Draft Environmental Assessment Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) Calabacillas Arroyo Grade Control and Bank Protection Project

HMGP 4652-0012-NM (1)

Bernalillo County, New Mexico April 2025



Federal Emergency Management Agency – Region 6 U.S. Department of Homeland Security 800 North Loop 288 Denton, TX 76209

Prepared for: AMAFCA 2600 Prospect Ave NE, Albuquerque, NM 87107



Prepared by:

Tetra Tech, Inc. 6121 Indian School Rd. NE, Suite 205 Albuquerque, NM 87110



Bohannan Huston, Inc. 7500 Jefferson St. NE Albuquerque, NM 87109

Bohannan 🛦 Huston

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Project Authority	1
1.2 Project Location	2
2.0 PURPOSE AND NEED	4
3.0 ALTERNATIVES	5
3.1 No Action Alternative	5
3.2 Proposed Alternative	5
3.3 Alternatives Analyzed and Dismissed	7
3.3.1 Alternative 1	7
4.0 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED	7
4.1 Physical Resources	7
4.1.1 Geology and Soils	7
4.1.2 Prime and Unique Farmland	9
4.1.3 Air Quality	9
4.2 Water Resources	9
4.2.1 Surface Water, Groundwater, and Water Quality	9
4.2.2 Wetlands	10
4.2.3 Floodplains	11
4.3 Biological Resources	14
4.3.1 Threatened and Endangered Species and Critical Habitat	14
4.3.2 Birds of Concern	16
4.3.3 Vegetation	17
4.3.4 Fish and Wildlife	18
4.4 Cultural Resources	19
4.4.1 Historic Properties	19
4.4.2 Class I Records Review	19
4.4.3 Class III Cultural Resources Survey	21
4.4.4 Tribal Cultural Resources	21
4.5 Socioeconomic Resources	22
4.5.2 Hazardous Materials and Waste	22
4.5.3 Noise	23
4.5.4 Traffic	23

4.5.5 Public Services and Utilities	24
4.5.6 Public Health and Safety	24
4.6 Summary of Potential Environmental Impacts	25
5.0 CUMULATIVE IMPACTS	27
6.0 AGENCY COORDINATION, PUBLUC INVOLVEMENT AND PERMITS	28
6.1 Agency Scoping	28
6.2 Agency Permit Coordination	28
6.3 Public Notice	28
7.0 REFERENCES	30
8.0 LIST OF PREPARERS AND REVIEWERS	32

LIST OF TABLES

4
8
14
16
18
20
25

LIST OF FIGURES

$\mathbf{F}_{\mathbf{A}}$ and $\mathbf{I}_{\mathbf{A}}$ $\mathbf{D}_{\mathbf{A}}$ $\mathbf{I}_{\mathbf{A}}$ $\mathbf{A}_{\mathbf{A}}$ and $\mathbf{M}_{\mathbf{A}}$	2
Figure 1. Project Area Man	.1
$1 \operatorname{fguit}(1, 1) \operatorname{fout}(1, 1) \operatorname{fuu}(1, 1$	

APPENDICES

APPENDIX A: USACE Permit; Section 106 SHPO and Tribal Consultation Responses APPENDIX B: FEMA Flood Insurance Rate Maps APPENDIX C: IPAC/BISON-NM Report/Rare Plants APPENDIX D: Species List From Calabacillas Site Visit APPENDIX E: Photo Log From Calabacillas Site Visit APPENDIX F: Agency Scoping Letters APPENDIX G: Draft Notice Of Availability APPENDIX H: Draft FONSI

ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition		
AMAFCA	Albuquerque Metropolitan Arroyo Flood Control Authority		
BMP	Best Management Practice		
CEQ	Council of Environmental Quality		
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act		
CFR	Code of Federal Regulations		
cfs	Cubic feet per second		
CGP	Construction General Permit		
CWA	Clean Water Act		
EA	Environmental Assessment		
EO	Executive Order		
EPA	Environmental Protection Agency		
ESA	Endangered Species Act		
FEMA	Federal Emergency Management Agency		
FPPA	Farmland Protection Policy Act		
FONSI	Finding of No Significant Impact		
GCS	Grade Control Structures		
HMGP	Hazard Mitigation Grant Program		
MBTA	Migratory Bird Treaty Act		
NAD	North American Datum		
NAAQS	National Ambient Air Quality Standards		
NOAA	National Oceanic and Atmospheric Administration		
NEPA	National Environmental Policy Act		
NMDHSEM	New Mexico Department of Homeland Security and Emergency Management		
NPDES	National Pollution Discharge Elimination System		
NRCS	Natural Resources Conservation Service		
OHWM	Ordinary High-Water Mark		
OSHA	Occupational Safety and Health Administration		
SWPPP	Stormwater Pollution Prevention Plan		
TSCA	Toxic Substances Control Act		

Acronyms/Abbreviations	Definition	
USACE	United States Army Corps of Engineers	
USDA	United States Department of Agriculture	
UTM	Universal Transverse Mercator	
WOTUS	Waters of the United States	

1.0 INTRODUCTION

The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) is proposing two grade control structures (GCS) and bank protection within the Arroyo de las Calabacillas (Calabacillas Arroyo, Calabacillas, or arroyo) between Unser Boulevard and Golf Course Road in Albuquerque, New Mexico. Multiple flood protection GCS already exist within the Calabacillas in this reach, but certain areas do not meet the required flood control standards.

The infrastructure improvements proposed were recommended in the Calabacillas Arroyo Facility Plan Proposed Conditions Report: Phase III, Task B (AMAFCA, 2018), which identified reaches of the Calabacillas prone to overtopping during 100-year storm events and associated areas of imminent vertical and lateral migration and erosion. Within the project area, the Calabacillas is narrowly constrained on both sides by development including residential neighborhoods, parks, and commercial properties. The proposed project would mitigate flooding and erosion to protect surrounding life and property utilizing GCSs and bank protection. The proposed bank protection would protect buildings adjacent to the arroyo by containing 100-year flows within the main floodway and prevent erosion from expanding and compromising building foundations. The two proposed GCSs would stabilize the slope of the Calabacillas in this reach, keeping the velocities and sediment loads within the arroyo channel at consistent and manageable rates.

1.1 PROJECT AUTHORITY

AMAFCA is a government entity created in 1963 by the New Mexico State Legislature with authority to manage and protect persons and property from flash floods, and to maintain flood control facilities within the City of Albuquerque and neighboring areas in Bernalillo County. AMAFCA applied for and is currently under review for Federal Emergency Management Agency (FEMA) funding through the New Mexico Department of Homeland Security and Emergency Management (NMDHSEM) under FEMA's Hazard Mitigation Grant Program (HMGP). This program provides grants to states and local governments to implement long-term hazard mitigation measures. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) regulations to implement NEPA, and FEMA's procedures for implementing NEPA (FEMA Instruction 108-1-1). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed Calabacillas Arroyo Grade Control Structures 3a1 3b1 Project. FEMA would utilize the findings in this EA to determine whether preparation of an Environmental Impact Statement (EIS) is warranted, or a Finding of No Significant Impact (FONSI) is acceptable. FEMA is aware of the November 12, 2024 decision in *Marin Audubon Society v. Federal Aviation Administration*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, FEMA has

nonetheless elected to follow those regulations at Title 40 Code of Federal Regulations (C.F.R.) Parts 1500–1508, in addition to the Department of Homeland Security's (DHS) and FEMA's procedures implementing NEPA found in DHS Directive 023-01-01, DHS Instruction 023-01-001-01, FEMA Directive 108-1, and FEMA Instruction 108-1-1to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

1.2 PROJECT LOCATION

The proposed project area is located along the Calabacillas Arroyo in northwest Albuquerque, NM between Unser Blvd., and Golf Course Rd. (bordered between McMahon Blvd. and Irving Blvd. as shown in Figure 1). The total project area is approximately 109 acres and is located within the Los Griegos United States Geological Survey (USGS) 7.5-minute topographical quadrangle (U.S. Geological Survey, 2024) in Township 11N Range 2E Section 00. Approximate elevation within the project area is 5,200 feet above mean sea level (AMSL).

The project area is directly downstream of Swinburne Dam, an AMAFCA facility. The Calabacillas Arroyo is a tributary to the Rio Grande and the project area is located approximately 1.8 miles upstream from the confluence with the Rio Grande.

The City of Albuquerque owns the land within the Calabacillas Arroyo and AMAFCA maintains a drainage easement over a majority of the City of Albuquerque-owned land for operation, maintenance, and inspection of the Calabacillas Arroyo. The project area is surrounded to the north and south by residential areas and is adjacent to two public parks: Tuscany Park and Paradise Meadows Park. Walking paths are present within the Calabacillas, and the area is used for recreation.



Figure 1: Project Area Map

2.0 PURPOSE AND NEED

Through HMGP, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures. The HMGP grant is designed to assist states, U.S. territories, federally recognized tribes, and local communities in implementing a sustained pre-disaster natural hazard mitigation program. The goal of HMGP is to reduce overall risk to the population and structures from future hazardous events, while also reducing reliance on federal funding in future disasters. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

The Calabacillas is a large ephemeral arroyo near the northwest border of Albuquerque's city limits that is bounded by significant residential and commercial development and outfalls within the Rio Grande Valley State Park. The current infrastructure in this reach cannot contain 100-year floods within the main floodway with the necessary freeboard required by AMAFCA and has experienced repetitive bank erosion, as shown in Table 1. The purpose of this project is to mitigate flooding and provide erosion protection that would withstand a 100-year storm event. There is a need to prevent the Calabacillas Arroyo from incising vertically and meandering laterally into existing and future developments and related infrastructure.

The Calabacillas and other AMAFCA infrastructure within the arroyo have experienced a history of hazards and subsequent damages, as outlined in Table 1.

Date	Duration (Days)	Loss (\$)	Description
8/6/2006	1 day (3 hrs)	\$8,000 (yearly O&M typical)	Storm accumulation approx. 1.97 inches (100 yr event). Typical yearly repairs made to bank protection and channel banks were regraded to fix erosion.
*7/9/2006	1 day (3 hrs)	\$58,000 (from 2022 COA Hazard Mitigation Plan)	Storm accumulation approx. 2.22 inches (100 yr event). Major repairs were made to riprap bank protection, and channel banks were regraded after erosion.
12/17/2010	1 day (5 hrs)	\$8,000 (yearly O&M typical)	Storm accumulation approx. 1.6 inches $(25 - 50 \text{ yr} \text{ event})$. Typical yearly repairs made to bank protection and channel banks were regraded to fix erosion.
7/27/2013	1 day (3 hrs)	\$8,000 (yearly O&M typical)	Storm accumulation approx. 2.1 inches (100 yr event). Typical yearly repairs made to bank protection and channel banks were regraded to fix erosion.

Table 1: History of Hazards and Damages for Arroyo de las Calabacillas

Date	Duration (Days)	Loss (\$)	Description
*9/10/2013 – 9/14/2013	4 days	\$40,000 (from 2022 COA Hazard Mitigation Plan)	Storm system accumulated approx. five inches of rain. Peak rain in one day was 1.6 inches $(25 - 50 \text{ yr event})$. Major repairs were made to pipeline failures, riprap bank protection, and channel banks were regraded after erosion.
10/24/2018	1 day (5 hrs)	\$8,000 (yearly O&M typical)	Storm accumulation approx. 1.74 inches $(50 - 100 \text{ yr} \text{ event})$. Typical yearly repairs made to bank protection and channel banks were regraded to fix erosion.

*Losses during these events include damages typical along the entire arroyo. All other events listed are average maintenance costs for just the arroyo within the project area.

Due to the severity of recent flooding events and identified degradation of the bed and banks of the arroyo, stabilization and bank protection is necessary for the protection of the surrounding community and future developments.

Failure to stabilize the arroyo could result in lateral channel migration into existing infrastructure during storm events and subsequent erosion that may affect the integrity of building foundations. There is an increased potential for expensive repairs and mitigation efforts in the future without implementation of the project.

3.0 ALTERNATIVES

Three alternatives were considered for this project: No Action Alternative, the Proposed Alternative, and Alternative 1.

3.1 NO ACTION ALTERNATIVE

The No Action alternative would not implement stabilization or bank protection measures along the project reach of the Calabacillas Arroyo. Therefore, this reach would be prone to hazards such as bank overtopping and inundation of surrounding properties, erosion, and destabilization of banks (which are supporting foundations of homes), or flooding and damage to private property and government property (such as roadways and parks). Any incisions within the arroyo would continue to degrade creating a deeper and steeper channel that is inaccessible to the public and AMAFCA maintenance crews.

3.2 **PROPOSED ALTERNATIVE**

The proposed alternative includes the construction of two new grade control structures (GCSs), GCS 3a1 and GCS 3b1, as well as linear bank protection, erosion control, and access and maintenance roads within the Calabacillas. These structures are necessary to provide vertical/lateral erosion control, overall bank protection, and channel stability to the Calabacillas. Currently, this portion of the Calabacillas is narrowly constrained on both banks by development including residential neighborhoods, parks, and commercial properties. The specific project components are listed below:

- Grade Control Structure (GCS) 3a1 consisting of one 8-foot drop located between GCS 2 and GCS 3a.
- GCS 3b1 consisting of one 4-foot drop located between GCS 3 and GCS 3b.
- Approximately 300 feet of linear bank protection along the right bank upstream of GCS 2b.
- Approximately 550 feet of linear bank protection along the right and left banks between GCS 2 and GCS 3a1.
- Approximately 300 feet of linear bank protection along the right bank downstream of GCS 3a1.
- Additional bank protection along the left bank of GCS 3a and additional toe protection downstream of GCS 3a.
- Additional dumped riprap erosion control pad on the left toe upstream of GCS 3.
- Approximately 500 feet of linear bank protection along the right and left banks between GCS3 and GCS 3b1.
- Approximately 300 feet of linear bank protection along the right bank between GCS 3b1 and GCS 3b.
- Additional toe protection downstream of GCS 3b.
- Access and maintenance roads upstream and around GCS 3a1.
- Access and maintenance roads around GCS 3b1.

The proposed bank protection would be elevated to provide a minimum of 2-feet of freeboard and extend down three feet for scour protection during the 100-yr event. Without these buffered protections, floods would overtop, undermine, or flank existing structures allowing the arroyo to meander until it compromises building foundations, property walls, roads, etc.

The two proposed GCSs would serve a similar purpose of containing the flows within the narrow Calabacillas floodway with adequate freeboard. Additionally, they would stabilize the arroyo slope, encouraging water flow to reach equilibrium instead of alternating between states of aggradation and degradation. Equilibrium slopes provide predictable velocities, water surface elevations, and reduce maintenance efforts to keep infrastructure operable and surrounding properties and lives safe.

