

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

AND

FINDING OF NO SIGNIFICANT IMPACT

Farmers Mutual Ditch Erosion Repair Project

Farmington, San Juan County, New Mexico

Section 1113 Water Resources Development Act of 1986

EAXX-202-00-L4P-1751546035



Final

September 2025

US Army Corps of Engineers

Albuquerque District

4101 Jefferson Plaza NE

Albuquerque, New Mexico, 87109

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U.S. ARMY CORPS OF ENGINEERS
ALBUQUERQUE DISTRICT

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Farmers Mutual Ditch Erosion Repair Project

**Section 1113 Water Resources Development Act of 1986 Farmington, San
Juan County, New Mexico**

The U.S. Army Corps of Engineers, Albuquerque District (USACE) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The Supplemental Environmental Assessment (SEA), dated September, 2025 for the Farmers Mutual Ditch Erosion Repair Project addresses repair of storm damage to the Farmers Mutual Ditch (Acequia, ditch), Farmington, San Juan County, New Mexico. The USACE recommendation is contained in Section 4 of the SEA.

The SEA, incorporated herein by reference, evaluated various alternatives that would repair storm erosion damage to allow for the continued distribution of water for use by the members of the Farmers Mutual Ditch Association in the project area. In addition to a “no action” plan, one other alternative was evaluated, the Erosion Repair Alternative (recommended plan). The recommended action includes:

- Erosion repair and embankment stabilization.
- Extension of the articulated concrete block (ACB) matting.
- Removal and replacement of damaged ACB matting.
- Installation of riprap for energy dissipation.
- Utilization of existing access roads and staging areas.
- All existing ACB matting and unsuitable materials within project site would be removed and disposed of off-site.
- Construction would take place outside of irrigation season and migratory bird nesting season.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 6:

Table 7: Summary of Findings and Impacts.

Resources	Alternative B: Erosion Repair Alternative (Preferred Alternative)	Alternative A: No Action Alternative
Physical Landscape		
<i>Water Resources and Water Quality</i>	Short-term Negative Impacts Long-term Positive Impacts	Long-term Negative Impacts
Biological Resources		
<i>Special Status Species</i>	No Impacts	No Impacts
Cultural Resources	No adverse effects	Long-term Negative Impacts
Socioeconomic Considerations		
<i>Socioeconomics</i>	No Impacts	Long-term Negative Impacts
<i>Land Use</i>	No Impacts	Long-term Negative Impacts

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the SEA would be implemented, if appropriate, to minimize impacts and are listed below:

- If a bald eagle is present within 0.5 mile of the work in the morning before the project activity starts, or following breaks, the contractor would suspend all activity until the bird leaves of its own volition. However, if a bald eagle arrives during construction activities or if an eagle is beyond that distance, construction would not be interrupted.
- All construction activities would occur outside of the primary migratory bird nesting season (March 15 through August 31) to minimize potential disturbances to protected avian species.
- Sediment and erosion controls would be in place during the construction period. Following construction, the soil would be stabilized, and all disturbed areas would be revegetated with appropriate native species.
- All construction equipment would be cleaned before entering and upon leaving the study area to prevent introduction or spread of invasive species. Equipment that was previously used in a waterway or wetland would be disinfected to prevent spread of aquatic disease organisms. Any disinfectant or other pesticide product used would be actively registered with the US Environmental Protection Agency and used as directed on the label.
- Access roads and disturbed soil would be wetted. Stockpiles of debris, soil, sand, or other materials that could produce dust would be wetted or covered. All fill material, rubble, and spoil would be covered while being transported to or from the project site.
- All servicing and fueling of equipment would be conducted in a designated area hydrologically isolated from surface waters. Emergency spill kits would be placed in the designated fueling area. A Spill Control Plan would be required for this project. All heavy equipment would carry a spill kit and the operator shall be knowledgeable in the use of spill containment equipment.
- All General, Regional, and Water Quality Conditions applicable to Nationwide Permits within the State of New Mexico and to this project would be adhered to.
- Erosion control blankets used post-construction, edges should be buried, and non- fused mesh materials used to avoid wildlife entanglement.

No compensatory mitigation is required as part of the recommended plan.

Public review of the Draft SEA and FONSI was completed from August 8, 2025 to September 6, 2025. A comment-response table is included in Appendix C of this Final SEA and FONSI.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE has determined that the recommended plan would have no effect on federally listed species or their designated critical habitat.

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the USACE determined that the recommended plan would result in no adverse effect to historic properties. This determination was made in consultation with the New Mexico State Historic Preservation Office (SHPO) in recognition that the acequia is a historic property. Concurrence was received on 25 April 2025, and tribal consultation was conducted accordingly.

Pursuant to the Clean Water Act of 1972, as amended (CWA), there would be minor discharge of dredged or fill material associated with the recommended plan. The plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The action would meet the conditions of Nationwide Permit 13. If a USACE project meets the conditions of a specific general permit, the 404(b)(1) analysis has already been completed and additional 404(b)(1) analysis is not required. The Regional Conditions applicable to all Nationwide Permits within the State of New Mexico are found in section

3.1.1 or in the Appendix of the SEA.

