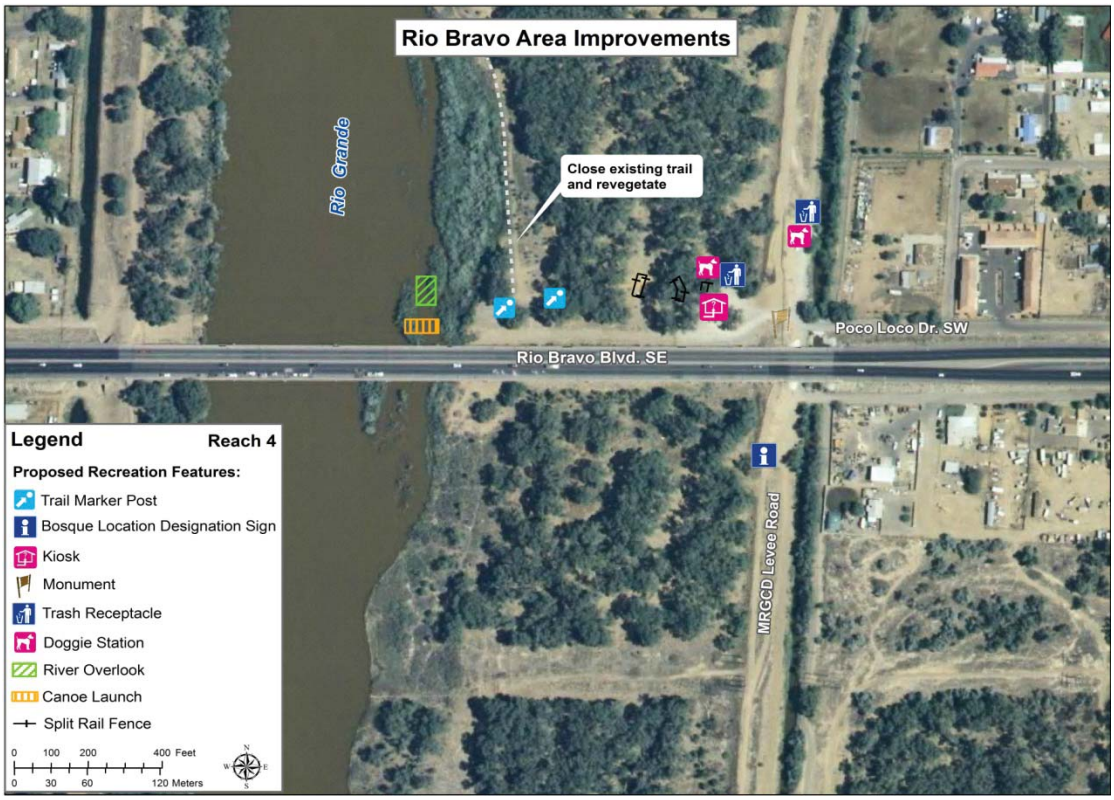

Figure 18. Rio Bravo North and South Area Improvements.

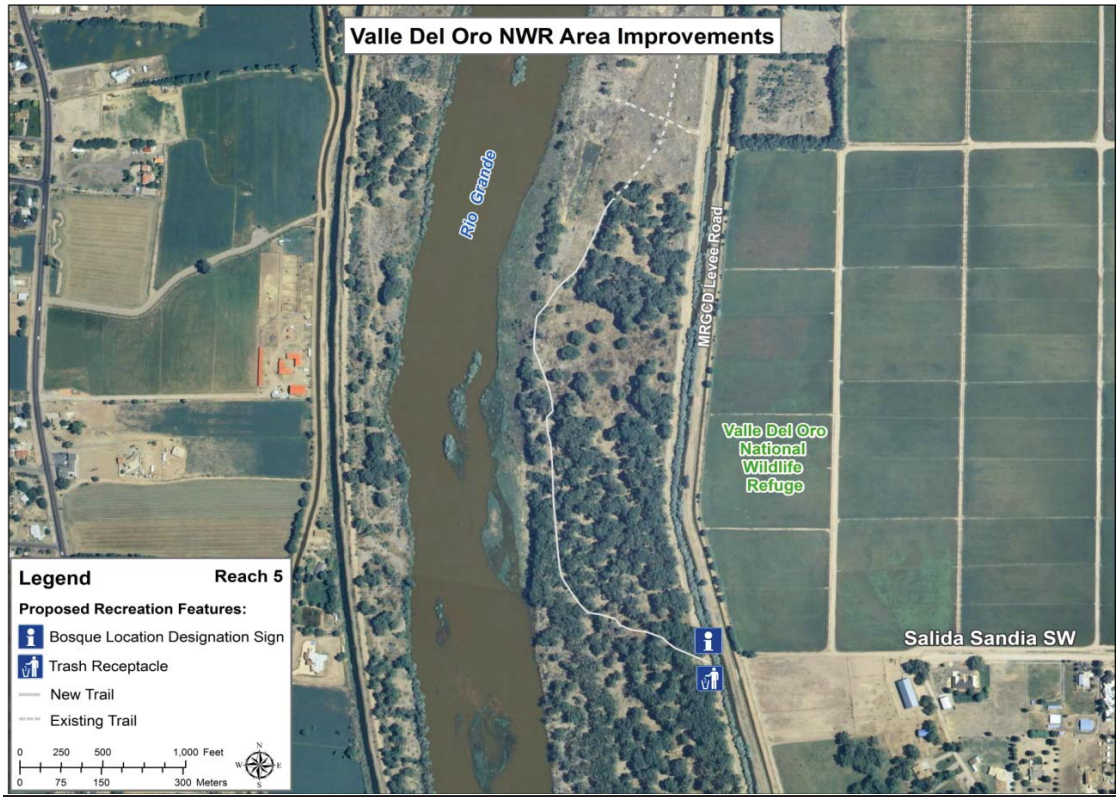

Figure 19. Valle Del Oro NWR Area Improvements.

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 (*Elaegnus 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 3includes 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 additional 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 and Providing Photographic Documentation of a Remnant of "Detroit rip-rap"* (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. On April 4, 2016, the New Mexico State Historic Preservation Officer concurred with the Corps determination of No Historic Properties Effected (HPD Consultation No. 103299, Appendix A).