Excavators and backhoes would be the equipment used to construct the project. The project consists of 56,000 CY of excavation and backfill, and 16,100 CY of excavation and disposal. A disposal site has not been determined. Specific sequencing would be determined by the contractor, but construction of access roads occurs first followed by clearing and grubbing, excavation, installation of infrastructure, backfill, and seeding.

The proposed project seeks to mitigate flooding and subsequent erosion, which could severely impact surrounding residential properties and other infrastructure. The combination of grade control structures and bank protection would be constructed with both grouted and dumped riprap to maintain stylistic continuity with the existing infrastructure. Scour depth gages, which serve as an additional safety measure, would be installed at several key locations to monitor changes in the channel bed and inform maintenance operations.

3.3 ALTERNATIVES ANALYZED AND DISMISSED

3.3.1 Alternative 1

Alternative 1 includes lining the entire reach of the Calabacillas in concrete, permanently containing flooding and stabilizing the banks. This alternative would provide a permanent solution to any potential vertical or lateral erosion within and surrounding the Calabacillas. The Calabacillas would be reconstructed, straightened out, and graded into a trapezoidal shape for efficiency. This alternative would have a large footprint and require significant excavation and re-grading and uses concrete instead of utilizing recycled materials (riprap). Concrete lining the arroyo would prevent infiltration of water into the soils and would negatively affect the surrounding native vegetation and species. Without infiltration, water velocities would significantly increase and could pose a safety hazard.

Major drawbacks for this type of construction includes the loss of ecosystem function (lack of infiltration of surface water into groundwater) and the cost of concrete lining, which is infeasible. Therefore, this alternative will not be analyzed further in this EA.

4.0 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED

4.1 PHYSICAL RESOURCES

4.1.1 Geology and Soils

According to the Preliminary Geologic Map of the Albuquerque-Rio Rancho Metropolitan Area and Vicinity map by NM Bureau of Geology and Mineral Resources (New Mexico Bureau of Geology and Mineral Resources, 2006), the following geologic formations are found within the project area and described below:

Qa – Active stream – valley alluvium (Qa, historic-Holocene)

Light grayish – to yellowish-brown sand, silty to clayey sand, and gravel; boulders are common along the western flank of the Sandia Mountains; associated with modern incised stream valleys; very weakly developed (stage 1 carbonate morphology) to nonexistent soils; 1-12m thick.

Qay – Younger stream-valley alluvium (Qay, upper Pleistocene-Holocene) – pale- to light brown, sand, muddy sand, and pebble to cobble gravel; boulders locally present along front of the Sandia Mountain; weakly developed soils (Stage I and II carbonate morphology); locally contains active stream-valley alluvium (Qa); radiocarbon dates on detrital charcoal yielded radiocarbon ages of 1790 +/- 90 and 4550 +/- 140 radiocarbon years (SC-1 and SC-2, Table 1); up to 24 m thick.

From the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey for the project area (U.S. Department of Agriculture, 2024). Table 2 displays the soils identified.

Soil	Erosion Factor, K	Wind Erodibility Group	Acres of Project Area	Percent (%) of Project Area
Bb: Bluepoint fine sand, hummocky	0.17	1	2.6	2.4
BCC: Bluepoint loamy fine sand, 1 to 9 percent slopes	0.20	2	106.0	97.6
BKD: Bluepoint-Kohan association, hilly	0.17	2	0.0	0.0
		Total Project Area	108.6	100.0

These soils share the same ecological site group (deep sand, cool desert grassland) and general landform setting of alluvial flats, floodplains, and stream terraces. Bluepoint soils are typically on dunes and sand sheets with slopes ranging from 0 to 50 percent. The climate these soils thrive are arid with hot, dry summers and warm, moist winters with average annual precipitation of 3 to 7 inches.

The Erosion K factor is a quantitative description of the susceptibility of soil particles to detach and transport by rainfall and runoff (United States Department of Agriculture, 2002). Sandy soils (such as Bb) have a low K value because the soil has such a high infiltration rate and reduced runoff, which means the soils are not easily transported. Loamy soils (such as BCC) have moderate to high K values because soil particles are easily detached and infiltration is moderate creating moderate to high runoff, which means the soils are moderate to easily transported. Additionally, the wind erodibility group determines how susceptible soils are to wind erosion (United States Department of Agriculture, 2002). These soils are categorized as most susceptible to wind erosion.

- No Action Alternative: The No Action alternative would result in continued erosion of soils in the Project Area (due to their erosive nature) and sedimentation of downstream surface waters.
- **Proposed Action Alternative:** Approximately 56,500 CY of excavation and backfill and 15,500 CY of excavation and disposal would occur because of the proposed action. Parts of the channel bottom and banks would be reconfigured and hardened. Riprap would be added for bank protection. Maintenance access roads would be constructed for ease of access to the Project Area.

To minimize impacts to soils and comply with the requirements of Environmental Protection Agency's (EPA's) Construction General Permit (CGP), AMAFCA's construction contractor would prepare a stormwater pollution prevention plan (SWPPP) and obtain a National Pollution Discharge Elimination System (NPDES) permit prior to construction. Implementation of appropriate erosion and sediment control best management practices (BMPs) (see Section 4.2.1) would be required during construction. A disposal area will be identified, and disposal requirements would be followed. Upon completion of construction activities, exposed soils would be revegetated with a standard native seed mix (AMAFCA Seed Specification, Section 632).

4.1.2 Prime and Unique Farmland

No prime or unique farmland or farmland of statewide or local importance were found within the project area. Therefore, there would be no effect to Prime and Unique Farmland by either alternative.

4.1.3 Air Quality

The EPA has established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide, lead, nitrogen dioxide, particulate matter greater than 10 microns (μ m) in diameter, particulate matter greater than 2.5 μ m in diameter, ozone, and sulfur dioxide (U.S. Environmental Protection Agency, 2024). Bernalillo County is in attainment with the NAAQS for these criteria pollutants.

- No Action Alternative: This alternative would not impact air quality.
- **Proposed Action Alternative:** The Proposed Action would be expected to result in minor, temporary, and localized impacts to air quality during construction due to the use of fuel-burning equipment and potential for fugitive dust. Construction contractors would be required to comply with local emissions standards and to implement dust control measures such as watering down construction areas when winds are high. Equipment running times should be minimized and only occur during regular hours. For surface disturbance and/or demolition within Bernalillo County, the contractor must obtain a Fugitive Dust Control Construction Permit from the City of Albuquerque (City of Albuquerque, 2025). Additionally, exhaust from construction equipment and contractor vehicles may temporarily impact air quality within the vicinity of the project area. This would be reduced by following these standards, and during construction hours only.

4.2 WATER RESOURCES

4.2.1 Surface Water, Groundwater, and Water Quality

The Clean Water Act (CWA), as amended, regulates the discharge of pollutants into Waters of the United Sates (WOTUS), and is the primary federal mechanism protecting streams, lakes, and wetlands from degradation. The United States Army Corps of Engineers (USACE) is the regulatory authority for the discharge of dredged or fill material into waters of the U.S. pursuant to Section 404 of the CWA.

The project area is located within an ephemeral waterway. This waterway conveys stormwater and flows in response to precipitation events. This waterway is a tributary of the Rio Grande, a traditional navigable water and Water of the U.S. (WOTUS). The project area is located approximately 1.8 miles upstream from the confluence with the Rio Grande. Due to the recent Supreme Court decision, Sackett v. Environmental Protection Agency, 598 U.S. 651 (2023), ephemeral channels are no longer considered jurisdictional waters with respect to Section 404 of the Clean Water Act. AMAFCA has submitted an application to USACE (SPA-2024-00442) regarding Section 404 of the CWA (attached as Appendix A). Although an official approved jurisdictional determination has not yet been received from USACE, USACE has informally indicated that it is unlikely that features in the project area would meet the current criteria for

classification as WOTUS. In addition, USACE indicated that, a formal letter from their office is not legally required prior to beginning work as approved jurisdictional determinations and no-permit-required letters are courtesy services provided as their workload permits. It is assumed that a Section 401 permit will, therefore, not be required either.

Depth to groundwater in the project area is estimated to be more than eighty inches (greater than 6 feet). No sole-source aquifers are designated within Bernalillo County.

- No Action Alternative: Under the No Action Alternative, bank erosion and flooding would continue within the Calabacillas Arroyo. Large storm events are expected to result in substantial amounts of sediment being carried through the arroyo and into the Rio Grande during a brief period. This has potential to reduce water quality and restrict flows to existing wetland and riparian habitats.
- **Proposed Action Alternative:** The Proposed Action would include 56,500 CY of excavation and backfill and installation of riprap and concrete structures in and adjacent to the Calabacillas. The Calabacillas was determined to be non-jurisdictional by USACE and the Proposed Action would not require permitting under Sections 401 (water quality certification) and 404 (discharge of dredge or fill into waters of the U.S.) of the CWA.

During project construction, minor, short-term impacts to surface waters and surface water quality may occur due to the transport of sediment from disturbed soils by stormwater runoff. To minimize impacts of the Proposed Action to soils and sedimentation of the channel, most construction activities would try to be scheduled between October 15 and June 15, which is outside of the normal regional monsoon season. AMAFCA, or their contractor, would prepare a SWPPP and obtain NPDES permit coverage prior to construction. Implementation and maintenance of appropriate erosion and sediment control BMPs would be required during construction. Upon completion of construction activities, unpaved parts of the Project Area would be revegetated with native seed mix, which would further reduce sedimentation of waterways.

4.2.2 Wetlands

The Clean Water Act, as amended and Executive Order (EO) 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impacts to wetlands. Wetlands are transitional areas located between terrestrial and aquatic systems that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation that is typically adapted for life in saturated soil conditions. Wetlands are defined by three essential characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology (U.S. Environmental Protection Agency, 2024).

The U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (U.S. Fish & Wildlife Service, 2016) does not identify any wetlands within the project area but identifies the Calabacillas as an intermittent riverine system with a sandy streambed that is intermittently flooded (R4SB4J). During site

reconnaissance and coordination with USACE, no wetlands or jurisdictional water resources were identified within the project area.

- No Action Alternative: The No Action alternative would not impact wetlands.
- **Proposed Action Alternative:** The Proposed Action would not impact wetlands and no USACE permit is required.

4.2.3 Floodplains

EO 11988 (Floodplain Management) requires federal agencies to consider how their actions may encourage future development in and impact the important natural functions of floodplains and floodways. FEMA flood insurance rate maps (FIRMs) identify the regulatory 100-year floodplain for the National Flood Insurance Program. The Project Area is located within Zones AE Floodway, Shaded X, and X within FIRM Panels 35001C0104H (map revised 08/16/12) (U.S. Department of Homeland Security, 1996) and 35001C0108G (map revised 09/26/08) (U.S. Department of Homeland Security, 1996), attached as Appendix B.

Zone AE Floodway: A special flood hazard area with established base flood elevations subject to inundation by the 1% annual flood risk. The 1% probability is FEMA's base flood or 100-year flood value. The Floodway is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 1 foot.

Shaded X: 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile

Zone X (unshaded): Not a special flood hazard, but an area of minimal flood hazard. This zone has protection by a levee from a 100-year flood and falls outside the 500-year flood range.

- No Action Alternative: The No Action alternative would result in no reduction of the current flood potential and would not alter the floodplain.
- **Proposed Action Alternative:** The Proposed Action would alter the topography of a mapped flood hazard area to reduce the potential for streambank erosion within the project area. AMAFCA has coordinated with the City of Albuquerque floodplain administrator to apply for a Floodplain Development Permit for non-residential construction within the FIRM Panel 35001C0104H. This application was reviewed by the City and approved. AMAFCA was granted the Floodplain Permit Number: A11F001. All coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.

In compliance with FEMA regulations implementing EO 11988, FEMA is required to conduct the 8-Step Decision-Making process for actions that are proposed within the floodplain per 44 CFR 9.6 (U.S. Code of Federal Regulations, 2024).

4.2.3.1 8-Step Floodplain Review

Step 1 is to determine whether the project area is in the 100-year floodplain. The project area is in the 100-year floodplain with a Zone AE and X designation, per FIRM map 35001C0104H and 35001C0108G, dated 08/16/12 and 09/26/08, respectively. The base flood elevations range from 5266 ft. to 5145 ft. North American Vertical Datum of 1988 (NAVD 88) measuring from east of Unser Blvd. to west of Golf Course Rd.

Step 2 is to notify and involve the public in the decision-making process. Initial notice was accomplished through the disaster specific public notices issued for FEMA DR-4652-NM on June 8, 2022; June 14, 2022; and October 14, 2022.

Step 3 is to identify and evaluate practicable alternatives to locating the Proposed Action in the floodplain, including alternative sites and actions outside of the floodplain.

The purpose of the Proposed Action is to reduce and mitigate flooding and subsequent erosion within the project area. AMAFCA identified the Proposed Action, No Action, and Alternative 1 to the Proposed Action. Alternative 1 to the Proposed Action includes concrete lining the entire reach of the Calabacillas Arroyo which would permanently contain flooding and stabilize the banks. However, the expense of a fully concrete-lined channel would impact the infiltrative capacity of the channel and negatively affect the surrounding native vegetation and species. The No Action Alternative would cause the Calabacillas to be prone to hazards such as bank overtopping and inundation of surrounding properties, erosion and destabilization of banks or flooding and damage to private and government property.

Step 4 is to identify impacts associated with occupancy and modification of the floodplain and support of floodplain development that could result from pursuing the Proposed Action. Per 44 CFR 9.10, FEMA should consider whether the Proposed Action would result in an increase in the useful life of any structure or facility in question, maintain the investment at risk and exposure of lives to the flood hazard, or forego an opportunity to restore the natural and beneficial values served by floodplains or wetlands. FEMA should specifically consider and evaluate (1) impacts associated with modification of floodplains, (2) additional impacts that may occur when certain types of actions may support subsequent actions that have additional impacts of their own, (3) adverse impacts of the Proposed Action on lives and property and on natural and beneficial floodplain values, and (4) three categories of factors: flood hazard-related factors, natural values-related factors, and factors relevant to a proposed action's effects on the survival and quality of wetlands.

Per 44 CFR, natural values-related factors include (1) water resource values (natural moderation of floods, water quality maintenance, and ground water recharge), (2) living resource values (fish and wildlife and biological productivity), (3) cultural resource values (archaeological and historic sites, and open space recreation and green belts), and (4) agricultural, aquacultural, and forestry resource values.