The New Mexico Environment Department issued conditional Water Quality certification for NWP 13 on October 14, 2021. All conditions of the water quality certification shall be implemented to minimize adverse impacts to water quality.

All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Implementation of the proposed action is expected to economically benefit the Farmers Mutual Ditch Association community members by preventing future stormwater runoff damage and reducing long-term maintenance costs.

The planned action is being coordinated with Federal, State, and local agencies with jurisdiction over the biological and cultural resources of the project area. Based upon these factors and others discussed in the following Supplemental Environmental Assessment, the proposed action is recommended and would have negligible effects on the human environment. Therefore, an Environmental Impact Statement will not be prepared for the proposed rehabilitation work on the Farmers Mutual Ditch Erosion Repair Project.

Date

Matthew T. Miller, P.E., PMP
Lieutenant Colonel, U.S. Army
District Commander

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Farmers Mutual Ditch Erosion Repair Project

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LIST OF ACRONYMS USED

ACB	Articulated Concrete Block (erosion protection mat)
APE	Area of Potential Effect
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
CWA	Clean Water Act
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
HTRW	Hazardous, Toxic, and Radioactive Waste
IPaC	Information for Planning and Consultation system
ISC	New Mexico Interstate Stream Commission
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMCRIS	New Mexico Cultural Resources Inventory System
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMOSE	New Mexico Office of the State Engineer
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PCE	Primary Constituent Elements
OHWM	Ordinary High-Water Mark
SHPO	State Historic Preservation Office
SEA	Supplemental Environmental Assessment
SUIT	Southern Ute Indian Tribe
SWPPP	Storm Water Pollution Prevention Plan
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	Waters of the United States
WRDA	Water Resources Development Act

1. BACKGROUND

The U.S. Army Corps of Engineers, Albuquerque District (USACE), completed an Environmental Assessment (EA) in June 2023 for rehabilitation of the Farmers Mutual Ditch acequia under Section 1113 of the Water Resources Development Act (WRDA) of 1986 (Public Law 99-662), as amended. The EA for the Farmers Mutual Ditch Rehabilitation (USACE, 2023) evaluated the environmental impacts of a project to improve the acequia by replacing approximately two miles of open ditch with buried pipe to prevent rock and debris slides from filling the irrigation canal. Phase I of the project, rehabilitating approximately one mile of the ditch, was constructed during the non-irrigation season.

The Farmers Mutual Ditch (Acequia, ditch) was chartered in the 1880s and supplies irrigation water for 600 users located along its approximate 22-mile length as it courses through the north floodplain of the San Juan River beginning at Farmington, New Mexico (**Additional background on the acequia system is provided in the June 2023 EA for the Farmers Mutual Ditch Rehabilitation Project.**). The Farmers Mutual Ditch is a part of the Acequia Rehabilitation Program and managed by the Farmers Mutual Ditch Association (Association). Acequias are "ditch" type irrigation systems, consisting of a diversion and a simple earthen-ditch conveyance channel. Additional background on the acequia was provided in the 2023 EA.

On 24 June 2024, the Albuquerque District was notified of damage to the project erosion protection mat from runoff associated with a rainfall event on or near 22 June 2024. A site visit to assess the situation determined that the erosion protection mat requires replacement and damages to the acequia require repair.

1.1. Purpose and Need for Action

Currently, a portion of Farmers Mutual Ditch that runs along steep, unstable bluffs close to the river is affected by rock and debris slides. In the past, the rockslides have filled the irrigation ditch, reducing the water supply to Association members and necessitating frequent, expensive maintenance. Phase 1 of the Acequia project addressed this issue. The June 22, 2024, flood event further exacerbated erosion issues at Drainage Crossing 1, leading to significant soil loss beneath the articulated concrete block (ACB) matting and destabilization of portions of the embankment.

The purpose of this Supplemental Environmental Assessment (SEA) is to evaluate the environmental impacts of the proposed repair and reinforcement project to stabilize the eroded areas and prevent future damage. The project includes extending the ACB protection mat at Drainage Crossing 1 to improve erosion resistance and provide additional stabilization where previous matting was insufficient. Riprap would be installed at the toe of the slope and along the upstream end of the channel to act as an energy dissipator, reducing the force of flowing water and preventing further sediment loss. All existing ACB matting in the project area would be removed and disposed of, and new matting would be installed in its place in accordance with manufacturer guidelines. Construction activities would require the use of hydraulic excavators, bulldozers, vibratory drum rollers, telehandlers, and dump trucks.