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 converge under the CGP in the form on a Notice of Intent to U.S. Environmental Protection Agency (U.S. EPA) Region VI. A Storm Water Pollution Prevention Plan (SWPP) 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 stormwater, 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 ("cuckoo") (*Coccyzus americanus*) 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

Existing Environment	*Foreseeable Effects*
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 the 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 Preparers and Reviewers

Stephen Ryan, Biologist - Environmental Resources Section
Ondrea Hummel, Ecologist - Environmental Resources Section, Quality Control
Michael Porter, Fishery Biologist - Environmental Resources Section, Quality Control
Gregory Everhart, Archaeologist - Environmental Resources Section, Cultural Resources
Justin Reale, Environmental Engineer – Hazardous, Toxic and Radioactive Waste Section
Julie Alcon, Chief – Environmental Resources Section
Lynette Giesen, Project Manager

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 (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. 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, NMCRIS 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. Cultural Resources Coordination

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

March 21, 2016

103299

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

NMHPD Consultation Nos. 86258 and 96989

RECEIVED
AZ MAR 23 2016
HISTORIC PRESERVATION DIVISION

SPA Recd 4-6-2016
GDE

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

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 at two existing recreation areas (see Enclosure 1; NIAF Figures 1, 2, 3, and 4). The project sponsor is the Middle Rio Grande Conservancy District. Two parcels not previously surveyed are located in Bosque areas owned by the U.S. Bureau of Reclamation (USBR) / Middle Rio Grande Conservancy District (MRGCD). The MRGCD is the project sponsor. Other Recreation Phase project areas have been previously surveyed for cultural resources during other phases of work for the MRG Restoration and Bosque Wildfire projects (Marshall 2003; Everhart 2004; Estes 2005; Cordero et al. 2009).

Pursuant to 36 CFR 800.4, the area of potential effect for both project areas is a total of approximately 2.30 acres. At Project/Survey Area 1, located at the eastern end of La Entrada (road) in Corrales, the project plans to install a single, new Bosque Location Description Sign east of the private property fence line on BOR/MRGCD land on the west side of the Corrales Riverside Drain. The Riverside Drain's ditch banks are used by the public as a hiking trail. For Survey Area 1 the APE is approximately 0.1 acre.

Project/Survey Area 2 is the Calabacillas Arroyo Recreation Area located on the south side of and at the eastern end of Calabacillas Arroyo, near its confluence with the Rio Grande. The proposed construction area and APE is 2.2 acres, a total of 6.10 acres were surveyed. 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 project plans to entirely rehabilitate Project Area 2.

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 the Survey Area 1 and 2 project areas. The Corrales Main Canal (LA112683) and the Corrales Riverside Drain both occur near the project areas; however, neither would be affected by the proposed Recreation Phase construction. No previous surveys have been conducted near Survey Area 1. For Survey Area 2, nearby archaeological surveys include Marshall 1996 (NMCRIS No. 53844) and Kneebone and Everhart 1997 (NMCRIS No. 57594). The extensive 1930s MRGCD irrigation (canals, primary laterals and drainage ditches) and spoil bank levee system 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.

Project/Survey Areas 1 and 2 were both surveyed by a Corps archaeologist on December 15, 2015. The archaeological survey was conducted by walking linear transects spaced at 15 meters in width or less and the survey covered the entirety of both of these project areas plus a buffer. No artifacts or other cultural resources were observed during the survey of Survey Area 1. No archaeological sites or other historic properties were observed within the APE for Project/Survey Area 2; however, one isolated occurrence, IO No. 1, a historic trash dump was documented within Survey Area 2.

The Corps negative survey report entitled *A Cultural Resources Inventory of 6.2 Acres for the Middle Rio Grande Ecosystem Restoration Project, Recreation Phase, Bernalillo and Sandoval Counties, New Mexico, and Providing Photographic Documentation of a Remnant of "Detroit Rip-Rap"* (Corps Report No. USACE-ABQ-2016-001; NMCRIS No. 135187) is enclosed for your review (Enclosure 1). This report also provides additional documentation in the form of an accurate GPS location and color photographs for an isolated remnant of historic "Detroit rip-rap." Detroit rip-rap is a term used to describe old automobile bodies that have been cabled together and placed along river and stream backs to retard bank erosion. This Rio Grande Bosque example of Detroit rip-rap, located in the floodplain along the left-hand (east) side of the Rio Grande south of Central Avenue, was first documented by Marshall (2003:65) as IO No. 6. During the Bosque Wildfire Project, Estes (2005:33, 35) re-documented the car bodies and associated large blocks of hand mixed concrete and tiles as IO No. 23 in their Survey Area 10 near Tingley Beach. During Bosque Wildfire vegetation removal activities, the Corps' Contractor again found the car bodies and notified the Corps Project Manager. Along with the City of Albuquerque's archaeologist, Dr. Matthew Schmader, the Corps conducted a site visit on November 12, 2004, and took the representative photographs that are now included in our Corps survey report. On March 11, 2016, Corps archaeologists revisited the site and obtained accurate GPS and photographs. At the time (2004) the Corps Contractor was informed that the automobile bodies were to be left in place. However, since that time, concrete and other vegetative debris were to be removed from the area and although remnant pieces of automobile metal remains at the site, unfortunately the larger pieces of the automobile bodies have been removed. The remnants of this example of Detroit rip-rap is near existing hiking trails and in a location easily accessible to the public, and in the future could be interpreted and utilized as an educational tool.

Based upon the results of the NMCRIS data search and negative survey results and since IO No.1 is outside of the Calabacillas Arroyo construction area, the Corps is of the opinion that the proposed Recreation Phase construction would result in No Historic Properties Affected.

Pursuant to 36 CFR 800.2, the Corps submitted tribal scoping letters to tribes with interests in Bernalillo and Sandoval Counties and coordinated the projects with Sandia and Isleta Pueblos; the Corps has received no indication of tribal concerns for the Bosque Wildfire or the MRG Restoration Projects.