Factors relevant to a Proposed Action's effects on the survival and quality of wetlands include (1) public health, safety, and welfare, including water supply, quality, recharge and discharge, (2) pollution, (3) flood and storm hazards, (4) sediment and erosion, (5) maintenance of natural systems, including conservation and long-term productivity of existing flora and fauna, species and habitat diversity and stability,

hydrologic utility, fish, wildlife, timber, and food and fiber resources, and (6) other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

The Proposed Action alternative would not result in an increased base discharge and is intended to reduce the flood hazard potential to surrounding residential buildings and infrastructure. The project is not expected to encourage development within the floodplain. The Proposed Action would not change land use or result in a reduction to societal and recreational benefits provided by the floodplain at this location. Open space and recreational uses in the parks would not be impacted by the Proposed Action.

The floodplain provides the following functions: flood storage and conveyance, filtration of nutrients and impurities from runoff, reduction of flood velocities, reduction of flood peaks, moderation of water temperature, reduction of sedimentation, and reduction of frequency and duration of low surface flows. These functions are expected to remain intact after implementation of the Proposed Action. The final hydrology and hydraulics report for the Proposed Action, dated January 6, 2025, includes an engineer's stamped certification that the project will not result in any rise in flood elevations in compliance with FEMA's regulations for EO 11988 (44 CFR 9.11.d.4). By selecting the Proposed Action, this reach of the channel would continue to infiltrate surface water into groundwater.

There is a possibility there could be minor short-term impacts to surface water quality during the project's construction.

The Proposed Action does not affect the surrounding threatened and endangered species and would not adversely modify or otherwise affect critical habitats. The Proposed Action would have negligible impacts to native species and their habitats nor have any effect on population levels of these species.

As discussed in Section 4.4, the site has been surveyed for archaeological resources. Seven (7) archaeological resources of the seventeen (17) previously recorded archaeological sites were identified within the Project Area. Since the Proposed Action would not occur near these sites, archaeological resources would not be impacted.

Step 5 is to minimize the potential adverse impacts identified under Step 4 and restore and preserve the natural and beneficial values served by floodplains. All the impacts discussed above are considered insignificant or beneficial to the floodplain. The Proposed Action seeks to reduce streambank erosion contributes to the conservation of natural and beneficial floodplain values. During construction, short-term water quality impacts would be mitigated by the implementation of BMPs such as the installation of silt fencing and straw waddles for sediment control, continuous dust suppression, equipment is checked for spillage, and ensuring contractor is equipped with on-site spill prevention kits and protocols are followed to address spills or contamination of soils.

Step 6 is to determine whether the Proposed Action is practicable and to re-evaluate alternatives. Per the discussion above, the Proposed Action alternative is the only practicable alternative.

Step 7 requires that the public be provided with an explanation of any final decision that the floodplain is the only practicable alternative. Final notice will be incorporated into the notice of availability for this Environmental Assessment.

Step 8 is the review of the implementation and post-implementation phases of the Proposed Action to ensure that the requirements stated in 44 CFR 9.11 are fully implemented. The proposed project would be conducted in accordance with applicable floodplain development requirements.

4.3 BIOLOGICAL RESOURCES

4.3.1 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973, as amended, requires federal agencies to determine the effects of their proposed actions on threatened and endangered species and respective critical habitats. The law requires federal agencies to ensure proposed actions would not jeopardize the existence of any listed species or cause destruction or adverse modification of critical habitats of surrounding species; with the consultation of the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service.

A list of federally listed species was obtained via Information for Planning and Consultation (IPaC), a project planning tool managed by USFWS (U.S. Fish & Wildlife Service, 2024). An official IPaC was requested for this project (Consultation #2025-0041413). Additionally, the New Mexico Department of Game and Fish (NMDGF) Biota Information System of New Mexico (BISON-M) was queried for state-listed threatened and endangered wildlife species for Bernalillo County (New Mexico Department of Game & Fish, 2024). The New Mexico state endangered plant species was queried for records of occurrence of special-status plant species that may potentially occur within the Project Area (New Mexico Rare Plant Technical Council, 1999). These reports are available as Appendix C. The species gathered from the IPaC, BISON-M, and NM Rare Plant Species are displayed in Table 3.

Species	Status	Potential to Occur			
Mammals					
New Mexico Meadow Jumping Mouse (Zapus hudsoniusluteus)	State and Federally Endangered	No. No suitable habitat occurs within the project area.			
Spotted Bat (Euderma maculatum)	State Threatened	Low probability. Rock cliffs on the southwestern part of project area may pose as a potential habitat. Additionally, there are several juniper trees nearby (mostly outside of the project area) that may post as a potential habitat. Both are small areas and have a low potential of use.			
Birds					
Mexican Spotted Owl (Strix occidentalis Lucinda)	State and Federally Threatened	No. No suitable habitat occurs within the project area.			
Southwestern Willow Flycatcher (Empidonax trailii extimus)	State and Federally Endangered	No. No suitable habitat occurs within the project area.			

Table 3: Threatened and Endangered Species Evaluated for the Potential to Occur within the Project Area

Species	Status	Potential to Occur	
Yellow-billed Cuckoo (Coccyzus americanus)	State and Federally Threatened	No. No suitable habitat occurs within the project area.	
Broad-billed hummingbird (<i>Cynanthus latirostris</i>)	State Threatened	No. No suitable habitat occurs within the project area.	
Least tern (Sternula antillarum)	State Endangered	No. No suitable habitat occurs within the project area.	
Neotropic cormorant (Phalacrocorax brasilianus)	State Threatened	No. No suitable habitat occurs within the project area.	
Bald eagle (Haliaeetus leucocephalus)	State Threatened, BGEPA	No. No suitable habitat occurs within the project area.	
Common black hawk (<i>Buteogallus anthracinus)</i>	State Threatened	No. No suitable habitat occurs within the project area.	
Alplomado falcon (Falco femoralis)	State Endangered	No. No suitable habitat occurs within the project area.	
Peregrine falcon (Falco peregrinus)	State Threatened	No. No suitable habitat occurs within the project area.	
Bell's vireo (Vireo bellii)	State Threatened	No. No suitable habitat occurs within the project area.	
Gray vireo (Vireo vicinior)	State Threatened	No. No suitable habitat occurs within the project area.	
Baird's sparrow (Centronyx bairdii)	State Threatened	No. No suitable habitat occurs within the project area.	
	Inse	cts	
Monarch Butterfly (Danaus Plexippus)	Federal Proposed	Low Probability. The Project Area is not within the species' migration corridor, but milkweed could grow within the area.	
Fishes			
Rio Grande silvery minnow (Hybognathus amarus)	State Endangered	No. No suitable habitat occurs within the project area.	
Plants			
Great Plains lady's tresses (Spiranthes magnicamporum)	State Endangered	No. No suitable habitat occurs within the project area.	

Based upon a review of potential habitat needs and existing habitat in the project area, one federally proposed species has a low probability to occur in the project area. None of these listed species have designated critical habitat within the project area or known habitat associations of the species. There are no refuge lands nor fish hatcheries within the Project Area.

- No Action Alternative: This alternative would result in no effect to federal listed species and would not be expected to impact state-listed or otherwise protected species.
- **Proposed Action Alternative:** FEMA has determined the Proposed Action would result in no effect to federally or state listed species because no listed species or critical habitats were identified within the project area, and no probable habitat exists.

4.3.2 Birds of Concern

The Migratory Bird Treaty Act (MBTA) protects migratory birds and their parts (including eggs, nests, and feathers) from take. Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act of 1940 (U.S. Code, 1916). Any person or organization who plans or conducts activities that may result in impacts to eagles and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures.

No occupied bird nests were observed in the project area at the time of the site visit.

A number of North American bird species are protected by the MBTA. Table 4 includes the species listed in the IPaC (Consultation # 2025-0041413) with the potential to occur in the project area.

Common Name	Scientific Name	Breeding Season
Bald Eagle	Haliaeetus Leucocephalus	Dec 1 – Aug 31
Black-Chinned Sparrow	Spizella atrogularis	Apr 15 – Jul 31
Broad-tailed Hummingbird	Sepalsphorus platycercus	May 25 – Aug 21
California Gull	Larus californicus	Mar 1 – Jul 31
Cassin's Finch	Haemorhous cassinii	May 15 – Jul 15
Clark's Grebe	Aechmophorus clarkii	Jun 1 – Aug 31
Evening Grosbeak	Coccothraustes vespertinus	May 15 – Aug 10
Golden Eagle	Aquila chrysaetos	Dec 1 – Aug 31
Grace's Warbler	Setophaga graciae	May 20 – Jul 20
Lesser Yellowlegs	Tringa flavipes	Breeds elsewhere
Lewis's Woodpecker	Melanerpes lewis	Apr 20 – Sep 30
Long-eared Owl	Asio otus	Mar 1 – Jul 15
Olive-sided Flycatcher	Cpntopus cooperi	May 20 – Aug 31
Pectoral Sandpiper	Calidris melanotos	Breeds elsewhere
Pinyon Jay	Gymnorhinus cyanocephalus	Feb 15 – Jul 15
Virginia's Warbler	Leiothlypis virginiae	May 1 – Jul 31
Western Grebe	Aechmophorus occidentalis	Jun 1 – Aug 31

 Table 4: Potential Migratory Birds within Project Area

Avian species' breeding seasons vary throughout the year. Raptors start in the earlier months of the year and songbirds and woodpeckers begin in the early fall. The main migratory nesting season occurs between mid-April to mid-August. Although, any work within raptor habitat should be avoided early in the season and work within riparian habitat should be avoided late in the season (U.S. Fish & Wildlife Service, 2024).

The following measures would be required to avoid or reduce potential impacts to wildlife:

- Perform any vegetation removal outside of the peak migratory bird-nesting period of April 15 through August 15 to avoid take of individuals, nests, or eggs.
- If construction activities must occur during nesting season, a qualified monitor must be employed to conduct breeding-bird surveys for surveying the project area for nests prior to clearing/scraping. The monitor would determine the appropriate timing of surveys in advance of construction activities.
- If an occupied nest is found, work within a buffer zone appropriate for the species would be delayed until the nest is vacated, and juveniles have fledged.
- For work near an occupied nest, the monitor would prepare a report to document the species present and the rationale of buffer selection. This report would be submitted to FEMA and any other approving agency for inclusion in project files.
- **No Action Alternative**: No work would be conducted under this alternative, and therefore, there would be no effect to Birds of Concern under this alternative.
- **Proposed Action Alternative:** Any work involving tree removal would be conducted outside of the nesting season as noted above. Special precautions regarding eagles and/or nesting or breeding species would also be followed as noted above. Based upon the implementation of these BMPs, there would be no effect to Birds of Concern by implementing the Proposed Action.

4.3.3 Vegetation

Located in the Albuquerque Basin (22m) EPA Ecoregion (Griffith, et al., 2006), the regional area is comprised of desert grassland and shrubland with mostly ephemeral and intermittent streams. From the soils provided in the previous section, the Bluepoint soil type are present for rangeland and wildlife habitat. From this soil type, there are several vegetative species associated including creosote bush, white bursage, ephedra, mesquite, Indian ricegrass, and big galleta.

From a site visit that occurred on September 26, 2024, vegetation species were identified and recorded (see Appendix D). From the site visit, a few hydrophytic plant species were identified near and within storm water outflow from above residential areas: Salix exigua, Amorpha fruticosa (FACW), and Baccharis salicina (FACW). The facultative wetland plants (FACW) found usually occur in wetlands but may occur in non-wetlands. The Calabacillas Arroyo has been historically labeled as ephemeral.

• No Action Alternative: There would be no impact to any vegetation under the No Action Alternative.

• **Proposed Action Alternative:** Vegetation removal would occur as a part of the construction process. AMAFCA and the contractor try to limit vegetation removal between typical growing seasons of April through August. Additionally, as part of the construction process, revegetation would occur. This process would incorporate the revegetation seed mix according to AMAFCA's standard specification (Albuquerque Metropolitan Arroyo Flood Control Authority, 2024). This would be applied on disturbed areas or slopes that are not going to be stabilized with bank protection.

4.3.4 Fish and Wildlife

No aquatic species were observed within the project area. From a site visit conducted on September 26, 2024, the following wildlife species (Table 5) were identified within the Project Area.

Common Name	Scientific Name
Coyote	Canis latrans
Prairie Dog	Cynomys sp.
Roadrunner	Geococcyx californianus
House Finch	Haemorhous mexicanus
Desert Cottontail	Sylvilagus audubonii
Curve-bill Thrasher	Toxostoma curvirostre

 Table 5: Wildlife Identified within Project Area

Other common species that occur in the project area include Mammal species such as jackrabbit (*Lepus* spp.), cottontail (*Sylvilagus* spp.), and woodrat (*Neotoma* spp.). Other potential avian species include cliff swallow (*Petrochelidon pyrrhonota*), mourning dove (*Zenaida macroura*), sage thrasher (*Oreoscoptes montanus*), Brewer's sparrows (*Spizella breweri*), northern flicker (*Colaptes auratus*), vesper sparrow (*Pooecetes gramineus*), and northern mockingbird (*Mimus polyglottos*). Potential raptors may include red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*). A variety of herptiles that might occur include fence lizard (*Aspidoscelis inornata*), horned lizard (Phrynosoma spp.), New Mexico whiptail (*Cnemidophorus neomexicanus*), gopher snake (*Pityophis catenifer*), rattlesnake (*Crotalus spp.*), and New Mexico spadefoot toad (*Spea multiplicata*).

- No Action Alternative: No impact to wildlife would be expected under the No Action alternative.
- **Proposed Action Alternative:** The direct impacts (permanent and temporary) of the Proposed Action to wildlife would result from vegetation removal, ground disturbance, and temporary noise impacts during construction. Wildlife that utilizes any channel wall cavities as dens would be temporarily displaced and either relocate to adjacent upstream or downstream areas or move back into the area once construction is complete. Any trenching required for the project would be

equipped with escape ramps or filled concurrently to avoid trapping small mammals or herptiles. Therefore, there would be short to mid-term impacts to wildlife during construction.

4.4 CULTURAL RESOURCES

The National Historic Preservation Act (NHPA) of 1966 (Advisory Council on Historic Preservation, 1966), as amended, outlines federal policy to protect historic properties and promote historic preservation in cooperation with the states, tribal and local governments, and other consulting parties.

4.4.1 Historic Properties

Section 106 of the NHPA outlines the procedures for federal agencies to follow to consider the effect of their actions on historic properties. The Section 106 process applies to a federal undertaking that has the potential to affect historic properties, defined in the NHPA as those properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

Under Section 106, federal agencies are responsible for identifying historic properties within the Area of Potential Effects (APE) for an undertaking, assessing the effects of the undertaking on those historic properties, if present, and considering ways to avoid, minimize, and mitigate any adverse effects of its undertaking on historic properties; it is the primary regulatory framework that is used in the NEPA process to determine impacts on cultural resources.