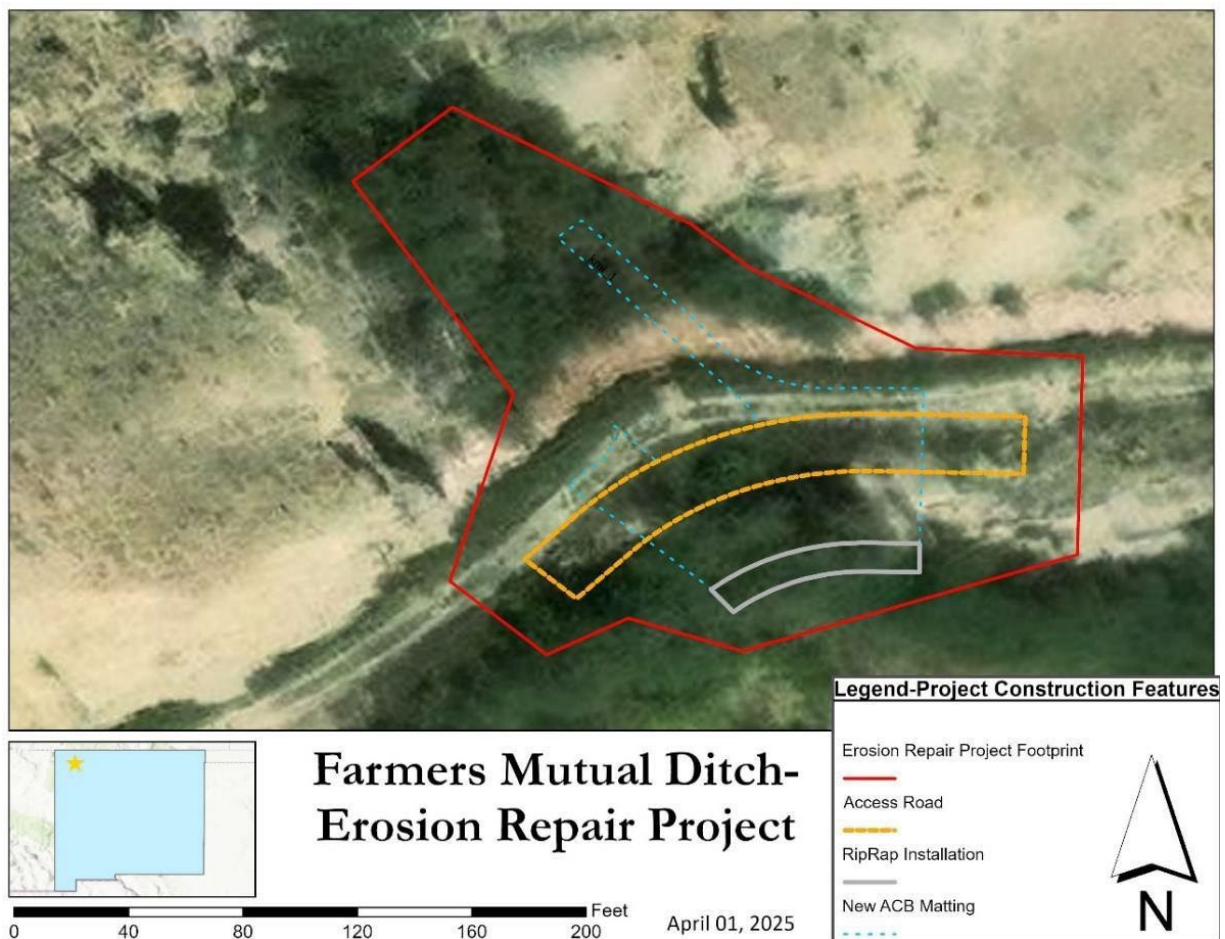


Figure 1: Project Construction Features

This SEA also addresses cultural resource compliance, as portions of the project area were not previously surveyed under the National Historic Preservation Act (NHPA). Additionally, the SEA evaluates potential impacts to federally listed species and designated critical habitat under the Endangered Species Act (ESA) and ensures compliance with the Migratory Bird Treaty Act (MBTA) by scheduling construction outside of the primary nesting season. The analysis considers bank stabilization measures, sediment control, and best management practices (BMPs) to minimize environmental impacts, while also ensuring that the project aligns with Clean Water Act (CWA) Section 404, Section 401, and Nationwide Permit (NWP) 13 requirements. These evaluations support the project's goal of addressing ongoing erosion concerns affecting the Farmers Mutual Ditch system while maintaining compliance with federal environmental laws and regulations.

1.2. Project Location

The Farmers Mutual Ditch Erosion Repair Project is located at Drainage Crossing 1, near the San Juan River in Farmington, San Juan County, New Mexico (Figure 1: Project Features Map-Drainage Crossing 1). The project site lies along the Farmers Mutual Ditch, an irrigation structure that diverts water from the San Juan River to support agricultural use. The GPS coordinates for the erosion repair project location are approximately 36° 44' 14.20" N, 108° 15' 23.02" W.