In summary, the Corps is seeking your concurrence in our determination that the proposed Recreation Phase construction would result in No Historic Properties Affected. The single historic artifact scatter, IO No. 1, located outside of the Calabacillas project area was documented in the field and is not considered eligible for listing on the National Register of Historic Places; the Corps is seeking your concurrence with this determination.

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 tribes interested in the project area would be conducted to determine the best course of action. If there are changes to the 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, located near Corrales, 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 julie.a.alcon@usace.army.mil. You may also provide comments to the above address.

Sincerely,

Julie Alcon
Chief, Environmental Resources Section

4/4/2014
Date

I CONCUR
for 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

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.:	2a. Lead (Sponsoring) Agency:	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:
135187	U.S. Army Corps of Engineers, Albuquerque District		USACE-ABQ-2016-001

4. Title of Report: A Cultural Resources Inventory of 6.2 Acres for the Middle Rio Grande Ecosystem Restoration Project, Recreation Phase, Bernalillo and Sandoval Counties, New Mexico, and Providing Photographic Documentation of a Remnant of "Detroit Rip-Rap"

Author(s) Gregory D. Everhart

5. Type of Report
X Negative ☐ **Positive**

6. Investigation Type
☐ Research Design **X** Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☐ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?):
Archaeological survey of 6.2 acres covering two existing, disturbed recreation areas and providing photographic documentation of a remnant of "Detroit rip-rap." The primary focus of this project's Recreation phase is to modernize/upgrade these existing recreation areas and trails by installing or rehabilitating parking areas, signage, picnic tables, doggie stations, trash receptacles, parking wheel stops, ADA access sidewalks, split rail fencing, etc., and installing new river overlook decks. Previous S.106 consultation for the extensive Middle Rio Grande Ecosystem Restoration and the Bosque Wildfire Projects covers portions of Sandia and Isleta Pueblos, Bernalillo and Sandoval Counties, and the City of Albuquerque in central New Mexico includes NMCRIS No's. 74700, 74948, 76137, 86258, 96989, 99314, 99730, 111640 and 127705.

8. Dates of Investigation:
from: August 26, 2015 to: March 9, 2016

9. Report Date: March 9, 2016

10. Performing Agency/Consultant:
U.S. Army Corps of Engineers, Albuquerque District
Principal Investigator: Gregory D. Everhart
Field Supervisor: Gregory D. Everhart
Field Personnel Names: Gregory D. Everhart and Jonathan E. Van Hoose

11. Performing Agency/Consultant Report No.:
USACE-ABQ-2016-001

12. Applicable Cultural Resource Permit No(s):
NM-16-193

13. Client/Customer (project proponent):
Contact:
Address:
Phone: ( )

14. Client/Customer Project No.:

15. Land Ownership Status ***(Must be indicated on project map):***

Land Owner	Acres Surveyed	Acres in APE
U.S. Bureau of Reclamation / MRGCD: Survey Area 1	0.1	0.1
U.S. Bureau of Reclamation / MRGCD: Survey Area 2	6.1	6.1
TOTALS	6.2	6.2

16 Records Search(es):

Date(s) of ARMS File Review August 26, 2015	Name of Reviewer(s) Gregory D. Everhart	
Date(s) of NR/SR File Review August 26, 2015	Name of Reviewer(s) Gregory D. Everhart	
Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency

17. Survey Data:

a. Source Graphics ☐ NAD 27 X NAD 83

X USGS 7.5' (1:24,000) topo map ☐ Other topo map, Scale:

X GPS Unit Accuracy X<1.0m ☐1-10m ☐ 10-100m ☐>100m

b. USGS 7.5' Topographic Map Name / USGS Quad Code

Alameda, NM	35106-b5
Los Griegos, NM	35106-b6

c. County(ies): Sandoval and Bernalillo

17. Survey Data (continued):

d. Nearest City or Town: Corrales and Albuquerque

e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼ , , .
			, , .
			, , .
			, , .
			, , .
			, , .
			, , .
			, , .
			, , .
			, , .

Projected legal description? Yes [ ] , No [ ] Unplatted [X]

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

Survey Areas 1 and 2 are both located within the unplatted, northern portion of the Town of Alameda Land Grant.

Survey Area 1 is located in Sandoval County along the west side of the Rio Grande at the eastern end of La Entrada (road) in Corrales.

Survey Area 2 is located in Bernalillo County along the west side of the Rio Grande at the eastern end and on the south side of Calabacillas Arroyo, near its confluence with the Rio Grande.

18. Survey Field Methods:

Intensity: X 100% coverage ☐ <100% coverage

Configuration: X block survey units ☐ linear survey units (l x w): ☐ other survey units (specify):

Scope: X non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: X systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 10 Crew Size: 1 Fieldwork Dates: December 15, 2015

Survey Person Hours: 1 Recording Person Hours: 2 Total Hours: 3

Additional Narrative: The intensive pedestrian survey was conducted by walking linear transects spaced 15 meters apart.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): Both project/survey areas are within or immediately adjacent to the Rio Grande bosque and are reported as occasionally flooded Vinton and Brazito soils. Vegetation in the disturbed areas includes cottonwood trees, some tamarisk, and various grasses and weeds.

20. a. Percent Ground Visibility: 80 b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): The recreation project areas have been disturbed from numerous modern construction and vegetation rehabilitation type activities.

21. CULTURAL RESOURCE FINDINGS ☐ Yes, See Page 3 X No, Discuss Why: **The ground surface in both project areas has been previously disturbed by grading and excavation with heavy equipment and Survey Area 2, located immediately adjacent to the Calabacillas Arroyo, has likely been significantly affected by stream flows on numerous occasions in the past.**	
22. Required Attachments (check all appropriate boxes): **X USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn** **X Copy of NMCRIS Mapserver Map Check** **☐ LA Site Forms - new sites (*with sketch map & topographic map*)** **☐ LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)** **☐ Historic Cultural Property Inventory Forms** **X List and Description of isolates, if applicable** **☐List and Description of Collections, if applicable**	**23. Other Attachments:** **X Photographs and Log** **☐ Other Attachments** ***(Describe)*:** **Representative photographs**
24. I certify the information provided above is correct and accurate and meets all applicable agency standards. **Principal Investigator/Responsible Archaeologist: Gregory D. Everhart** **Signature:** Gregory D Everhart **Date** 3-16-2016 **Title (if not PI):**	
25. Reviewing Agency: **U.S. Army Corps of Engineers, Albuquerque District** **Reviewer's Name/Date** Sarah Van Horse 3/16/16 **Accepted (✓) Rejected ( )** **Tribal Consultation (if applicable): X Yes ☐No**	**26. SHPO** **Reviewer's Name/Date:** **HPD Log #:** **SHPO File Location:** **Date sent to ARMS:**