The APE is the geographic area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if such properties exist. The APE for the current undertaking was defined as the entire 109-acre project area. Tetra Tech conducted a Class I records review of the project vicinity and a Class III cultural resources pedestrian survey of the project APE. The results of the cultural resources investigation are documented in a confidential cultural resources report prepared in compliance with Section 106 of the NHPA and applicable New Mexico state guidelines and regulations.

4.4.2 Class I Records Review

Tetra Tech reviewed the NRHP, the New Mexico State Register of Cultural Properties (SRCP), and the New Mexico Cultural Resource Information System (NMCRIS) database maintained by the New Mexico Historic Preservation Division's Archaeological Records Management Section (ARMS) to identify previous archaeological surveys and previously inventoried cultural resources within the APE and a 500-meter buffer, referred to as the Research Area.

4.4.2.1 Previous Archaeological Investigations

The records searches indicate that there have been seventeen previous cultural resources investigations between 1979 and 2018 within the Research Area, displayed in Table 6. Of these, seven covered portions of the project APE. All the previous surveys within the APE were conducted over 10 years ago, and as a result, the entire 106-acre required a new archaeological survey.

Activity No.	Project Name	Author(s)	Year
8022	An Archeological Survey of Approximately 640 Acres in Paradise Hills.	Harlan, Mark E.	1979
8696	A Cultural Resources Survey Across Calabacillas Arroyo Bernalillo County, New Mexico - Project M-4079(1).	Clifton, Don	1984
25191	A Cultural Resources Management Plan for the Proposed Calabacillas Arroyo Detention Dam in Bernalillo County, New Mexico.	Marshall, Michael P.	1989
44112	A Cultural Resources Inventory for the Corrales Reach of the Rio Grande Levee Project.	Kneebone, Ronald R.	1993
65075	Cultural Resource Survey for the Proposed Westside-McMahon Corridor Bernalillo County and Sandoval County, New Mexico.	Kovacik, Joseph J.	1999
65361	An Archeological Survey of 3.17 Kilometers/1.97 Miles of City of Albuquerque and Private Land Along Irving Boulevard Between Lyon/Unser Boulevard and Chantilly Road, Paradis Hills, Bernalillo County, New Mexico for Wilson and Company Engineers & Architect.	Condie, Carol J.	1999
66036	An Archeological Survey of City of Albuquerque and Private Land on Golf Course Road, Westside Boulevard to Country Club Road and Irving Boulevard from Golf Course Road to Chantilly Road, Paradise Hills, Bernalillo County, New Mexico.	Condie, Carol J.	1999
75310	Cultural Resource Survey of Golf Course Road and Irving Boulevards Bernalillo County, New Mexico.	Arms, George L. and Kirsten J. Campbell	2001
79659	Report of Archeological Survey: Unser/Calabacillas Dam, Bernalillo County, New Mexico.	Snow, David H.	1988
101261	Archaeological Survey, Proposed A432 McUnder Cell Tower, Albuquerque, Bernalillo County, New Mexico.	Reynolds, David H. and Nguyen Doan T. Kim-Trieu	2006
107273	Archaeological Survey for Improvements Along Lyon Boulevard, Bernalillo County, New Mexico.	Raymond, Gerry	2007
118496	A Class I and Class III Cultural Resources Assessment Survey of Proposed Upgrades to the Existing Wireless Telecommunications Facility T-Mobile USA NM01067 Located at 4824 McMahon Boulevard NW in Albuquerque, Bernalillo County, New Mexico.	Luchetta, Sarah and Jim Moses	2010
120638	Cultural Resource Survey for the Proposed Paradise North Tract 1B-1 Development, Albuquerque, Bernalillo County, New Mexico.	Walley, Scott	2011
121178	Cultural Resource Survey for the Proposed Arroyo de las Calabacillas Channel Protection Project, Albuquerque, Bernalillo County, New Mexico.	Daras, Saundra D.	2011
124296	A Cultural Resources Survey for the A432-B Desert Greens Golf Course Cell Tower in Albuquerque, New Mexico.	Mitchell, Douglas R.	2010
127023	A Cultural Resource Survey and Evaluation of Visual Effects for the Proposed Wireless Telecommunications Facility at the Desert Greens Site in Albuquerque, Bernalillo County, New Mexico.	Sullins, Adam	2013
141339	Class III Cultural Resources Survey of the Proposed Wimberly Property Collocation Telecommunications Tower Site, Albuquerque, Bernalillo County, New Mexico.	Kadlubowski, Sylvia M. L.	2018

Table 6: Previously Conducted Surveys in the Research Area

Bold = Surveys extending into Project Area

4.4.2.2 Previously Documented Cultural Resources

The review identified six archaeological sites within the Research Area, two of which are within the Project APE. Previously documented sites included five prehistoric sites (petroglyphs, a rock shelter, and a lithic scatter), and one site of an unknown time period (lithic scatter). None of the sites within the Research Area have formal NRHP eligibility determinations registered in the NMCRIS database; however, based on the site types they are most likely eligible for listing and qualify as historic properties.

4.4.3 Class III Cultural Resources Survey

Tetra Tech conducted a pedestrian survey of the project APE on November 26 and December 2, 2024. The survey relocated and updated the two previously documented sites in the project APE and identified a previously undocumented petroglyph site. In addition, six isolated occurrences were documented.

The site boundaries of the previously recorded sites were revised based on the extent of petroglyphs identified during the survey. All three archaeological sites are recommended as eligible for listing on the NRHP, and it is recommended that all project activities avoid the site boundaries by at least fifty feet. The isolated occurrences are recommended as not eligible for listing on the NRHP.

4.4.4 Tribal Cultural Resources

As prescribed by Section 106 of the NHPA, the lead federal agency is required to conduct governmentto-government tribal consultation regarding the effect of the undertaking on tribal cultural resources. There are eight tribes that request consultation on projects occurring in Bernalillo County including:

- Hopi Tribe of Arizona
- Isleta Pueblo
- Laguna Pueblo
- Navajo Nation
- Ohkay Owingeh (San Juan) Pueblo
- Pojoaque Pueblo
- Sandia Pueblo
- Ysleta del Sur
- **No Action Alternative:** The No Action alternative would not be expected to impact any cultural resources within or surrounding the project area.
- **Proposed Action Alternative:** The Proposed Action alternative does not include any ground disturbing activities within fifty feet of the two historic properties identified in the Project APE. The closest proposed ground disturbance associated with the undertaking is located approximately 100 feet to the north, on the other side of Calabacillas Arroyo. If these sites are completely avoided by the undertaking, there would be no effect to the characteristics that qualify them for listing on the NRHP. In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. If unmarked graves or human remains are present on private or state land,

compliance with the New Mexico Cultural Properties Act (Article 18, Section 6, Subsection 11.2 (18-6-11.2), NMSA 1978, also known as the Unmarked Burial Statute is required. NMDHSEM will require the applicant to stop work immediately in the vicinity of the discovery. NMDHSEM will immediately notify FEMA and law enforcement agencies of the discovery, which shall notify the Office of the Medical Investigator (OMI) and the SHPO. OMI shall evaluate the remains for medicolegal significance with minimal disturbance of the remains. OMI will terminate the discovery of any non-medicolegal human remains to the SHPO, who shall proceed pursuant to the Unmarked Burial Statute and its implementing regulations found at 4.10.11 NMAC. For any questions for human remains on state or private land, contact State Archeologist, Michelle Ensey, (505) 490-3928, <u>michelle.ensey@dca.nm.gov</u>. Consultation letters were distributed to applicable tribes and NM SHPO regarding Section 106 on March 3, 2025. Responses were received from the Pueblo of Pojoaque and the Pueblo of Sandia (attached as Appendix A). Both responses expressed no concerns for the implementation of the project. NM SHPO provided a response on March 17, 2025 (attached as Appendix A) and concur with the No Adverse Effects to Historic Properties determination as a result of the proposed project.

4.5 SOCIOECONOMIC RESOURCES

4.5.1 Hazardous Materials and Waste

If present in the environment, hazardous substances are a critical concern because of health and safety risks for the public and construction workers, as well as potential cleanup liability. Section 101(10) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) takes a wide interpretation of hazardous substances to include all the following:

- Substances designated under CWA Sections 307(a) and 311(b)(4).
- Hazardous air pollutants listed under Section 112 of the Clean Air Act.
- Resource Conservation and Recovery Act (RCRA) hazardous wastes.
- Chemical mixtures for which the EPA has acted under Section 7 of the Toxic Substances Control Act (TSCA).

A CERCLA release to the environment includes any method that would allow a hazardous substance to enter environmental media (air, water, soil, or geologic material) that is not contained within a building or facility. Federal and state environmental databases were reviewed for known hazardous materials sites near the project area. According to the EPA and its EnviroAtlas database (U.S. Environmental Protection Agency), there are no Superfund Enterprise Management System National Priority List (NPL) or brownfield sites occurring within the vicinity of the project area, and no hazardous materials were identified during site visits.

- No Action Alternative: Under the No Action alternative, the existing condition would not change.
- **Proposed Action Alternative:** The Proposed Action would create no new sources of hazardous materials. Contaminants are not expected to be encountered at the project site during construction as no contaminated media is known to occur in the project area. If contaminated soil or water is encountered during excavation, actions would be taken immediately to protect workers and residents from exposure. The work would cease until the appropriate procedures can be implemented and permits obtained.

The construction contractor shall oversee, manage, and dispose of excavated soil and debris, petroleum products, hazardous materials, and toxic waste in accordance with the requirements of governing local, state, and federal agencies; and this would be documented in their SWPPP.

4.5.2 Noise

The Federal Noise Control Act of 1972 establishes a national policy to promote an environment free from noise that jeopardizes human health and welfare. Under the act, control of noise rests with state and local governments. Sound is most measured in levels of noise called decibels on the A-weighted scale (dBA), which is the scale most like the range of sounds that the human ear can hear. Noise-sensitive receptors (residences) are present within the vicinity of the project area.

During construction, noise levels would be higher than normal at and immediately adjacent to the project area due to the operation or movement of equipment. Construction-related noise is expected to be a temporary impact, ending when construction is completed. During construction or storing and moving equipment to and from work areas, noise levels could increase, but only temporarily.

- No Action Alternative: The No Action alternative would result in no additional noise impacts.
- **Proposed Action Alternative:** To reduce noise impacts at receptors, construction would typically occur during weekdays and daylight hours except when, with notification to residents, construction activities may extend beyond daylight hours to allow completion of an activity. Construction equipment would typically not operate between the hours of 10:00 p.m. and 7:00 a.m.

4.5.3 Traffic

The Project Area is bounded between public roads, including Unser Boulevard and Golf Course Road (east-west), and McMahon Boulevard and Irving Boulevard (north-south).

- No Action Alternative: Under this alternative, no direct impact to the area roads would occur. Although the project area may become more eroded or otherwise impacted by high flows during the monsoon season. Surrounding recreational trails may be impacted by erosion.
- **Proposed Alternative:** Short-term volume increases of construction traffic near the access points may occur. There is no anticipated road closures needed for construction activities. A traffic control plan and use of appropriate safety signs would be required of the contractor before construction begins for access to and from the main roads.

4.5.4 Public Services and Utilities

AMAFCA flood control facilities are located on the western portion of the project area. Additionally, there are two parks (Tuscany and Paradise Meadows) and two areas where overhead powerlines cross the Calabacillas (one on the western portion of the project area near AMAFCA facilities and the other on the eastern portion of the project area directly southwest of Palmilla Senior Living).

Additionally, ABQRIDE® route 157 (Cottonwood/Montaño/Kirtland) travels Golf Course Rd NW, which is the most eastern portion of the project area.

- No Action Alternative: Under the No Action alternative, no impact to utilities or public services would occur.
- **Proposed Action Alternative:** Prior to construction, the contractor would be responsible for adhering to the New Mexico 811 process or New Mexico One Call (state law requirement) for identifying potential utilities within the Project Area. During the design of the Proposed Action, a subsurface utility exploration was conducted and determined that no subsurface utilities are within the project area.

No interruption to public service or utilities is anticipated during construction activities. In the event of damage to a utility, the contractor would be required to contact the utility owner to report the utility strike. If necessary, a report detailing utility damage would be submitted by the contractor. If a sewer line is struck and compromised, the contractor would be required to contain and take corrective measures prior to proceeding with construction.

4.5.5 Public Health and Safety

The U.S. Department of Labor Occupational Safety and Health Administration (OSHA), as directed under the Occupational Safety and Health Act of 1970 (U.S. Department of Labor, 1970), as amended, defines safety standards for workers and requires workplaces to be kept free of serious recognized hazards. EO 13045 (Protection of Children) requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. The north and south side of the project area include recreational trails and small parks (Tuscany Park and Paradise Meadows Park). Additionally, in response to storms flooding various AMAFCA facilities, AMAFCA continues to push for more awareness of potential risks within arroyos by supporting the "Ditches are Deadly" program, with the slogan "*Ditches are Deadly – Stay Away! Find Safe Places to Swim and Play*" (AMAFCA, accessed January 2025).

From Table 1, the Calabacillas has a history of flooding occurrences that posed a health and safety risk to the surrounding community. Each flooding event has potential to further erode existing banks and scour existing grade control structures.

• No Action Alternative: This alternative would not result in any construction-related safety impacts but could reduce safety because of not implementing flood control measures at the site.

• **Proposed Alternative:** The proposed alternative seeks to mitigate flooding and resulting erosion that may affect surrounding properties and buildings. The proposed grade control structures and associated bank protection seek to prevent erosion from expanding and compromising surrounding building foundations.

During construction, OSHA standards are followed for protection of workers and the public health and safety. Additional coordination with the City of Albuquerque Open Space Department would occur to ensure awareness of construction activities and potential traffic it may cause to surrounding residents and nearby open trails. Risk could occur if residents, particularly children, wander onto the construction site and access to operating machinery or other on-site materials. To minimize these risks to the surrounding public, appropriate safety practices (such as sign placement and barriers) would be implemented to discourage access to the site. All construction activities would be performed by qualified personnel trained in the proper use of appropriate equipment while also having the knowledge of all applicable safety precautions. The contractor would be responsible for adhering to the New Mexico 811 (New Mexico 811) process for identifying buried utilities before construction occurs.

4.6 SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

Table 7 summarizes potential environmental impacts associated with implementing the proposed action and mitigation measures to offset those impacts.

Affected Environment	Impacts	Proposed Mitigation Measures
Geology and Soils	Approximately 56,500 CY of excavation and backfill and 15,500 CY of excavation and disposal would occur because of the proposed action. There are no Prime and Unique Farmlands in the project area.	A SWPPP would be prepared and an NPDES permit would be obtained prior to construction. Implementation of appropriate erosion and sediment control BMPs would be required. Exposed soils would be revegetated with a standard native seed mix.
Air Quality	Minor, temporary air quality impacts (fugitive dust, exhaust) during construction only. No impact to climate.	Contractors would be required to implement dust control BMPs when necessary. Equipment running times would be limited and emissions standards followed. A Fugitive Dust Control Construction Permit would be obtained.
Water Resources	There are no WOTUS. No discharge to surrounding areas would occur. Floodplains - No adverse impacts. The project would provide permanent flood protection to residents and roadway users.	A SWPPP and NPDES permit would be acquired prior to construction. Floodplains - AMAFCA has coordinated with the local floodplain administrator during final design and would comply with permits as part of construction.