The project area is situated within a steep-sloped landscape, with contour lines indicating elevation changes from approximately 5,210 feet at the Ordinary High-Water Mark (OHWM) of the San Juan River to 5,320 feet near US Highway 64. The project spans 98.70 linear feet along the riverbank and involves bank stabilization below the OHWM. The work zone is primarily constrained to previously disturbed areas, minimizing additional environmental impacts.

The need for repair arose from a storm event on June 22, 2024, which generated excessive runoff from an ephemeral drainage north of US Highway 64. This watershed collects stormwater from a mixed-use residential and commercial area, conveying it through a culvert beneath US-64 before discharging into the project area. The high-velocity runoff caused significant erosion at Drainage Crossing 1, resulting in the failure of the ACB matting and the loss of embankment material.

The Erosion Repair Project is limited to Crossing 1 and does not include Crossings 2 or 3. The primary objectives are to stabilize the streambank, reduce future erosion risk, and protect the integrity of the Farmers Mutual Ditch system.



Figure 2: Project Location Map



Figure 3: Enlarged Project Location

1.3. Authority and Federal Requirements

This SEA has been prepared consistent with the following authorities as provided by Congress.

Section 1113 of the WRDA 1986 (P.L. 99-662), as amended, authorizes the Acequia Restoration Program and directs the Secretary of the Army:

...to undertake, without regard to economic analysis, such measures as are necessary to protect and restore the river diversion structures and associated canals attendant to the operations of the community ditch and Acequia systems in New Mexico that are declared to be a political subdivision of the State of New Mexico...The non-Federal share of any work undertaken under this section shall be 25 percent.

[and] ...to consider the historic Acequia systems (community ditches) of the southwestern United States as public entities, if these systems are chartered by the respective State laws as political subdivisions of that State. This public entity status will allow the officials of these Acequia systems to enter into agreements and serve as local sponsors of water related projects of the Secretary.

This SEA was prepared by the USACE in compliance with all applicable Federal statutes, regulations, and Executive Orders (EO), as amended, including, but not limited to, the following:

Federal Laws

- National Environmental Policy Act of 1969 (NEPA) (42 U.S.C § 4321 *et seq.*)
- Clean Water Act of 1948, 1966, 1972,
- Endangered Species Act of 1973 (16 U.S.C. § 1531 *et seq.*)
- Migratory Bird Treaty Act of 1918 (16 U.S.C. § 703 *et seq.*)
- Watershed Protection and Flood Prevention Act of 1954 (16 U.S.C. § 1001 *et seq.*)
- Flood Control Act of 1958 (P.L. 85-500), 1962 (P.L. 87-874, Sec. 101)
- National Historic Preservation Act of 1966 (16 U.S.C. § 470 *et seq.*)
- Clean Air Act of 1972 (42 U.S.C. § 7401 *et seq.*)
- Federal Noxious Weed Act of 1975 (7 U.S.C. § 2814)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa-470mm)
- Farmland Protection Policy Act of 1981 (7 U.S.C. § 4201 *et seq.*)

- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001 *et seq.*)
- Water Resource Development Act of 1986 (P.L. 99-662, Sec. 1113)
- Energy and Water Resources Development Appropriations Act of 2004 (P.L. 108-137, Sec. 117)
- Plant Protection Act of 2000 (7 U.S.C § 7701 *et seq.*)
- Fish and Wildlife Coordination Act of 1934 (48 Stat. 401; 16 USC § 661 *et. seq.*)
- Plant Protection Act of 2000 (7 U.S.C § 7701 *et seq.*)
- American Indian Religious Freedom Act (42 U.S.C. § 1996)

Regulations

- Protection of Historic and Cultural Properties (36 CFR Part 800 *et seq.*)

Executive Orders

- EO 11593: Protection and Enhancement of the Cultural Environment, 1971
- EO 11988: Floodplain Management, 1977
- EO 11990: Protection of Wetlands, 1977
- EO 13112: Invasive Species, 1999
- EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (2001)
- EO 13751: Safeguarding the Nation from Impacts of Invasive Species, 2016

2. DESCRIPTION OF ALTERNATIVES

This section describes the two alternatives considered for National Environmental Policy Act (NEPA) analysis, a No Action Alternative and the Erosion Repairs Alternative.

2.1. Alternative A: No Action Alternative

No work would be performed to address the current damage.

2.2. Alternative B: Erosion Repairs Alternative

Under Alternative B, the project would address storm-induced erosion damage to the Farmers Mutual Ditch system by stabilizing Drainage Crossing 1, where the June 22, 2024, flood event caused significant soil loss beneath the ACB matting and

embankment destabilization. The repair plan includes replacing damaged ACB matting and extending ACB coverage where previous matting failed. To further stabilize the channel and embankment, riprap would be placed at the toe of slope and in the upstream channel to dissipate flow energy and reduce the risk of future undercutting.

Construction activities would utilize existing access roads and staging areas from the previous Phase 1 project to minimize further land disturbance. Heavy equipment, including hydraulic excavators, bulldozers, vibratory drum rollers, telehandlers, and dump trucks, would be used to complete the necessary earthwork and mat installation. Work would occur during the non-irrigation season to prevent disruption to water deliveries, with all activities remaining within the Farmers Mutual Ditch Association easement.