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: **135187**	**2. Lead (Sponsoring) Agency:** **U.S. Army Corps of Engineers, Albuquerque District**	**3. Lead Agency Report No.:** **USACE-ABQ-2016-001**

SURVEY RESULTS:

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited (*site update form required*): **0**
Previously recorded sites not relocated *(site update form required):* 0
TOTAL SITES VISITED: 0
Total isolates recorded: 1 **Non-selective isolate recording?** ☐
Total structures recorded (*new and previously recorded, including acequias*): **0**

MANAGEMENT SUMMARY: This report is a part of the extensive Middle Rio Grande (MRG) Ecosystem Restoration Project located in the MRG Valley that covers portions of Sandia Pueblo, Sandoval and Bernalillo Counties, the City of Albuquerque, and Isleta Pueblo, in central New Mexico. As documented in the original EA, the Corps contracted with the University of New Mexico's Office of Contract Archeology (UNM-OCA), Albuquerque, to conduct the original archaeological survey for the proposed 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. The Corps initiated the archaeological surveys that covered areas burned by the June 2003 wildfire (Everhart 2004). Subsequent to the wildfire, the Bosque Wildfire Project identified project areas where vegetation thinning and other work was determined necessary to reduce the threat of wildfire; the archaeological survey of these project areas was also conducted by UNM-OCA (Estes 2005). The New Mexico State Historic Preservation Officer concurred with the Corps determinations of No Historic Properties Affected and No Adverse Effect to Historic Properties for the Bosque Wildfire Project (HPD Consultation No's. 070666, 070902, and 076136). Subsequent to these large surveys, numerous other small archaeological surveys were conducted by Marshall (2003) and the Corps that covered additional, small Bosque Wildfire and MRG Restoration project areas such as staging areas. The Corps submitted tribal scoping letters to tribes with interests in Bernalillo and Sandoval Counties and coordinated the projects with Sandia and Isleta Pueblos; the Corps has received no indication of tribal concerns for the Bosque Wildfire or the MRG Restoration Projects. The two current project areas are located in bosque areas owned by the U.S. Bureau of Reclamation (USBR) / Middle Rio Grande Conservancy District (MRGCD). The MRGCD is the project sponsor. Albuquerque Open Space and the Albuquerque Metropolitan Arroyo Flood Control Authority manage the Calabacillas Recreation Area.

The other Recreation Phase project areas have been previously surveyed for cultural resources during other phases of work for the MRG Restoration and Bosque Wildfire projects. In addition to the project areas previously surveyed, the Recreation Phase includes two small project areas that had not been previously surveyed for cultural resources (this report). These are referred to as Project/Survey Areas 1 and 2. Survey Area 1 is located at the eastern end of La Entrada (road) in Corrales (Figures 1 and 2), and Survey Area 2 is located on the south side of and at the eastern end of Calabacillas Arroyo, near its confluence with the Rio Grande (Figures 3 and 4).

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 the Survey Area 1 and 2 project areas. The Corrales Main Canal (LA112683) and the Corrales Riverside Drain both occur in the vicinity of the project areas; however, neither would be affected by the proposed Recreation Phase construction. No previous surveys have been conducted near Survey Area 1. For Survey Area 2, nearby archaeological surveys include Marshall 1996 (NMCRIS No. 53844) and Kneebone and Everhart 1997 (NMCRIS No. 57594). The extensive 1930s MRGCD irrigation (canals, primary laterals and drainage ditches) and spoil bank levee system 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.

Both of these Project/Survey Areas were surveyed by a Corps archaeologist on December 15, 2015. The archaeological survey was conducted by walking linear transects spaced at 15 meters in width or less and the survey

covered the entirety of both of these project areas plus a buffer.

Pursuant to 36 CFR 800.4, the area of potential effect for both project 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 BOR/MRGCD land on the west side of the Corrales Riverside Drain; the Riverside Drain's ditch banks are used by the public as a hiking trail. For Survey Area 1 the APE is approximately 0.1 acre. No artifacts or other cultural resources were observed during the survey of 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 area has also been affected by original construction activities and years of maintenance of the existing recreation area, construction and maintenance of the Corrales Riverside Drain, and more recently by re-vegetation activities as evidenced by the presence of surface waters lines for a tree plot located east of the parking lot. The project plans to rehabilitate the entire recreation area with grading and new gravel to level the existing 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 of Project/Survey Area 2. One isolated occurrence, IO No. 1, a historic trash dump was documented during the survey of Project/Survey Area 2. See IO No. 1 description below.

Based upon the results of the NMCRIS data search and negative survey results and since the Survey Area 2 IO No.1 is outside of the planned Calabacillas Arroyo construction area, the Corps is of the opinion that the proposed Recreation Phase construction would result in No Historic Properties Affected.

This report also provides additional documentation in the form of an accurate GPS location and color photographs for an isolated remnant of historic "Detroit rip-rap." Detroit rip-rap is a term used to describe old automobile bodies that have been cabled together and placed along river and stream backs to retard bank erosion. Although not very effective, this method of bank protection was used as early as the 1930s and 1940s but primarily during the 1950s and 1960s, and there are numerous examples across the West (Linenberger 1999; Kemmick 2012; Romero 2015). By the end of the 1960s, the Nation became more environmentally conscious and this resulted in the passage of the National Environmental Policy Act of 1969 (NEPA) and the Clear Water Act of 1972, and the use of Detroit rip-rap was abandoned. A Corps report methods of streambanik protection stated "Automobile bodies are included in this listing only because they have been used occasionally for erosion protection. No redeeming features beyond low cost can be claimed. Environmental considerations make their use as streambank protection objectionable" (USACE 1997:173).