Table 7: Summary of Environmental Impacts and Mitigation for Proposed Action

Affected Environment	Impacts	Proposed Mitigation Measures
Biological Resources (Threatened and Endangered species, Birds of Concern, vegetation, fish and wildlife)	T&E species – no species or habitat exists. Birds of Concern – potential habitat removal would occur. Vegetation – Potential vegetation removal would occur. Wildlife – Areas along the arroyo and banks would be temporarily affected due to ground disturbance and temporary noise impacts during construction.	Birds of Concern – if any trees need to be removed, they would be removed outside of the nesting season. Vegetation – Limited vegetation removal will occur. Reseeding of disturbed areas and slopes will be conducted for stabilization. Wildlife - AMAFCA would limit vegetation removal and scraping between April through August as much as possible. If any construction activity must occur during the nesting season, AMAFCA would deploy a qualified biological monitor. Any open trenches will contain an escape ramp.
Cultural Resources (historic, archaeological)	No impacts to cultural resources are anticipated.	If the identified cultural sites are completely avoided, there would be no impacts. If unanticipated cultural remains are found during construction, all activity should cease, and FEMA and law enforcement agencies (if human remains are discovered) will be notified immediately of the discovery. FEMA and law enforcement shall notify the Office of the Medical Investigator (OMI) and the SHPO.
Hazardous Materials and Wastes	No hazardous materials are known to occur. No discharge of waste is expected.	If contaminated materials are discovered during construction activities, work would cease until procedures can be implemented and permits obtained. The construction contractor shall oversee, manage, and dispose of excavated soil and debris, petroleum products, hazardous materials, and toxic waste in accordance with the requirements, and to the satisfaction, of the governing local, state, and federal agencies.
Noise	Short-term impacts on noise levels would occur in the project area during the construction period.	Construction would take place during normal business hours and equipment would meet all local, state, and federal noise regulations.
Traffic Circulation, Volume, and Parking Access	Short-term, minor increases in the volume due to construction traffic.	The contractor would prepare a traffic control plan and post appropriate signs.
Public Service and Utilities	No interruption to public service or utilities is anticipated.	The contractor is required to use New Mexico One Call to locate utilities and protect utilities from damage. In the event of damage, the contractor would contact the utility owner and, if required, the New Mexico Environment Department.
Public Health and Safety	Minor safety risks during construction for workers and nearby residents.	The contractor would ensure OSHA safety standards are followed, and safety signs/ barriers are placed at access points to prohibit public access.

To mitigate impacts to surface waters, water quality, air quality, and the surrounding community, BMPs would be implemented when construction activities occur (as part of the project's compliance), and includes the following:

- Dust suppression via water truck.
- Site runoff/sediment control with staked mulch sock (wattles) and silt fencing.
- Establish a written protocol to address spills and/or contamination of soil.
- Track out pad at project site entrances.
- Construct a lined concrete washout basin.
- Ensure equipment is cleaned prior to original arrival to site, and when moving from Project Area to areas outside of Project Area to assure no transport of invasive vegetation.
- Establish inlet protection socks or barriers.
- Waste procedures: onsite trash receptacles and portable toilets.
- Establish designated staging areas.
- Perform regular heavy equipment inspections.
- Perform regular site environmental compliance inspections.

5.0 CUMULATIVE IMPACTS

According to CEQ regulations, cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably near future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (U.S. Code of Federal Regulations, 2020). In accordance with NEPA and to the extent practical, this EA considered the combined effect of the Proposed Action and other actions occurring or proposed in the vicinity of the Project Area.

Other projects that have or will be completed in the project area include:

- Implementation of grade control and maintenance at the Swinburne Dam, which is upstream of the project area.
 - Additional grade control structures immediately upstream of Swinburne Dam are planned as well as excavation of Swinburne Dam for providing additional attenuation of developed runoff and for construction of a regional sediment control facility. These projects are further described in the "Calabacillas Arroyo Facility Plan Above Swinburne Dam," July 2021 (Tetra Tech, Inc. and Bohannan Huston, Inc., 2021)

The construction of each area has been spread out over time to allow for healing of the surrounding habitat and function of the facilities themselves.

AMAFCA also completes regular maintenance within the Calabacillas Arroyo. This allows projects in the arroyo to have a continued net benefit to public health and safety.

6.0 AGENCY COORDINATION, PUBLUC INVOLVEMENT AND PERMITS

FEMA is the lead federal agency for conducting the NEPA compliance process for the proposed project. It is the goal of the lead agency to expedite the preparation and review of NEPA documents, as well as to be responsive to the needs of the community and the purpose and need of the Proposed Action, while meeting the intent of NEPA and complying with all NEPA provisions.

6.1 AGENCY SCOPING

Agency scoping letters and responses from resource agencies are provided in Appendix F. Project scoping comments included information on the City of Albuquerque's Open Space department and the project's boundaries, the potential archaeological sites within, and ensuring no jurisdictional wetlands are affected.

6.2 AGENCY PERMIT COORDINATION

Coordination with agencies for specific permitting has been conducted and is discussed in the above resource sections. Final documentation is also provided in the appendices.

- Clean Water Act USACE
- Floodplain Permit City of Albuquerque
- NHPA Section 106 State Historic Preservation Office

6.3 PUBLIC NOTICE

The public information process for the Proposed Action will include a public notice in the general circulation newspaper that serves the City of Albuquerque. The public notice will state brief information about the Proposed Action and how to submit public comments. The notice will invite the public to submit their comments about the Proposed Action, potential environmental impacts, and proposed mitigation measures so that they may be considered and evaluated. FEMA will consider and respond to all public comments in the final EA. If no substantive comments are received, the draft EA will become final, and a FONSI will be issued for the project. Currently, a public meeting is not planned because the Proposed Action is not considered controversial.

AMAFCA will notify the public of the availability of the draft EA through the publication of a public notice in the local newspaper of record. The draft EA will be made available for public review in hard

copy at the AMAFCA office building, located at 2600 Prospect Avenue NE, Albuquerque, NM 87107. The draft EA will also be available digitally AMAFCA's website on at: https://amafca.org/projects/calabacillas-3a1-3b1-project/. FEMA will conduct a 30-day public comment period commencing on the initial date of publication of the public notice. FEMA will consider and respond to all public comments in the final EA. If no substantive comments are received, the draft EA will become final, and a Finding of No Significant Impact (FONSI) will be issued for the project.

As part of the development of this EA, the following sources were contacted or consulted utilizing web services:

- U.S. Army Corps of Engineers, Albuquerque Regulatory District
- U.S. Census Bureau, American Community Survey
- U.S. Department of Agriculture, National Resource Conservation Service, Web Soil Survey
- U.S. Department of Homeland Security Federal Emergency Management Agency
- U.S. Department of Labor Occupational Safety and Health Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service, Information for Planning and Consultation (IPaC)
- New Mexico Environment Department, Air Quality Bureau
- New Mexico Environment Department, Surface Water Bureau
- New Mexico State Historic Preservation Officer
- City of Albuquerque
- Hopi Tribe of Arizona
- Isleta Pueblo
- Laguna Pueblo
- Navajo Nation
- Ohkay Owingeh (San Juan) Pueblo
- Pojoaque Pueblo
- Sandia Pueblo
- Ysleta del Sur

In accordance with applicable local, state, and federal regulations, AMAFCA, or its contractor, would be responsible for acquiring any necessary permits prior to commencing construction within the Project Area.

7.0 REFERENCES

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8.0 LIST OF PREPARERS AND REVIEWERS

The following is a list of preparers and FEMA reviewers who contributed to the development of the Calabacillas Arroyo Grade Control and Bank Protection EA for FEMA.

The individuals listed had principal roles in the preparation and content of this document. Many others had significant roles and contributions as well, and their efforts were no less important to the development of this EA. The others include senior managers, administrative support personnel, and technical staff.

Preparer Name	Agency/Affiliation/Role	Address
Ondrea Hummel, CERP	Tetra Tech, Inc./QC	6121 Indian School Road, NE, Suite 205 Albuquerque, NM 87110
Mackenzie Stamey	Tetra Tech, Inc.	6121 Indian School Road, NE, Suite 205 Albuquerque, NM 87110
Edmund Vandever	Tetra Tech, Inc.	6121 Indian School Road, NE, Suite 205 Albuquerque, NM 87110
Jared Romero, P.E., CFM	Albuquerque Metropolitan Arroyo Flood Control Authority	2600 Prospect Avenue Albuquerque, NM 87107
Craig Hoover, P.E.	Bohannan Huston, Inc.	7500 Jefferson St. NE, Albuquerque, NM 87109
Anna Caffrey, P.E., CFM	Bohannan Huston, Inc.	7500 Jefferson St. NE, Albuquerque, NM 87109
Reviewer Name	Agency/Affiliation/Role	
LaToya Leger Taylor	FEMA Region 6, Regional Environmental Officer/Approval	800 N. Loop 288 Denton, TX 76209
Dorothy Cook	FEMA Region 6, Senior Environmental Specialist/QA/QC	800 N. Loop 288 Denton, TX 76209

Preparer Name	Agency/Affiliation/Role	Address
Omololu Dawodu	FEMA Region 6, Environmental Protection Specialist/Environmental Reviewer	800 N. Loop 288 Denton, TX 76209



APPENDIX A: USACE PERMIT SECTION 106 SHPO AND TRIBAL CONSULTATION RESPONSES **APPENDIX B: FEMA FLOOD INSURANCE RATE MAPS**



APPENDIX C: IPAC/BISON-NM REPORT/RARE PLANTS



APPENDIX D: SPECIES LIST FROM CALABACILLAS SITE VISIT

APPENDIX E: PHOTO LOG FROM CALABACILLAS SITE VISIT



APPENDIX F: AGENCY SCOPING LETTERS

APPENDIX G: DRAFT NOTICE OF AVAILABILITY



APPENDIX H: DRAFT FONSI



APPENDICES

Appendix A: USACE Permit; Section 106 SHPO and Tribal Consultation Responses Appendix B: FEMA Flood Insurance Rate Maps (35001C0104H, 35001C0108G) Appendix C: IPaC/BISON-NM Report/Rare Plants Appendix D: Species List from Calabacillas Site Visit Appendix E: Photo Log from Calabacillas Site Visit Appendix F: Agency Scoping and Consultation Letters Appendix G: Draft Notice of Availability Appendix H: Draft FONSI



APPENDIX A: USACE PERMIT SECTION 106 SHPO AND TRIBAL CONSULTATION RESPONSES)

Vandever, Edmund

From:	Jared Romero <jromero@amafca.org></jromero@amafca.org>
Sent:	Tuesday, February 11, 2025 11:13 AM
То:	Hummel, Ondrea
Cc:	Cook, Dorothy; Craig Hoover (choover@bhinc.com)
Subject:	Fw: [Non-DoD Source] Jurisdictional Determination Request: File Number:
-	SPA-2024-00442 (Calabacillas Arroyo)

🔥 CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. 🦺

Hi Ondrea,

Please see the correspondence below from USACE regarding the ADJ and its status.

Thanks, Jared

Jared Romero, P.E., CFM

AMAFCA Drainage Engineer Phone: (505) 884-2215

From: Luna, Forrest D CIV USARMY CESPA (USA) <Forrest.Luna@usace.army.mil>
Sent: Tuesday, February 11, 2025 9:10 AM
To: Jared Romero <jromero@amafca.org>
Subject: RE: [Non-DoD Source] Jurisdictional Determination Request: File Number: SPA-2024-00442 (Calabacillas Arroyo)

Thank you for discussing your request for a no-permit-required/approved jurisdiction determination. As we discussed, a permit under Section 404 of the Clean Water Act is required for the discharge of dredged or fill material into waters of the United States. However, if the project area does not contain any potential waters of the United States, or if all such resources will be avoided, a permit from our office is not required.

Information regarding the current implantation of the Waters of the United States Rule can be found at this link. <u>https://www.epa.gov/wotus/pre-2015-regulatory-regime</u>

Training slides in PDF form that explain the rule can be found at this link.

https://www.epa.gov/system/files/documents/2024-09/wotus-overview_9-24-24_508c.pdf When reviewing the project in the Calabacillas Arroyo, City of Albuquerque, Bernalillo County, New Mexico, the proposed grade control, and bank stabilization structures. Regarding this project in Calabacillas Arroyo it appears that this feature is non-relatively permanent water (as a result of the SACKETT vs EPA which removed significant nexus and non-relatively permanent waters from jurisdiction under the Clean Water Act), AMAFCA has previously received an AJD for a project upstream action number SPA-2024-128 stating "feature is a not a relatively permanent, standing or continuously flowing body of water and therefore does not meet the definition of a waters of the United States and is therefore not jurisdictional." Since there are no additional tributaries inflowing into the Calabacillas Arroyo between the previous AJD and the newly requested AJD, it seems unlikely that the features discussed would meet the current criteria for classification as Waters of the United States. This email does not constitute a formal AJD; it is intended assist in your planning efforts. In these cases, a formal letter from our office is not legally required prior to beginning work. Approved jurisdiction determinations and no-permit-required letters are courtesy services we provide as our workload permits. Due to limited resources, it may take longer than expected to process your request. If we do not receive a response from you by March 13, 2025, we will automatically withdraw your request. Please reference project number SPA-2024-442 in all future correspondence. V/r

Forrest Luna Regulatory Specialist Albuquerque Division U.S. Army Corps of Engineers 4101 Jefferson Plaza NE Albuquerque, NM 87109-3435

Phone 505-342-3678 Mobile 505-382-0071 <u>https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/</u>



Streamline the permitting process with the **Regulatory Request System (RRS)** — your new online platform for permit applications.



From: Jared Romero <jromero@amafca.org>
Sent: Friday, November 15, 2024 6:48 AM
To: Luna, Forrest D CIV USARMY CESPA (USA) <Forrest.Luna@usace.army.mil>
Cc: Ondrea Hummel <Ondrea.Hummel@tetratech.com>
Subject: [Non-DoD Source] Jurisdictional Determination Request: File Number: SPA-2024-00442 (Calabacillas Arroyo)

Good Morning Forrest,

Following up on our conversation the other day regarding the JD for the Calabacillas Arroyo, we would like to proceed with getting an official determination from the Corps. Please keep/add this to your list for review and determination.