All existing ACB matting and unsuitable materials within the project area would be removed and disposed of offsite in accordance with applicable regulations. No suitable material is available onsite due to recent erosion activity; therefore, no onsite material would be used in the erosion repair, and no disposal sites would be located within the project site.

Construction would take place from early October through April 2026, during the non-irrigation season, ensuring that water would not be running through the acequia pipe. Additionally, all construction activities would take place outside of the migratory bird nesting season to minimize potential disturbances to protected avian species.

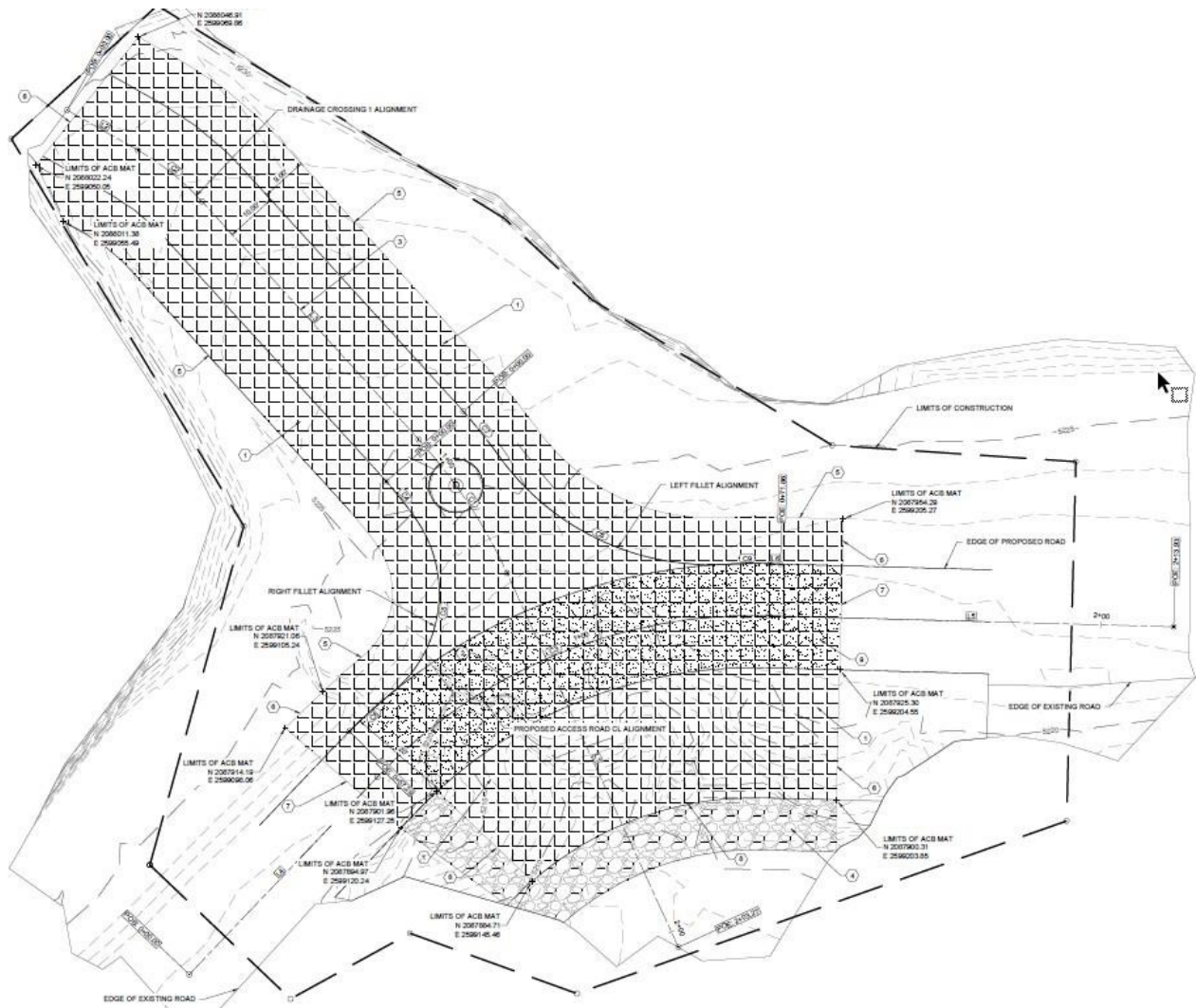


Figure 4: Site Plan-Drainage Crossing 1 and Access Road

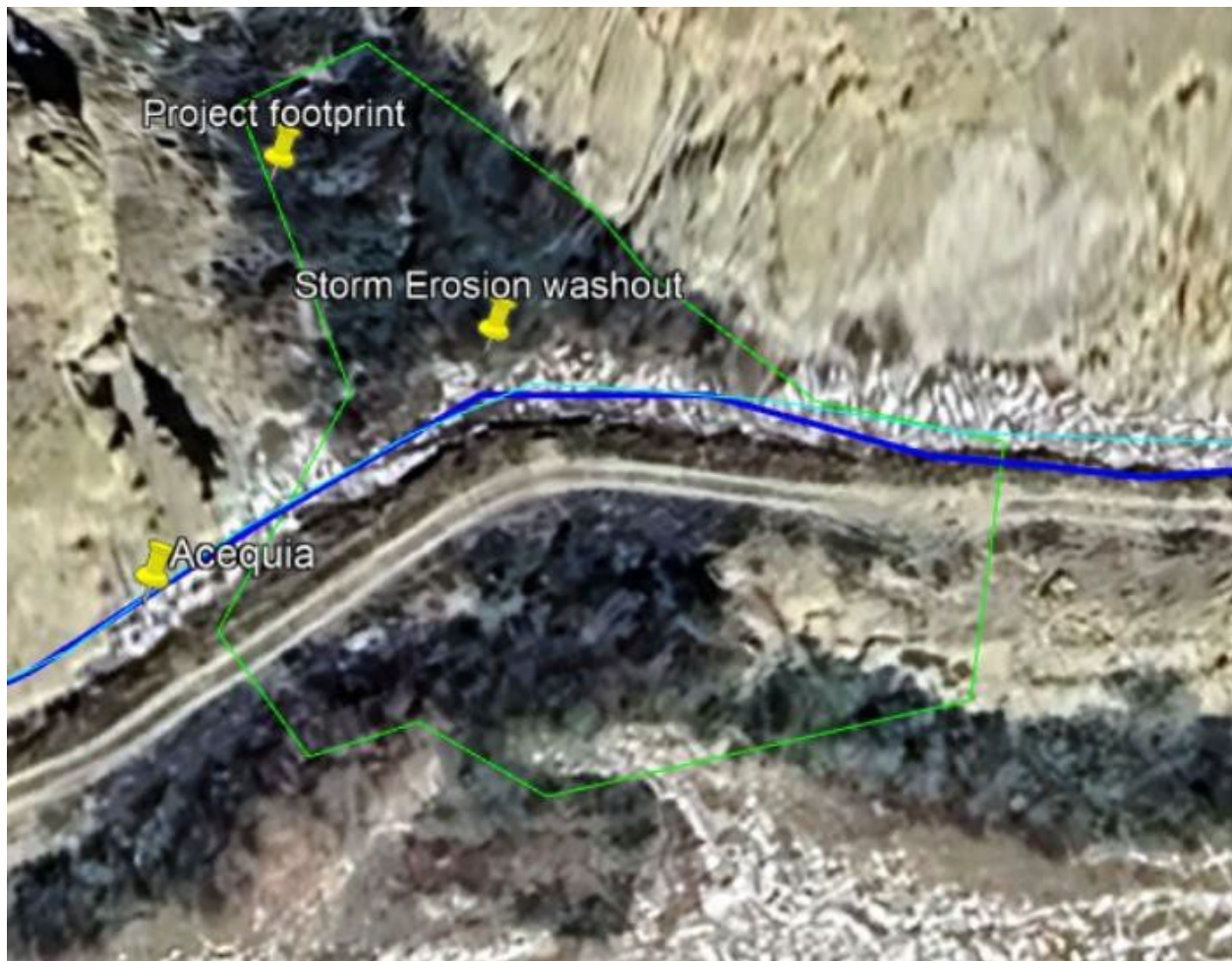


Figure 5: Erosion Repair Project Boundary

The limits of construction encompass approximately .51 acres, as depicted by the green project footprint boundary in Figure 5. This includes all locations where ground-disturbing activities would occur during the erosion repair project.

Bureau of Land Management Project Area:

The access road at Drainage Crossing 1 would require minor grading and surface refinements to facilitate erosion repair activities, but the overall footprints of the staging areas, access roads, and Drainage Crossing 1 would remain consistent with the original project. The borrow site, however, is located on BLM-managed land and would be

utilized as it was in the original Farmers Mutual Ditch Rehabilitation Project. While the Erosion Repair Project footprint, including the staging area and Drainage Crossing 1, does not intersect with BLM-managed land, the borrow site remains within BLM jurisdiction. As a result, BLM land use authorizations may still apply to borrow material extraction, but no additional access routes or work beyond the original project footprint are planned on BLM land. Any necessary coordination with BLM would be conducted to ensure compliance. For more details regarding the original project footprint and prior BLM coordination, refer to the original 2023 Environmental Assessment.