This Rio Grande bosque example of Detroit rip-rap, located in the floodplain along the left-hand (east) side of the Rio Grande south of Central Avenue, was first documented by Marshall (2003:65) as Isolated Occurrence (IO) No. 6. Marshall (2003:65) thought the automobile bodies dated from the 1930s to the 1940s. During the Bosque Wildfire Project, Estes (2005:33, 35) re-documented the car bodies and associated large blocks of hand mixed concrete and tiles as IO No. 23 in their Survey Area 10 near Tingley Beach (the OCA-UNM GPS coordinates for IO No. 23 were however, incorrect). During Bosque Wildfire vegetation removal activities, the Corps' Contractor again found the car bodies and notified the Corps Project Manager. Along with the City of Albuquerque's archaeologist, Dr. Matthew Schmader, the Corps conducted a site visit on November 12, 2004, and took the attached photographs. This example of Detroit rip-rap is in a location easily accessible to the public and near existing hiking trails, and in the future could be interpreted and utilized as an educational tool. On March 11, 2016, Corps archaeologists revisited the site and obtained accurate GPS coordinates (UTM Coordinates, Datum: NAD83, Zone: 13N, Easting: 347041, Northing: 3884115; as depicted in Figure 5) and the representative photographs attached. At the time (2004) the Corps Contractor was informed that the automobile bodies were to be left in place. However, since that time, concrete and other vegetative debris were to be removed from the area and although remnant pieces of automobile metal remains at the site, unfortunately the larger pieces of the automobile bodies have been removed.

The remnants of this example of Detroit rip-rap is near existing hiking trails and in a location easily accessible to the public, and in the future could be interpreted and utilized as an educational tool.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

MONITORING LA NUMBER LOG *(site form required)*

Sites Discovered (*site form required*) **:** **Previously recorded sites** ***(Site update form required):***

LA No.	Field/Agency No.	LA No.	Field/Agency No.

Areas outside known nearby site boundaries monitored? Yes ☐, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG (*site form required)*

Tested LA number(s)	Excavated LA number(s)

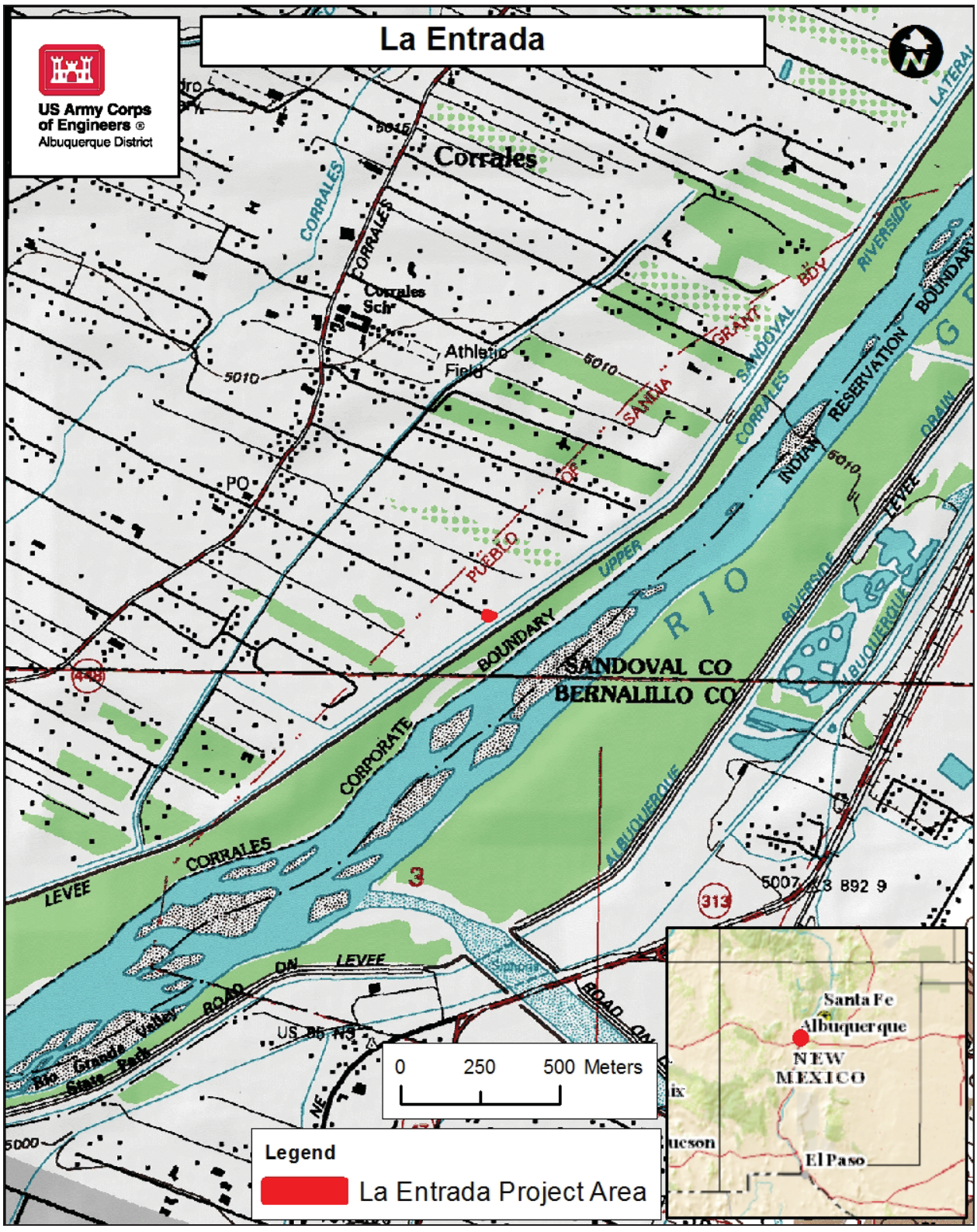

Figure 1. MRG Ecosystem Restoration Project's, Recreation Phase, La Entrada (road) project area.

Figure 2. MRG Ecosystem Restoration Project's, Recreation Phase, La Entrada (road) survey/project area in green.