If you have any questions, please contact me or Ondrea, who is AMAFCA's representative for the JD.

Thanks, Jared

Jared Romero, P.E., CFM

Albuquerque Metropolitan Arroyo Flood Control Authority Drainage Engineer Phone: (505) 884-2215

U.S. Department of Homeland Security Federal Emergency Management Agency 800 N Loop 288 Denton, Texas, 76209



March 5, 2025

Received 3/5/2025 HPD Log#124845

Michelle Ensey State Historic Preservation Officer Department of Cultural Affairs Bataan Memorial Building 407 Galisteo Street, Suite 236 Santa Fe, New Mexico 87501

RE: Section 106 Review Consultation, HMGP-4652-0012-NM (1), AMAFCA Calabacillas Grade Control and Bank Protection Unser Blvd, Albuquerque, Bernalillo County, NM (Lat.: 35.205365, Long.: -106.6912064) UTM: 13S 346012mE 3897100mN

Dear Ms. Ensey:

The Federal Emergency Management Agency (FEMA) is providing grant funding through the Hazard Mitigation Grant Program (HMGP) to Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) (Applicant) for the construction of grade control and bank stabilization project (Undertaking). FEMA is initiating Section 106 review for the above referenced properties in accordance with the Programmatic Agreement among FEMA, the New Mexico State Historic Preservation Officer (SHPO), and the New Mexico Department of Homeland Security and Emergency Management (DHSEM), dated September 19, 2024 (2024 Statewide PA).

FEMA is also requesting your review of the attached cultural resources report prepared by Tetra Tech: *Class III Cultural Resources Inventory, AMAFCA Calabacillas Arroyo Grade Control and Bank Protection, Bernalillo County, New Mexico* (NMCRIS 157628). The project is located on 109 acres of Calabacillas Arroyo between Unser Boulevard and Golf Course Road in Albuquerque, New Mexico, as shown on the attached maps.

The Applicant proposes to construct two new grade control structures (GCS 3a1 and GCS 3b1), linear bank protection, erosion control, and access and maintenance roads within the Arroyo de las Calabacillas (Calabacillas) between Unser Boulevard and Golf Course Road in Albuquerque, New Mexico. The new GCSs will be 8-foot drops constructed of grouted and dumped riprap. Linear bank protection will be approximately 1,950 discontinuous feet along the right bank and approximately 1,050 discontinuous feet along the right bank and approximately 1,050 discontinuous feet along the right bank and approximately 1,050 discontinuous feet along the right bank and approximately 1,050 discontinuous feet along the right bank and approximately 1,050 discontinuous feet along the left bank. Toe protection will be constructed on the left toe upstream of GCS 3a and 3b and a dumped riprap erosion control pad will be constructed on the left toe upstream of GCS 3. Access and maintenance roads will be needed upstream of GCS 3a1 and around GCS 3b1. Excavators and backhoes will be used to construct the project. Construction of access roads will occur first followed by clearing and grubbing, excavation, creating forms and placing concrete, placement of grouted riprap and dumped

riprap, installation of infrastructure, backfill, and re-seeding and vegetating impacted areas with native seed and covered with hydro mulch The project consists of 56,500 cubic yards (CY) of excavation and backfill and 15,500 CY of excavation and disposal.

FEMA has determined that the Area of Potential Effects (APE) for the proposed Undertaking shall include the footprint of the project based on the scale and nature of the Undertaking, as well as the area reasonably required to stage materials. The APE covers an area of approximately 109 acres.

On November 18, 2024, Tetra Tech performed a cultural records search using SHPO's New Mexico Cultural Resources Information System (NMCRIS) and associated site files, photographs, and maps to identify historic properties and districts in the area. Two previously recorded archaeological sites (Laboratory of Anthropology number [LA] 55803 and LA 71529) are present within the APE. An additional four archaeological sites are present within a 500-meter buffer of the APE. Eight surveys intersect the APE, all of which are over 10 years old and thus are not considered current.

On November 26 and December 2, 2024, Tetra Tech conducted an intensive (100-percent) pedestrian survey of the APE (NMCRIS 157628). The survey relocated and updated the two previously documented) and identified a new petroglyph site (LA 205955) in the APE. All three sites sites are Ancestral Puebloan petroglyph sites located along the base of a basalt escarpment in the southwestern end of the APE.



In addition, five isolated occurrences (IOs) were documented, including four pieces of flaked stone and fragments of aqua glass. The IOs are not eligible for listing on the National Register of Historic Places (NRHP) and no further management of the IOs is necessary.

FEMA has determined that the three petroglyph sites (

) in the APE are eligible for listing in the NRHP under Criteria A, C, and D. The sites qualify for listing under Criterion A for their association with Ancestral Puebloan culture, under Criterion C for possessing high artistic values, and under Criterion D for additional information potential in deep colluvial deposits that may contain intact cultural remains important to our understanding of prehistory. Although some vandalism and damage from Unser Boulevard construction was noted along the cliff band, the sites retain sufficient integrity of materials, design, setting, feeling, and association to convey their significance.

The Undertaking will completely avoid the site boundaries of

The closest proposed ground disturbing activity is over 130 feet from any archaeological site. No project activities or access roads are planned near the basalt escarpment on the southwestern side of the APE. If unanticipated intact buried cultural remains are found during project construction, all activities shall cease and FEMA and SHPO will be contacted.

Based on the information provided, FEMA has determined that there will be **No Adverse Effects to Historic Properties** as a result of the proposed Undertaking.

We respectfully request concurrence with this determination. Maps showing the project location and proposed work, as prepared by the Applicant, are attached. Your prompt review of this project is greatly appreciated. Should you need additional information please contact Angela A. McComb, Historic Preservation Specialist, at <u>angela.mccomb@fema.dhs.gov</u> or (202) 717-1443.

Sincerely,

La Toya Leger-Taylor Regional Environmental Officer FEMA Region 6

Concur with eligibility and effect determinations

State Historic Preservation Officer



Figure 1: Topographic map showing APE (in red), 500-meter buffer (in yellow), and proposed project disturbance area (hatched).

HMGP-4652-0012-NM (1) AMAFCA Calabacillas Grade Control and Bank Protection Page 5



Figure 2: Aerial image showing APE (in red), 500-meter buffer (in yellow), and proposed project disturbance area (hatched).

From:	Lopez, Fermin
To:	Scoggin, Robert
Subject:	RE: FEMA_Section 106_HMGP-4652-0012-NM_Calabacillas Grade Control - Pueblo of Pojoaque
Date:	Thursday, March 6, 2025 3:49:13 PM
Attachments:	image003.png

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Good afternoon, Robert. I am in receipt of your email request regarding the above-mentioned project. At this time, we will not provide consultation but will defer to the Pueblos that will participate. Should you have any questions or concerns please feel free to contact me.

Have a great day!

Thank You!

Fermin Lopez Tribal Historic Preservation Officer

Pueblo of Pojoaque Historic Preservation Office 39 Camino del Rincon STE #3 Santa Fe, NM 87506 505-231-0237 Cell flopez@pojoaque.org



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From: Scoggin, Robert <robert.w.scoggin@fema.dhs.gov>

Sent: Thursday, March 6, 2025 8:13 AM

To: Lopez, Fermin <FLopez@pojoaque.org>

Subject: FEMA_Section 106_HMGP-4652-0012-NM_Calabacillas Grade Control - Pueblo of Pojoaque

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Mr. Lopez,

We kindly request your review and comment on the attached Section 106 consultation for a grade control project in Bernalillo County, New Mexico. Thank you for your consideration. Please let me know if you have any questions.

Respectfully,

Robert W. Scoggin, MA Tribal Liaison | Environmental and Historic Preservation | Mitigation Diviison Mobile: (202) 716-4139 robert.w.scoggin@fema.dhs.gov

Federal Emergency Management Agency **fema.gov**



From:	<u>Greg Kaufman</u>
То:	Scoggin, Robert
Subject:	RE: FEMA_Section 106_HMGP-4652-0012-NM_Calabacillas Grade Control - Pueblo of Sandia
Date:	Tuesday, March 25, 2025 12:37:46 PM
Attachments:	image002.png
	image003.png

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Robert -

The Pueblo of Sandia has no concerns about the project and does not require further consultation.

Thanks for the notification, Greg



Greg Kaufman Environment Director Pueblo of Sandia 481 Sandia Loop Bernalillo, NM 87004 gkaufman@sandiapueblo.nsn.us Office: 505-771-5080 Cell: 505-340-7616

From: Scoggin, Robert <robert.w.scoggin@fema.dhs.gov>
Sent: Thursday, March 6, 2025 8:14 AM
To: Greg Kaufman <gkaufman@sandiapueblo.nsn.us>
Subject: FEMA_Section 106_HMGP-4652-0012-NM_Calabacillas Grade Control - Pueblo of Sandia

Good morning Mr. Kaufman,

We kindly request your review and comment on the attached Section 106 consultation for a grade control project in Bernalillo County, New Mexico. Thank you for your consideration. Please let me know if you have any questions. Respectfully,

Robert W. Scoggin, MA

Tribal Liaison | Environmental and Historic Preservation | Mitigation Diviison Mobile: (202) 716-4139 <u>robert.w.scoggin@fema.dhs.gov</u>

Federal Emergency Management Agency **fema.gov**



APPENDIX B: FEMA FLOOD INSURANCE RATE MAPS (35001C0104H, 35001C0108G)

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program does not moresarily atemity all areas upper to flooding, periodatry from local derivege executions of areal site. The commenty may reposition yebuilt be considered for possible updated or adotional flood hazard information.

To obtain more detailed information in areas where Base Tood Elevations (BES) and/or Diversity have been determined, users are encoursed to consult the Flood Publies and Floodsway Data and/or Summary of Salewiser Elevators tables contained where the Flood Insurance Sub(FIGS) report Base Companies where the Versite Sale (FIG) and Sale Sale (FIG) report Base monder wheehoot elevations. These BFEs are interest for flood insurance information. Accordingly, flood elevation data presented in the FIS report based in utility of the utility of the properse of construction and/or elevation.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0" North American Vertical Datum of 1988 (PANO Bi). Users of this FIRM should be aware that coastal to dis elevations are also provided in the Summary of Stilhard Elevations sake in the Flood Inscarse Study Report for this practicion. Elevations show in the Summary of Statement Elevations take should be used for contentioner, and/or floodpain markginemic purpose should be used for elevations shown on the STAM.

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Certain areas not in Special Food Hazard Arkas may be protected by Bood control structures. Refer to Section 2.4 "Flood Protection Measures" at the Frost Insurance Study report for information on flood poetfol structures in the paradition.

The projection used in the properties of this may well here Marco Sale Puezcontral Jone (1995 5000). The hereafted addimain was ArADS (1998) operand. Differences in desim, polynomic, projection or Sater Plane contra used in the instruction of (1994) for adjoint professione may result in slight polynomia Afferences in many features across protection boundaries. These differences do not affect the account of this Field.

These acceptons on the map are referenced to the North Annualize Narled Deterding the North Narley and Narley North Narley Narley Narley (Narley Narley Na

NDS Mormator: Services NDAA: NVRQS12 National Geodetic Survey, SSMC-IL #8002 OSIS Cash-West Highway Saver Spring, Maryland 20910-3242 (001) 713-3242

Tri cillikin parent elevation, description, and/or location information for bench marks shown on this map please constact the information Services Brench of the National Geodetic Survey at (301) 713-3242, or visit their exitssie at http://www.sgs.nosa.gov/.

Base map information shown on this FRM was provided in digital format by City of Moquenza, 2010, Bernallino Caurty, 2004, and 2010, Bureau of Land Mongement, 2000, National Recorders Survey, 2000, and United State Geological Survey (USCS): 1989. Addisonal behaviour was procequinement of solutions and the second state of the second state and the second state devolvement under 1000 ST 2000. Den U.S. Development of Agliculture second solutions and states 1000 ST 2000.

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Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or do-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panets; community map repository addresses; and a Lating of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panets on which each community is located.

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at http://mics.tema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital version of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products or the National Flood insurance Program in general, please call the FEMA Map Information atchange (FMX) at 1477-FEMA.MAP (1-877-356-3027) or visit the FEMA website at http://www.fema.ou/basireas/info.



NOTES TO USERS

This map is for use in administering the National Flood insuranc dums nut necessarily raintify all mean subject to flooding, partial drainage sources of small also. The community map reposit any from local in one of the second s

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NGS Information Services NGA, INNGS12 National Geodetic Survey, SSMC-3, #9202 1315 East-Vitel Highway Salver Spring, Mangland 20int0-3282 (301) 715-3042

To obtain current elevation, description, and/or location inform marks shown on this map, please contact the information Services Branch of the National Geodric Survey at (201) 713-3242, or visit ther website at <u>http://www.nds.nces.dov</u>

Base map information shown on this FIRM was provided in digital format by Bernaido County produced at a scale of 1.12.000 from photography diated 1099 or late

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Contact the FEMA Map Service Center at 1-800-358-9616 for information on available products associated with this //II/M. Available products may include proviously haved Letters of Map Chango. # Rood Insurance Study report, and/or dipital vences of this map. The FEMA Map Service Center may also be included by FAA = 1-800-358-9629 and their vehicle of the include the faa.

evergeestions about this map or questions concerning the National surance Program in general, please call 1- 877- FEMA MAP 36-2627) or visit the FEMA website at http://www.fema.conflueneest.th Flood In 1-877-3

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APPENDIX C: IPAC/BISON-NM REPORT/RARE PLANTS



United States Department of the Interior

FISH AND WILDLIFE SERVICE New Mexico Ecological Services Field Office 2105 Osuna Road Ne Albuquerque, NM 87113-1001 Phone: (505) 346-2525 Fax: (505) 346-2542



In Reply Refer To: 01/13/2025 21:18:08 UTC Project Code: 2025-0041413 Project Name: Calabacillas Arroyo Grade Control Structures 3a1, 3b1, and Associated Bank Protection

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area, and to recommend some conservation measures that can be included in your project design.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico State agencies. These lists, along with species information, can be found at the following websites.

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program: <u>https://www.emnrd.nm.gov/sfd/rare-plants/</u>

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: <u>nmrareplants.unm.edu</u>

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, <u>www.fws.gov/wetlands/Data/Mapper.html</u>, integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/library/collections/threats-birds. This list identifies migratory and non-migratory bird species (beyond

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit <u>https://www.fws.gov/partner/</u> <u>council-conservation-migratory-birds</u> for information regarding the implementation of Executive Order 13186.

We suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at nmesfo@fws.gov, where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office

2105 Osuna Road Ne Albuquerque, NM 87113-1001 (505) 346-2525

PROJECT SUMMARY

Project Code:	2025-0041413
Project Name:	Calabacillas Arroyo Grade Control Structures 3a1, 3b1, and Associated
	Bank Protection
Project Type:	Flooding
Project Description:	Installation of bank stabilization and grade control structures within the
	Calabacillas Arroyo in northwest Albuquerque, NM.