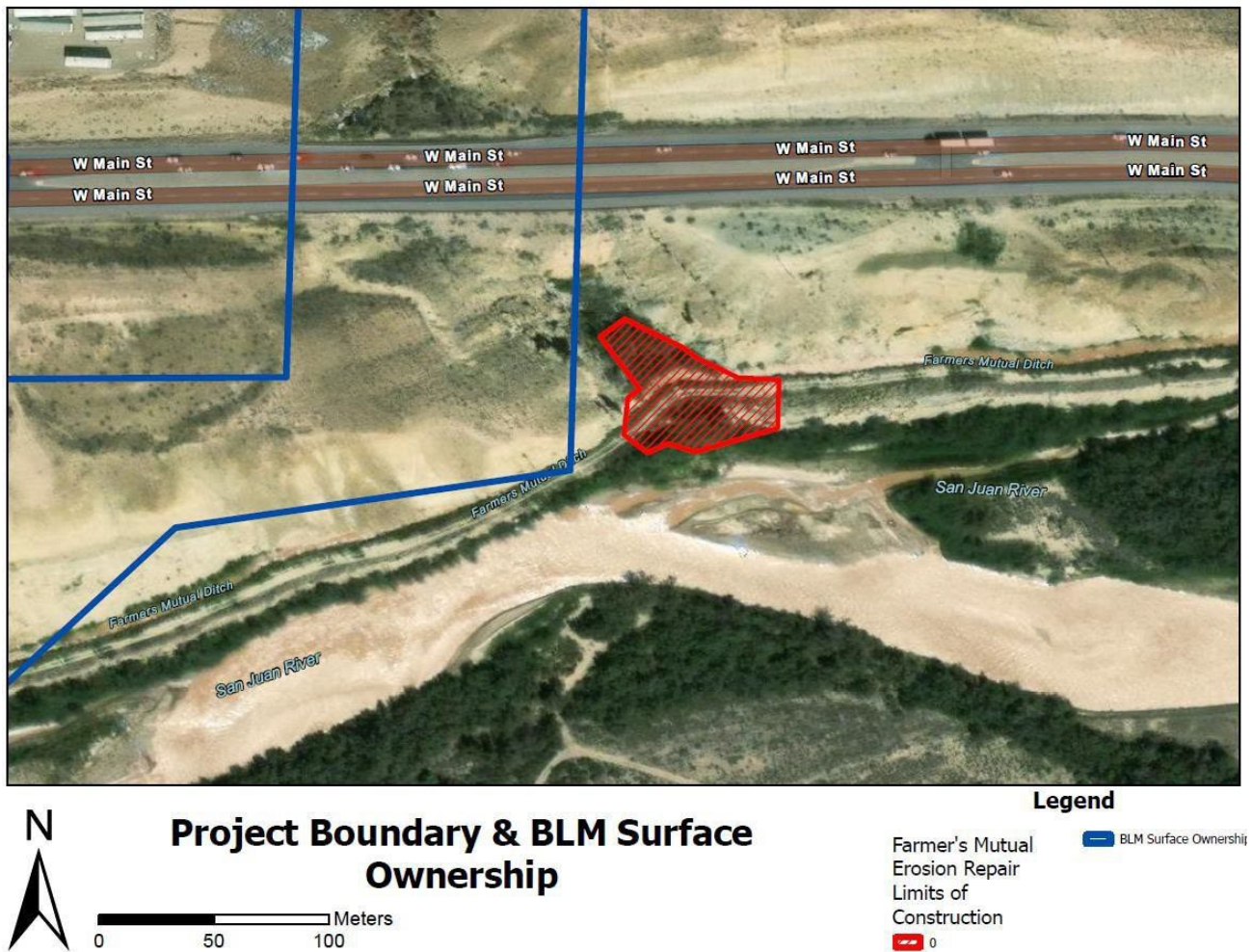


Figure 6: Project Boundary & BLM Surface Ownership

Reseeding in Disturbed Areas:

After completion of the erosion repair work, reseeding would be conducted in areas where soil disturbance has occurred to promote vegetation regrowth, pollinator habitat, and prevent further erosion. Ideal locations for reseeding include disturbed areas along the repaired bank, particularly in soils surrounding areas where riprap has been placed, to help stabilize the soil and reduce sediment runoff. The access route along the ditch may also require reseeding if it experiences significant disturbance during construction. Additionally, since the borrow site is located on BLM-managed land, reseeding may be necessary as part of the reclamation process to restore vegetation cover. If the staging area is impacted by heavy equipment use, it may also benefit from reseeding efforts. A native seed mix suited for the San Juan River floodplain and surrounding uplands would be used to ensure ecological compatibility. In areas prone to erosion, straw wattles or erosion control mats may be installed to support seed establishment and long-term stabilization.

Table 1: Plant Names and Seeding Rates Used for Reclamation on Access Routes

Common Name	Scientific Name	Seeding Rate (lbs of pure live seed per acre)
Sand dropseed	<i>Sporobolus cryptandrus</i>	0.5
Galleta	<i>Pleuraphis jamesii</i>	12
Indian ricegrass	<i>Oryzopsis hymenoides</i>	8
Annual sunflower (wild variety)	<i>Helianthus annuus</i>	4

3. EXISTING ENVIRONMENT AND FORESEEABLE EFFECTS

The 2023 EA analyzed various environmental resources, and their existing conditions and foreseeable effects remain unchanged from that analysis. As a result, this SEA does not reanalyze these resources, as they are not expected to be impacted by the proposed repair work. These include the physical environment, encompassing climate, physiography, geology, and air quality; hazardous, toxic, and radioactive waste (HTRW), which was not identified as a concern in the 2023 EA; and floodplains and wetlands, where no new impacts beyond those previously analyzed are anticipated.