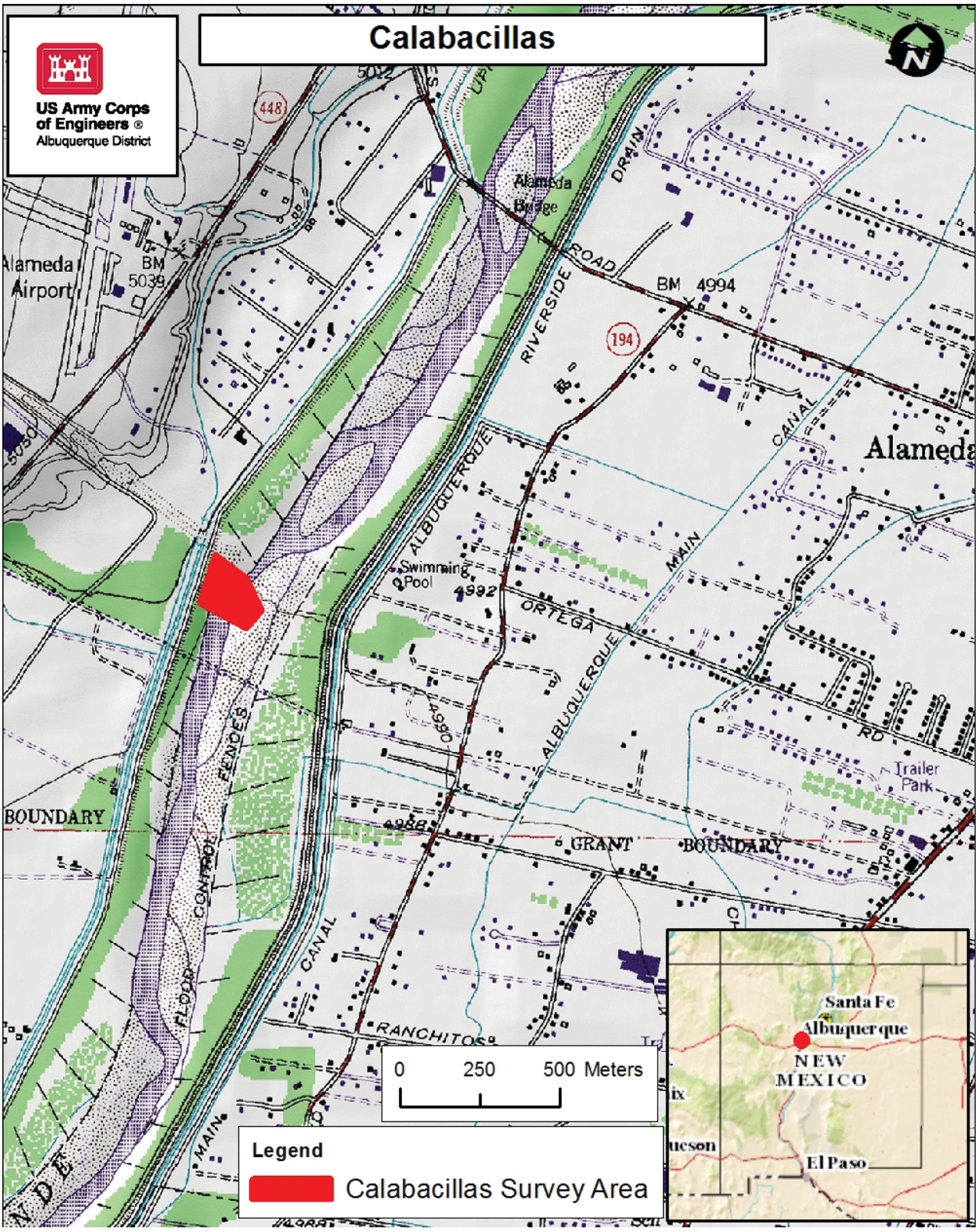

Figure 3. MRG Ecosystem Restoration Project's, Recreation Phase Calabacillas Arroyo project area.