Project Location:

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@35.204764749999995,-106.70012339162835,14z</u>



Counties: Bernalillo County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
New Mexico Meadow Jumping Mouse Zapus hudsonius luteus There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/7965</u>	Endangered
BIRDS NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/8196</u>	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/6749</u>	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/3911</u>	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical	Proposed Threatened
habitat.	Threatened
Species profile: <u>https://ecos.fws.gov/ecp/species/9743</u>	

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.
IPAC USER CONTACT INFORMATION

Agency:Private EntityName:Edmund VandeverAddress:6121 Indian School Road NE, Suite 205City:AlbuquerqueState:NMZip:87110Emailedmund.vandever@tetratech.com

Phone: 5054091887





Species of Greatest Conservation Need and Federal or State Threatened/Endangered Bernalillo

Taxonomic Group	# Species Taxonomic Group			<u># Species</u>		
Birds Mammals	13	Fish				1
	TOTAL SPECIES:	16				
0				Oritical	600	D ia ta
<u>Common Name</u>	<u>Saentific Name</u>	NIVIGE	<u>USFVVS</u>	Haditat	<u>SGUN</u>	<u>Photo</u>
<u>Spotted Bat</u>	Euderma maculatum	Т			Y	<u>View</u>
Meadow Jumping Mouse	Zapus luteus luteus	E	E	Y	Y	<u>View</u>
Yellow-billed Cuckoo (western pop)	Coccyzus americanus occidentalis	5	Т	Υ	Y	<u>View</u>
Broad-billed Hummingbird	Cynanthus latirostris	Т			Y	<u>View</u>
Least Tern	Sternula antillarum	E			Y	View
Neotropic Cormorant	Phalacrocorax brasilianus	Т			Y	View
Bald Eagle	Haliaeetus leucocephalus	Т			Y	View
Common Black Hawk	Buteogallus anthracinus	Т			Y	View
Mexican Spotted Owl	Strix occidentalis lucida		Т	Y	Y	View
Aplomado Falcon	Falco femoralis	E	E		Y	View
Peregrine Falcon	Falco peregrinus	Т			Y	<u>View</u>
Southwestern Willow Flycatcher	Empidonax traillii extimus	E	E	Y	Y	View
Bell's Vireo	Vireo bellii	Т			Y	View
<u>Gray Vireo</u>	Vireo vicinior	Т			Y	<u>View</u>
Baird's Sparrow	Centronyx bairdii	Т			Y	View
Rio Grande Silvery Minnow	Hybognathus amarus	E	E	Y	Y	<u>View</u>



Home Rare Plant List About the List About NMRPTC Contacts Current Events More

New Mexico Rare Plants

Rare Plant List

Search Parameters:

This search is not limited by plant name Counties: BERNALILLO

Results found: 10

Export CSV	Modify Sea	hrch							
Scientific Name	NMRPTC	FWS	State of NM	USFS	BLM	Navajo Nation	State Rank	Global Rank	Counties
<u>Astragalus</u> <u>feensis</u>	R						S3	G3	BERNALILLO,HIDALGO,SANDOVAL,SANTA FE,TORRANCE
Dalea scariosa	D						S3	G3	BERNALILLO, SANDOVAL, SOCORRO, VALENCIA
<u>Delphinium</u> <u>sapellonis</u>	D						53	G3	BERNALILLO,COLFAX,LOS ALAMOS,MORA,SAN MIGUEL,SANDOVAL,SANTA FE,TAOS,TORRANCE
<u>Heuchera</u> pulchella	R			SEN			S2	G2	BERNALILLO,SANDOVAL,TORRANCE
<u>Mentzelia</u> todiltoensis	R				SEN		S3	G3	BERNALILLO, CIBOLA, SANTA FE, SOCORRO
<u>Muhlenbergia</u> <u>arsenei</u>	D						S3	G5	BERNALILLO,LOS ALAMOS,MCKINLEY,SANDOVAL,SANTA FE
<u>Physaria iveyana</u>									BERNALILLO
<u>Sclerocactus</u> papyracanthus	D						S4	G4	BERNALILLO,CIBOLA,DONA ANA,GRANT,LINCOLN,LOS ALAMOS,OTERO,RIO ARRIBA,SANDOVAL,SANTA FE,SIERRA,SOCORRO,TORRANCE
<u>Silene plankii</u>	R						S2	G2	BERNALILLO,DONA ANA,SANDOVAL,SIERRA,SOCORRO,TORRANCE
<u>Spiranthes</u> <u>magnicamporum</u>	D		E				S2	G3G4	BERNALILLO,GUADALUPE,RIO ARRIBA,SANTA FE

APPENDIX D: SPECIES LIST FROM CALABACILLAS SITE VISIT

The following are species found within the Project Area from a site visit occurred on September 26, 2024.

Vegetative Species Identified within the Project Area			
Scientific Name	Common Name	Facultative Status (Arid West)	Native (N) / Introduced (I) / Noxious (X)
Ailanthus altissima	Tree of heaven	FACU	Х
Ambrosia acanthicarpa	Flatspine bur ragweed	-	Ν
Amorpha fruticosa	False indigo	FACW*	Ν
Artemisia campestris	Field sagewort	UPL	Ν
Artemisia filifolia	Sand Sage	-	Ν
Atriplex canescens	Four Wing Saltbrush	-	Ν
Baccharis salicina	Willow baccharis	FACW*	Ν
Baileya multiradiata	Desert marigold	-	Ν
Berlandiera lyrata	Chocolate flower	-	Ν
Bouteloua curtipendula	Sideoats grama	-	Ν
Bouteloua gracilis	Blue grama	-	Ν
Cenchrus spinifex	Coastal sandbur	-	Ν
Chilopsis linearis	Desert willow	FAC	Ν
Cleome serrulata	Rocky Mtn Beeplant	FACU	Ν
Cylindropuntia imbricata	Tree cholla	-	Ν
Dasyochloa pulchella	Low woollygrass	-	Ν
Datura wrightii	Sacred datura	UPL	Ν
Ericameria nauseosa	Rubber rabbitbrush	-	Ν
Eriocoma hymenoides	Indian ricegrass	-	Ν
Eriogonum sp.	Buckwheat	-	Ν
Fallugia paradoxa	Apache plume	-	Ν
Gutierrezia sarothrae	Broom snakeweed	-	Ν
Helianthus annuus	Annual sunflower	FACU	Ν
Juniperus monosperma	Oneseed juniper	-	Ν
Lavandula ep.	Lavender	-	Ι
Lycium torreyi	Torrey wolfberry	FAC	Ν
Machaeranthera canescens	Hoary tansyaster	UPL	Ν
Medicago sativa	Alfalfa	UPL	Ι
Mentzelia sp.	Blazing star	-	Ν
Muhlenbergia rigens	Deergrass	FAC	Ν
Nassella tenuissima	Mexican feathergrass	-	Ν
Opuntia phaeacantha	Tulip prickly pear	-	Ν
Phacelia integrifolia	Gypsum scorpionweed	-	Ν
Platanus orientalis	Oriental planetree	-	Ι
Populus deltoides	Cottonwood	FAC	N

Vegetative Species Identified within the Project Area			
Psorothamnus scoparius	Broom dalea	-	Ν
Saccharum ravennae	Ravenna grass	FAC	Х
Salix exigua	Coyote willow	FACW*	Ν
Salsola tragus	Russian thistle	FACU	Х
Sphaeralcea angustifolia	Copper globemallow	-	Ν
Sporobolus airoides	Alkali sacaton	FAC	Ν
Sporobolus sp.	Sacaton/dropseed	-	Ν
Tamarix sp.	Salt cedar	FAC	Х
Ulmus pumila	Siberian elm	UPL	Х
Vitex agnus-castus	Vitex	-	Ι
Xanthium strumarium	Rough cocklebur	FAC	N

Wildlife Identified in the Project Area			
Scientific Name	Common Name		
Canis latrans	Coyote		
Cynomys sp.	Prarie dog		
Geococcyx californianus	Roadrunner		
Haemorhous mexicanus	House finch		
Sylvilagus audubonii	Desert cottontail		
Toxostoma curvirostre	Curve-bill thrasher		

APPENDIX E: PHOTO LOG FROM CALABACILLAS SITE VISIT



Photo: 1

Description:

View across east end of Project Area and Golf Course Rd NW.

Orientation:

Facing East



Photo: 2

Description:

View upstream from the eastern end of SDAM assessment area. The channel was 25.37m wide at this location

Orientation:

Facing Northwest





Photo: 3

Description:

View downstream from the midpoint of the SDAM assessment area.

Orientation:

Facing East



Photo: 4

Description:

View upstream from the midpoint of the SDAM assessment area.

Orientation:

Facing Southwest





Photo: 5

Description:

View downstream from the western end of the SDAM assessment area.

Orientation:

Facing Northeast



Photo: 6

Description:

View of bank erosion along the Calabacillas Arroyo.

Orientation:

Facing Southwest





Photo: 7

Description:

View of culvert and stormwater outfall into arroyo. Potential bat habitat.

Orientation:

Facing North



Photo: 8

Description:

View downstream of a stormwater outflow pipe just west of this location. A small collection of hydrophytic vegetation including coyote willow growing along the edge of the arroyo.

Orientation:

Facing Northwest





Photo: 9

Description:

View of culvert and stormwater outfall into arroyo. Potential bat habitat.

Orientation:

Facing North



Photo: 10

Description:

View of existing grade control structure within the arroyo.

Orientation:

Facing West





Photo: 11

Description:

View of potential Western burrowing owl (*Athene cunicularia ssp. hypugaea*) habitat adjacent to Project Area. Prairie dogs (*Cynomys sp.*) observed, but no owls observed.

Orientation:

Facing Northwest



Photo: 12

Description:

Representative photo of upland habitat adjacent to the main channel of the Calabacillas Arroyo.

Orientation:

Facing North





Photo: 13

Description:

View of existingAMAFCA flood control infrastructure and proposed staging area at the west end of the project area. Unser Blvd visible in the distance.

Orientation:

Facing West



Photo: 14

Description:

View across the existing AMAFCA flood control infrastructure at the west end of the project area.

Orientation:

Facing North





Photo: 15

Description:

View of existing AMAFCA flood control infrastructure and proposed staging area at the northwest end of the project area.

Orientation:

Facing East



Photo: 16

Description:

View of the proposed staging area in the southwest end of the project area. Potential Western burrowing owl (*Athene cunicularia ssp. hypugaea*) habitat along the southern border of the project area, though no burrows were found.

Orientation:

Facing Southeast



APPENDIX F: AGENCY SCOPING and CONSULTATION LETTERS

Ronald D. Brown, Chair Elizabeth Newlin Taylor, Vice Chair Orlando G. Martinez, Jr., Secretary-Treasurer Bruce M. Thomson, P.E., Asst. Secretary-Treasurer Tim Eichenberg, Director

> Kevin W. Troutman Executive Director



Metropolitan Arroyo Flood Control Authority 2600 Prospect N.E., Albuquerque, NM 87107 Phone: (505) 884-2215 Fax: (505) 884-0214 Website: www.amafca.org

Albuquerque

[Insert date]

Name Agency Address Albuquerque, NM

RE: Calabacillas Grade Control Structure and Bank Protection Project Scoping

Dear [Insert contact name],

The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), using Federal Emergency Management Agency (FEMA) Hazard Mitigation Program funds administered by the New Mexico Department of Homeland Security Emergency Management (NM DHSEM), is proposing the Calabacillas Arroyo Grade Control Structure and Bank Protection Project in Bernalillo County, NM.

AMAFCA is proposing to construct two new Grade Control Structures, 3a1 and 3b1, and bank protection within the Calabacillas Arroyo between Unser Blvd. and Golf Course Rd, see attached map. This arroyo is prone to overtopping during 100-year storm events causing vertical and lateral migration, which leads to erosion of the banks. Developments such as residential neighborhoods, parks, and commercial properties surround the arroyo, and have been affected by these storms. The proposed project seeks to stabilize the arroyo and effectively manage the water flow rates throughout this section of the arroyo. The additional bank protection, composed of grouted and dumped riprap, will effectively minimize soil erosion and prevent the expansion and eventual compromising of surrounding building foundations and still maintain the natural aesthetic the Calabacillas Arroyo is known for.

The purpose of this scoping letter is to inform you about this proposed project, and to give you the opportunity to provide us with information regarding issues, problems or opportunities you may have regarding this project. We would like to request any information you may have within the proposed project area or surrounding area, such as existing condition information, studies, Environmental Assessments (EA), and Environmental Impact Statements. This information will help us determine the scope of issues to be discussed in the Environmental Assessment (EA) under the National Environmental Policy Act for this proposed project.

Tetra Tech is developing the EA on behalf of AMAFCA. I am the Project Manager on this project for AMAFCA. Please provide any written comments within fifteen (15) days from the date of this letter to Mrs. Ondrea Hummel, Senior Ecologist with Tetra Tech at Ondrea.Hummel@tetratech.com. If you have any questions or require additional information, please contact Mrs. Hummel at (505) 404-3131.

Sincerely,

Jared Romero, P.E., CFM AMAFCA Drainage Engineer



Agency/Company	Role
City of Rio Rancho	
Bernalillo County	Communication Services Director
Bernalillo County	Emergency Management Director
Bernalillo County	Public Works - Operations & Maintenance Director
Bernalillo County	Parks, Recreation, and Open Space Director
Albuquerque City Council - District 5	Representative
Albuquerque City Council - District 5	Policy Analyst for Dan Lewis
County Commission - District 4 (Bernalillo)	Representative
NMED	NMED Surface Water Quality Bureau NPDES Program Manager
USEPA Region 6	Region 6 - South Central Office
MRGCD	Chief Engineer/CEO
USACE	
USFWS	Field Supervisor - NM Ecological Services
USFWS	Administrative Officer - NM Ecological Services
NMDGF	Northwest Regional Office - Albuquerque
Bureau of Reclamation	Upper Colorado Basin Region - Albuquerque Area Office
ABCWUA	Water Resources Division Manager
NMISC	Rio Grande Coordinator
CABQ	City of Albuquerque Floodplain Administrator
CABQ	City of Albuquerque Parks & Rec CIP Manager
CABQ	City of Albuquerque Parks & Rec Senior Manager
CABQ	City of Albuquerque Open Space Superintendent

Vandever, Edmund

From:	Barela, Martha I <mbarela@usbr.gov></mbarela@usbr.gov>
Sent:	Tuesday, November 26, 2024 12:50 PM
То:	Hummel, Ondrea
Cc:	Faler, Jennifer A; Wirth, Sharon R; Padilla, Robert S
Subject:	Response to Calabacillas Grade Control Structure and Bank Protection Project Scoping
Attachments:	NMCRIS Map.docx

You don't often get email from mbarela@usbr.gov. Learn why this is important

🜔 CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. 🤌

Good afternoon Mrs. Hummel,

We received a letter dated November 15, 2024 regarding the Calabacillas grade control and bank protection project scoping. After reviewing the information, the Bureau of Reclamation would like to provide the following feedback:

- Archaeological Sites: There are two significant archaeological sites within the project footprint that were recorded in the mid-late 1980s. Revisiting these sites and avoiding them in the project's Area of Potential Effects (APE) would be beneficial. Please see the attached map for more details.
- ESA and Critical Habitat: While our check on the USFWS IPaC system indicated no concerns regarding ESA-listed species or critical habitat, we recommend reaching out directly to USFWS for confirmation on ESA-listed species, critical habitat impacts, and Migratory Bird Treaty Act (MBTA) requirements. Additionally, consulting with the US Army Corps of Engineers regarding any jurisdictional wetlands and CWA permitting needs that might apply would be prudent.