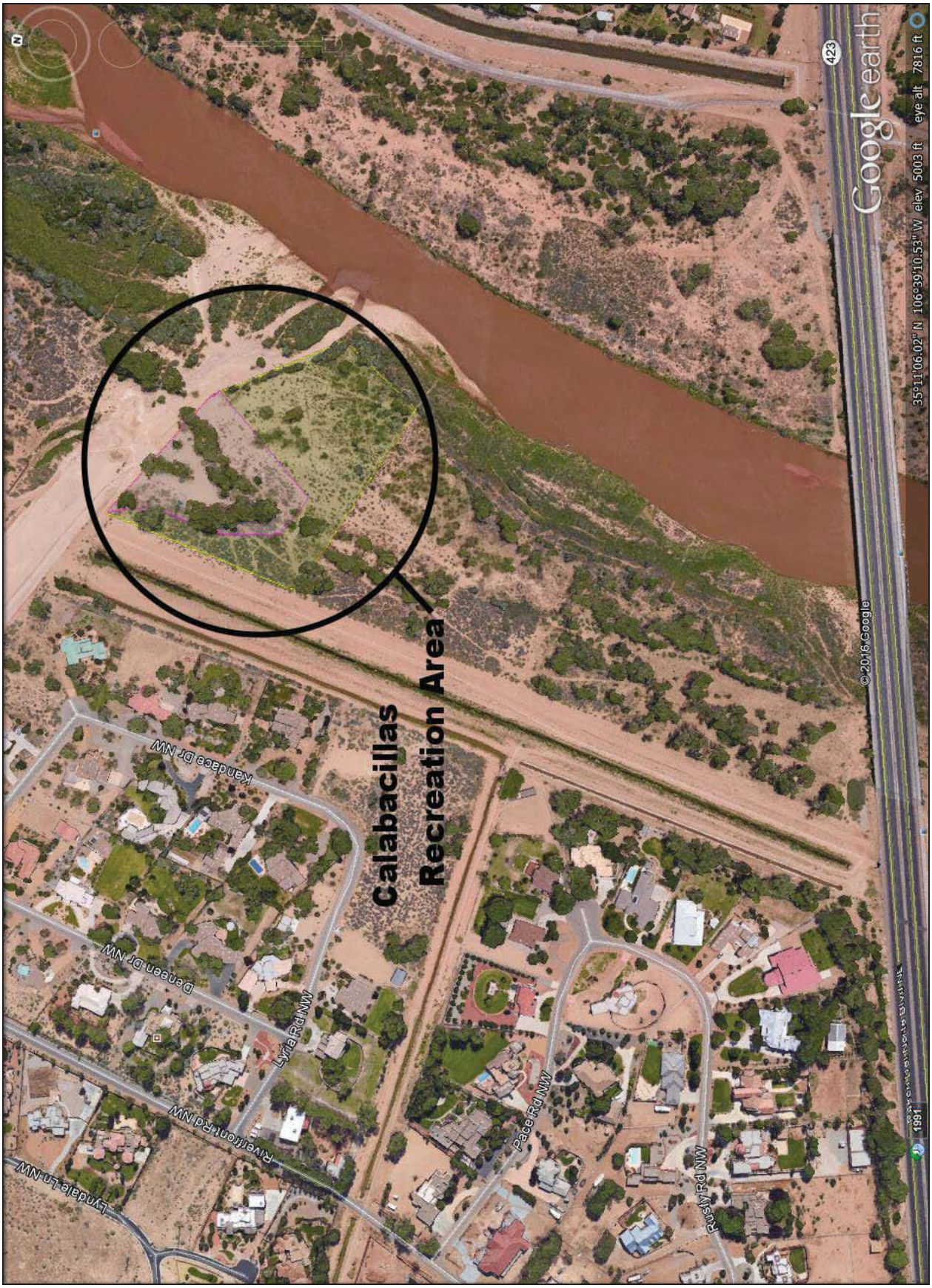

Figure 4. MRG Ecosystem Restoration Project's, Recreation Phase, Calabacillas Recreation Area. Survey area is in green and Project Area is in purple.

--This map has been redacted--

Figure 4a. MRG Ecosystem Restoration Project's, Recreation Phase, Calabacillas Recreation Area. Survey area is in green and Project Area is in purple; IO No.1 is in red.

--This map has been redacted--

MRG Restoration – La Entrada (road); NMCRIS Search - August 26, 2015; gde

For Official Use Only

Public Disclosure of
Archaeological Site Locations
is Prohibited by 16 U.S.C. 470hh (36 CFR 296.18)

--This map has been redacted--

MRG Restoration –Calabacillas Arroyo; NMCRIS Search - August 26, 2015; gde

Representative Photographs of Calabacillas Arroyo Survey Area

Photograph No. 12. Surface water lines in re-vegetation tree plot. December 15, 2015.

Photograph No. 15. Tree root ground-down by heavy vegetation thinning equipment. December 15, 2015.

Photograph No. 20. Existing recreation/parking area on the right with proposed trails and picnic tables to be constructed on the left of the tree line; view to the southwest. December 15, 2015.

Photograph No. 24. Guard rail on the south side of the existing recreation/parking area, view to the north. December 15, 2015.

Table 1: Isolated Occurrence No. 1 - Artifact Estimate

Generalized Artifact Descriptions	estimated numbers
window glass	10s
bottle/jar glass	100s
whole bottles/jars	0
ceramics	8
metal cans/buckets/barrels	1
other metal	0
vehicle parts	0
bricks/blocks/concrete	10s
building materials	10s
plastic	0

IO No. 1 Description: 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 (see representative photographs below). The scatter measures approximately 12 meters N-S by 20 meters E-W and is located along the east side of the Corrales Riverside Drain service road and eastward into an area of sagebrush. It appears that this trash dump may have originally been dumped at the side of the road and after years of maintenance and recreational use of the area, the artifacts have moved down slope. 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 IO No. 1 scatter is generally composed of several glass shards of Nehi, Pepsi, and other soda, wine, and beer bottle glass (100s); clear, window glass; blue glass (?Vicks, 1); cream glass (1); pieces of ceramic dinnerware (6); a piece of glazed crock (1); as well as a few pieces of wire; asbestos tile; and fragments of bricks and concrete blocks; and a single piece of asphalt shingle. The glass artifacts may have been several whole bottles when dumped but have been broken since that time. There was also an old cigarette lighter and one metal food can.

Representative Photographs of IO No. 1

Photograph No. 25. Example of primarily glass artifact scatter. December 15, 2015.

Photograph No. 27. Example of soda bottle glass artifact. December 15, 2015.

Photograph No. 28. Example of primarily glass artifact scatter. December 15, 2015.

Photograph No. 30. Example of primarily glass artifact scatter. December 15, 2015.

Photograph No. 32. A Clorox bottle base that was made between 1945 and 1950. December 15, 2015.

Photograph No. 13. An old cigarette lighter. December 15, 2015.

Figure 5. Remnant of "Detroit rip-rap" located approximately 0.25 mile south of the Central Ave. bridge.

Representative 2004 Photographs of a remnant of "Detroit rip-rap"

Photograph 1. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the south.

Photograph 5. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the northeast.

Photograph 6. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the northeast.

Photograph 7. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the northeast.

Photograph 8. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the north.

Photograph 9. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 11-12-2004. View to the northeast.

Representative 2016 Photographs of a remnant of "Detroit rip-rap"

Photograph 1. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 03-11-2016. View to the north. Compare three trees with 2004 Photograph No. 8.

Photograph 4. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 03-11-2016. View to the east. Compare with 2004 Photograph No. 7.

Photograph 5. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 03-11-2016. View to the northeast.

Photograph 6. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 03-11-2016. View to the south. Compare with 2004 Photograph No. 1.

Photograph 19. Overview of Remnant Segment of "Detroit Rip-Rap." Corps Photograph, 03-11-2016. View to the north. Note: all previous 2004 and 2016 photographs are north of the existing boardwalk leading to the Tingley Boardwalk and Overlook; this automobile body is on the south side of the boardwalk.

References

The Clorox Company
2016 Bottle Guide. https://www.thecloroxcompany.com/company/heritage/bottle-guide/ Accessed February 11, 2016.

Cordero, Robin M., Tracy Steffgen, and Patrick Hogan
2009 **A 667.6 Acre Cultural Resurce 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.

Kemmick, Ed
2012 Rusting Hulks of Classic Cars a Common sight on Yellowstone River. In Billings Gazette, http://billingsgazette.com/news/local/rusting-hulks-of-classic-cars-a-common-sight-on-yellowstone/article_96d6cfcd-e28b-5454-a62f-0b36e2b6d27b.html. Accessed March 1, 2016.

Linenberger, Toni Rae\
1999 Hammond Project. U.S. Bureau of Reclamation. http://www.usbr.gov/projects/Project.jsp?proj_Name=Hammond+Project Accessed March 1, 2016.

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 Bohannan-Huston Inc., Albuquerque. Submitted to the U.S. Army Corps of Engineers, Albuquerque District, Albuquerque.

Romero, Jonathan
2015 Junk Cars Emerge from River's Banks. In **Durango Herald**, http://www.durangoherald.com/article/20151002/NEWS01/151009927/Junk-cars-emerge-from-river%E2%80%99s-banks- . Accessed March 1, 2016.

U.S. Army Corps of Engineers (USACE; Biedenharn, David S., Charles M. Elliott, and Chester C. Watson)
1997 **The WES Stream Investigation and Streambank Stabilization Handbook**. U.S. Army Engineer, Waterways Experiments Station (WES), Vicksburg, Mississippi. *chl.erdc.usace.army.mil/Media/2/8/7/**Streambank**Manual.pdf.*

Appendix B. Clean Water Act Section 404

US Army Corps of Engineers®
Albuquerque District

Nationwide Permit Summary

NATIONWIDE PERMIT 33
Temporary Construction, Access, and Dewatering
Effective Date: March 19, 2012
Expiration Date: March 18, 2017
(NWP Final Notice, 77 FR 10278, para. 33)

Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to an area that has no waters of the United States, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a separate section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

NATIONWIDE PERMIT GENERAL CONDITIONS

General Conditions: The following general conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate

through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects from Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100–Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at *http://www.fws.gov/*, or *http://www.fws.gov/ipac* and *http://www.noaa.gov/fisheries.html*, respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the

Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. **Historic Properties.** (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h–2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum

extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2)–(14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. **Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific

conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. **Pre-Construction Notification.** (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the

permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project’s purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1⁄10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs(b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed federal project.

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: reestablishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete

project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent—meaning bordering, contiguous, or neighboring—to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)–(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

ADDITIONAL INFORMATION

For additional information concerning the nationwide permits or for a written determination regarding a specific project, please contact the office below:

In New Mexico:

Chief, Regulatory Division
Albuquerque District, US Army Corps of Engineers
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435
Telephone: (505) 342-3282

In Southeastern Colorado:

Southern Colorado Regulatory Office
200 S. Santa Fe Avenue, Suite 301
Pueblo, CO 81003
Telephone: (719) 543-9459

In Southern New Mexico and Western Texas:

Las Cruses Regulatory Office
505 S. Main St., Suite 142
Las Cruces, NM 88001
Telephone: (575) 556-9939

In Northwestern New Mexico and within the San Luis Valley of Colorado:

Durango Regulatory Office
1970 E. 3rd Avenue, Suite 109
Durango, CO 81301
Telephone: (970) 259-1582

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be accessed on our Internet page: http://www.spa.usace.army.mil/reg/

This nationwide permit is effective March 19, 2012, and expires on March 18, 2017.

Summary Version: March 19, 2012

US Army Corps of Engineers®
Albuquerque District

Nationwide Permit Summary

NATIONWIDE PERMIT 36
Boat Ramps
Effective Date: March 19, 2012
Expiration Date: March 18, 2017
(NWP Final Notice, 77 FR 10278, para. 36)

Boat Ramps. Activities required for the construction of boat ramps, provided the activity meets all of the following criteria:

(a) The discharge into waters of the United States does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or in the form of precast concrete planks or slabs, unless the district engineer waives the 50 cubic yard limit by making a written determination concluding that the discharge will result in minimal adverse effects;

(b) The boat ramp does not exceed 20 feet in width, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;

(c) The base material is crushed stone, gravel or other suitable material;

(d) The excavation is limited to the area necessary for site preparation and all excavated material is removed to an area that has no waters of the United States; and,

(e) No material is placed in special aquatic sites, including wetlands. The use of unsuitable material that is structurally unstable is not authorized. If dredging in navigable waters of the United States is necessary to provide access to the boat ramp, the dredging must be authorized by another NWP, a regional general permit, or an individual permit.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge into waters of the United States exceeds 50 cubic yards, or (2) the boat ramp exceeds 20 feet in width. (See general condition 31.) (Sections 10 and 404)

NATIONWIDE PERMIT GENERAL CONDITIONS

General Conditions: The following general conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary

crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects from Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100–Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at *http://www.fws.gov/*, or *http://www.fws.gov/ipac* and *http://www.noaa.gov/fisheries.html*, respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the

Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. **Historic Properties.** (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h–2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum

extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2)–(14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. **Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific

conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. **Pre-Construction Notification.** (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the

permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project’s purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1⁄10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs(b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed federal project.

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: reestablishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete

project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent—meaning bordering, contiguous, or neighboring—to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)–(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

ADDITIONAL INFORMATION

For additional information concerning the nationwide permits or for a written determination regarding a specific project, please contact the office below:

In New Mexico:

Chief, Regulatory Division
Albuquerque District, US Army Corps of Engineers
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435
Telephone: (505) 342-3282

In Southeastern Colorado:

Southern Colorado Regulatory Office
200 S. Santa Fe Avenue, Suite 301
Pueblo, CO 81003
Telephone: (719) 543-9459

In Southern New Mexico and Western Texas:

Las Cruses Regulatory Office
505 S. Main St., Suite 142
Las Cruces, NM 88001
Telephone: (575) 556-9939

In Northwestern New Mexico and within the San Luis Valley of Colorado:

Durango Regulatory Office
1970 E. 3rd Avenue, Suite 109
Durango, CO 81301
Telephone: (970) 259-1582

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be accessed on our Internet page: http://www.spa.usace.army.mil/reg/

This nationwide permit is effective March 19, 2012, and expires on March 18, 2017.

Summary Version: March 19, 2012

Appendix C. Public and Agency Comments (placeholder)