Additionally, BOR typically reviews projects on the Rio Grande floodplain for their effects on river maintenance authority and local channel stability, which could lead to future maintenance needs. This includes a technical review based on our experiences and current design practices. Given that AMAFCA's work is on a tributary to the Rio Grande, changes to water and sediment loads to the river might occur. If you have any questions or would like to discuss further, please reach out to Robert Padilla (505) 462-3626 or email rpadilla@usbr.gov.

Martha Barela

Program Analyst Albuquerque Area Office Office: (505) 462-3623| Cell: (505) 274-0737



Vandever, Edmund

From:	Chen, Tiequan <tchen@cabq.gov></tchen@cabq.gov>
Sent:	Friday, November 22, 2024 4:43 PM
То:	Hummel, Ondrea
Cc:	Vandever, Edmund; Wolfley, Jolene; Biazar, Shahab; Rodenbeck, Jay B.; Phelan, Whitney A.; Aulick, Hannah; Jared Romero
Subject:	Re: Calabacillas Arroyo Grade Control Structure and Bank Protection Project Scoping

1. CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. 1.

Hi Ms. Hummel:

This part of Calabacillas Arroyo is the City's Open Space. Please coordinate with the City's Planning department and Parks and Rec department, and submit preliminary reports, plans for review and approval. Let me know if you have any questions.

Thanks!



<u>cabq.gov/planning</u> From: Hummel, Ondrea <Ondrea.Hummel@tetratech.com> Sent: Wednesday, November 13, 2024 6:30 PM Cc: Hummel, Ondrea <Ondrea.Hummel@tetratech.com>; Vandever, Edmund <EDMUND.VANDEVER@tetratech.com> Subject: RE: Calabacillas Arroyo Grade Control Structure and Bank Protection Project Scoping

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Hello, you will be receiving (or may have received) a hard copy letter with the following information regarding this project. As noted, please provide any questions, comments or input to me within 15 days of the receipt of the letter. Thank you.

Ondrea Hummel, CERP | Senior Ecologist | Tetra Tech Inc.

The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), using Federal Emergency Management Agency (FEMA) Hazard Mitigation Program funds administered by the New Mexico Department of Homeland Security Emergency Management (NM DHSEM), is proposing the Calabacillas Arroyo Grade Control Structure and Bank Protection Project in Bernalillo County, NM. AMAFCA is proposing to construct two new Grade Control Structures, 3a1 and 3b1, and bank protection within the Calabacillas Arroyo between Unser Blvd. and Golf Course Rd, see attached map. This arroyo is prone to overtopping during 100-year storm events causing vertical and lateral migration, which leads to erosion of the banks. Developments such as residential neighborhoods, parks, and commercial properties surround the arroyo, and have been affected by these storms. The proposed project seeks to stabilize the arroyo and effectively manage the water flow rates throughout this section of the arroyo. The additional bank protection, composed of grouted and dumped riprap, will effectively minimize soil erosion and prevent the expansion and eventual compromising of surrounding building foundations and still maintain the natural aesthetic the Calabacillas Arroyo is known for.

The purpose of this scoping letter is to inform you about this proposed project, and to give you the opportunity to provide us with information regarding issues, problems or opportunities you may have regarding this project. We would like to request any information you may have within the proposed project area or surrounding area, such as existing condition information, studies, Environmental Assessments (EA), and Environmental Impact Statements. This information will help us determine the scope of issues to be discussed in the Environmental Assessment (EA) under the National Environmental Policy Act for this proposed project.

Tetra Tech is developing the EA on behalf of AMAFCA. I am the Project Manager on this project for AMAFCA. Please provide any written comments within fifteen (15) days from the date of this letter to Mrs. Ondrea Hummel, Senior Ecologist with Tetra Tech at <u>Ondrea.Hummel@tetratech.com</u>. If you have any questions or require additional information, please contact Mrs. Hummel at (505) 404-3131.



Ondrea Hummel, CERP | Senior Ecologist Direct: 505-404-3131 | Cell: 505.235.6470 | Fax: 505.881.3283 ondrea.hummel@tetratech.com | www.tetratech.com APPENDIX G: DRAFT NOTICE OF AVAILABILITY



Federal Emergency Management Agency PUBLIC NOTICE

Notice of Availability of the Draft Environmental Assessment for the AMAFCA Calabacillas Grade Control and Bank Protection Project, HMGP-4652-0012-NM (1)

Interested persons are hereby notified that the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) has applied to the Federal Emergency Management Agency (FEMA) for funding under the Hazard Mitigation Grant Program (HMGP) through the New Mexico Department of Homeland Security and Emergency Management (NMDHSEM). HMGP provides grants to states and local governments to implement long-term hazard mitigation measures. The purpose of HMGP is to reduce the loss of life and property due to natural disasters. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This notice also serves as FEMA's final notice under Executive Order 11988 for Floodplain Management as the proposed action affects floodplain resources.

FEMA proposes to provide funding to AMAFCA to construct two new grade control structures (GCS), bank protection, erosion control, and access and maintenance roads within and along the Arroyo de las Calabacillas (Calabacillas Arroyo) between Unser Boulevard and Golf Course Road in Albuquerque, New Mexico. Multiple flood protection grade control structures already exist within the Calabacillas in this reach, but certain areas do not meet the required flood control standards. The proposed project would mitigate flooding and erosion to protect surrounding life and property.

A draft Environmental Assessment (EA) has been prepared to assess the potential impacts of the Proposed Action and alternatives on the human and natural environment in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Parts 1500 – 1508), FEMA's Instruction 108-1-1 for implementing NEPA, the National Historic Preservation Act, Executive Order 11988, Executive Order 11990, and 44 CFR Part 9. The draft EA evaluates alternatives that provide for compliance with applicable environmental laws. The alternatives evaluated include 1) No Action; 2) Proposed Action as described above. A third alternative, which included lining the Calabacillas Arroyo with concrete, was dismissed from full consideration in the EA due to its scale, cost, and ecosystem impacts.

The draft EA is available for review and comment from May 4 to June 4, 2025, at the AMAFCA Building, 2600 Prospect Avenue NE, Albuquerque, NM 8710, from 8:00 A.M. to 5:00 P.M. Monday through Friday. An electronic or hard copy version of the draft EA can be requested from Omololu Dawodu, FEMA Region 6, Email: omololu.dawodu@fema.dhs.gov or viewed on AMAFCA's website at https://amafca.org/projects/calabacillas-3a1-3b1-project/.

The comment period will end 30 days from the initial notice publication date. Written comments on the draft EA can be mailed or emailed to Omololu Dawodu, Environmental Protection Specialist, FEMA Region 6, 800 N Loop 288, Denton, TX 76209; Email: omololu.dawodu@fema.dhs.gov. If no substantive comments are received, the draft EA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project. Substantive comments will be addressed as appropriate in the final documents.

All other questions regarding disaster assistance should be directed to FEMA's Helpline at 1-800-621-3362 or visit www.DisasterAssistance.gov.





APPENDIX H: DRAFT FONSI



FINDING OF NO SIGNIFICANT IMPACT ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY CALABACILLAS ARROYO GRADE CONTROL AND BANK PROTECTION PROJECT BERNALILLO COUNTY, NEW MEXICO HMGP-4652-0012-NM (1)

BACKGROUND

In accordance with the Federal Emergency Management Agency's (FEMA) Instruction 108-1-1, an Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). The purpose of this project is to mitigate flooding and provide erosion protection that would withstand a 100-year storm event along the Calabacillas Arroyo downstream of Swinburne Dam. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) has applied for Hazard Mitigation Grant Program (HMGP) funding, through the New Mexico Department of Homeland Security and Emergency Management (NMDHSEM), under HMGP-4652-0012-NM. Through HMGP, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures, including flood mitigation. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Three project alternatives were evaluated in this EA: 1) No Action Alternative; 2) Proposed Action Alternative; 3) Concrete Channel Lining. Under the No Action Alternative, AMAFCA would take no action to mitigate flooding or provide erosion protection in the project area, and the arroyo would continue to incise the channel banks and meander into developments and related infrastructure. Alternative 3, Concrete Channel Lining, was dismissed from further consideration the EA due to its scale, infeasible cost, and impacts to the ecosystem.

Under the Proposed Action Alternative, AMACA would construct two new grade control structures (GCSs), as well as linear bank protection, erosion control, and access and maintenance roads within the Calabacillas Arroyo between Unser Boulevard and Golf Course Road in Albuquerque, New Mexico. These grade control structures are necessary to provide erosion control, overall bank protection, and channel stability to the Calabacillas Arroyo.

Finding of No Significant Impact AMAFCA Calabacillas Arroyo Grade Control and Bank Protection Project HMGP-4652-0012-NM (1) Page 2

A public notice was posted in the local newspaper of record and on AMAFCA's website. The draft EA was made available for public comment at a local public building and on FEMA's website for 30 days. No comments were received from the public during the comment period.

FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action as described in the EA will not significantly impact geology, groundwater, wetlands, migratory birds, threatened or endangered species, historic properties, hazardous materials, public services, or utilities. During construction, short-term, minor impacts to soils, air quality, water quality, vegetation, wildlife, noise, traffic, and minor safety risks for workers are anticipated. Long-term beneficial impacts to floodplain are expected. No long-term adverse impacts are anticipated. All adverse impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

CONDITIONS

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of federal funding.

- 1. This review does not address all federal, state, and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
- 2. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- 3. To minimize impacts to soils and comply with the requirements of Environmental Protection Agency's (EPA's) Construction General Permit (CGP), AMAFCA's construction contractor would prepare a stormwater pollution prevention plan (SWPPP) and obtain a National Pollution Discharge Elimination System (NPDES) permit prior to construction. Implementation of appropriate erosion and sediment control best management practices (BMPs) would be required during construction. A disposal area will be identified, and disposal requirements would be followed. Upon completion of construction activities, exposed soils would be revegetated with a standard native seed mix (AMAFCA Seed Specification, Section 632).

Finding of No Significant Impact AMAFCA Calabacillas Arroyo Grade Control and Bank Protection Project HMGP-4652-0012-NM (1) Page 3

- 4. Construction contractors would be required to comply with local emissions standards and to implement dust control measures such as watering down construction areas when winds are high. Equipment running times should be minimized and only occur during regular hours. For surface disturbance and/or demolition within Bernalillo County, the contractor must obtain a Fugitive Dust Control Construction Permit from the City of Albuquerque (City of Albuquerque, 2025).
- 5. AMAFCA must comply with Floodplain Permit Number A11F001, and encroachments within the adopted regulatory floodway must not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- 6. The following measures would be required to avoid or reduce potential impacts to wildlife:
 - Perform any vegetation removal outside of the peak migratory bird-nesting period of April 15 through August 15 to avoid take of individuals, nests, or eggs.
 - If construction activities must occur during nesting season, a qualified monitor must be employed to conduct breeding-bird surveys for surveying the project area for nests prior to clearing/scraping. The monitor would determine the appropriate timing of surveys in advance of construction activities.
 - If an occupied nest is found, work within a buffer zone appropriate for the species would be delayed until the nest is vacated and juveniles have fledged.
 - For work near an occupied nest, the monitor would prepare a report to document the species present and the rationale of buffer selection. This report would be submitted to FEMA and any other approving agency for inclusion in project files.
 - Any trenching required for the project would be equipped with escape ramps or filled concurrently to avoid trapping small mammals or herptiles.
- 7. In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. If unmarked graves or human remains are present on private or state land, compliance with the New Mexico Cultural Properties Act (Article 18, Section 6, Subsection 11.2 (18-6-11.2), NMSA 1978, also known as the Unmarked Burial Statute is required. NMDHSEM will require the applicant to stop work immediately in the vicinity of the discovery. NMDHSEM will immediately notify FEMA and law enforcement agencies of the discovery, which shall notify the Office of the Medical Investigator (OMI) and the SHPO. OMI shall evaluate the remains for medicolegal significance with minimal disturbance of the remains. OMI will terminate the discovery of any non-medicolegal human remains to the SHPO, who shall proceed pursuant to the Unmarked Burial Statute and its implementing regulations found at 4.10.11 NMAC. For any questions for human remains on state or private land, contact State Archeologist, Michelle Ensey, (505) 490-3928, michelle.ensey@dca.nm.gov.

Finding of No Significant Impact AMAFCA Calabacillas Arroyo Grade Control and Bank Protection Project HMGP-4652-0012-NM (1) Page 4

- 8. If contaminated soil or water is encountered during excavation, actions would be taken immediately to protect workers and residents from exposure. The work would cease until the appropriate procedures can be implemented and permits obtained. The construction contractor shall oversee, manage, and dispose of excavated soil and debris, petroleum products, hazardous materials, and toxic waste in accordance with the requirements of governing local, state, and federal agencies; and this would be documented in their SWPPP.
- 9. A traffic control plan and use of appropriate safety signs is required of AMAFCA's contractor before construction begins for access to and from the main roads.
- 10. AMAFCA's contractor must adhere to the New Mexico 811 (New Mexico 811) process for identifying buried utilities before construction occurs. In the event of damage to a utility, AMAFCA's contractor must contact the utility owner to report the utility strike. If necessary, a report detailing utility damage would be submitted by the contractor. If a sewer line is struck and compromised, the contractor would be required to contain and take corrective measures prior to proceeding with construction.

CONCLUSION

Based on the findings of the EA, coordination with the appropriate agencies, comments from the public, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (FEMA Instruction 108-1-1) and the proposed project as described in the attached EA may proceed.

APPROVAL AND ENDORSEMENT

La Toya Leger-Taylor Regional Environmental Officer FEMA Region 6

Marty Chester Hazard Mitigation Assistance Senior Advisor FEMA Region 6