Additionally, the biological environment, including general vegetation, fish and wildlife, and invasive species, is not expected to be affected. Socioeconomic considerations and land use also remain unchanged; nevertheless, socioeconomic data for the project area have been updated.

However, three key resource areas require further analysis in this SEA. Water resources and water quality will be evaluated due to the project's proximity to the San Juan River and bank stabilization work, ensuring potential effects on water quality, sedimentation, and hydrology are considered. Special status species were analyzed in the 2023 EA, but this SEA reassesses potential effects to ensure continued compliance with the ESA. This includes reviewing current listing statuses and incorporating recent biological assessments. Additionally, cultural resources are the primary focus of this SEA because the 2023 EA's cultural resource survey did not encompass the entire Area of Potential Effect (APE) for the proposed repair work. This SEA evaluates potential impacts to previously surveyed areas in accordance with Section 106 of the NHPA.

While soils were not a primary focus in the 2023 EA, repair activities would involve excavation and soil disturbance. This SEA includes a discussion on soil disturbance and erosion control measures under physical environment or water resources to ensure all relevant impacts are documented.

3.1. Physical Environment

3.1.1. Water Resources and Water Quality

Section 404 Clean Water Act

The San Juan River, the nearest surface water resource to the Erosion Repair Project, serves as the primary water source for the Farmers Mutual Ditch through a diversion. According to the New Mexico Administrative Code (§20.6.4.405), the designated uses of the San Juan River include public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact recreation, marginal cold water aquatic life, and warmwater aquatic life. Water quality standards for the river require that its temperature must not exceed 32.2°C (90°F).

The proposed action involves bank stabilization and erosion control measures that would result in the discharge of dredged or fill material into waters of the United States. As such, the project falls under the jurisdiction of Section 404 of the Clean Water Act and has been evaluated to determine if it qualifies for Nationwide Permit 13 for Bank

Stabilization. To qualify under this nationwide permit, the project must meet several conditions. The length of bank stabilization must not exceed 500 feet unless a waiver is obtained (U.S. Army Corps of Engineers, 2022). The project's stabilization length is 98.70 feet, which is well below this threshold and does not require additional authorization. Additionally, the volume of fill material below the OHWM must not exceed an average of one cubic yard per running foot unless a waiver is obtained. The total fill material used below the OHWM is around 30 cubic yards, which results in an average of 0.32 cubic yards per linear foot, significantly below the one cubic yard per running foot threshold.

The activity must not impair surface water flow into or out of the San Juan River, and the design and placement of riprap would ensure that normal flow regimes are maintained. The materials used must be appropriately anchored to prevent erosion from high flows, and the bank stabilization design incorporates proper placement and anchoring to mitigate erosion risks. Since this project is strictly for bank stabilization and erosion repair and does not alter the stream channel, it does not involve stream channelization. Additionally, native vegetation appropriate to site conditions must be used for bioengineering or vegetative stabilization if applicable. While this project primarily involves riprap placement, any disturbed areas would be stabilized using BMPs including revegetation with native plant species. The structure must also be properly maintained to ensure continued effectiveness, and the stabilization features would be designed for long-term durability, with maintenance as necessary following high-flow events.

Section 401 Water Quality Certification:

A water quality certification (WQC) pursuant to Section 401 of the CWA has been conditionally approved for projects authorized under NWP13 Bank Stabilization in New Mexico, provided they comply with the New Mexico Environment Department (NMED) conditions for bank stabilization. The Erosion Repair Project would adhere to all applicable general, regional, and water quality conditions associated with NWP 13 in New Mexico to ensure compliance with state water quality standards. The project does not involve impervious channelization, which would require an individual Section 401 WQC. While NMED strongly recommends the use of bioengineered stabilization technique such as willow plantings, root wads, and large woody debris in combination with hard armoring, the project would incorporate appropriate BMPs to minimize adverse impacts on water quality. These BMPs include silt fences, straw wattles, sediment basins, and erosion control barriers to reduce runoff, as well as fuel spill prevention measures, such as equipment leak inspections and designated fueling areas at least 100 feet from surface waters. Additionally, all disturbed areas would be reseeded with native vegetation post construction to mitigate erosion and protect water

quality. Since the project aligns with the conditional approval criteria for NWP 13, an individual Section 401 WQC is not required (U.S. Army Corps of Engineers, 2022).

Section 402 National Pollutant Discharge Elimination System

Stormwater discharges associated with construction activities fall under Section 402 of the Clean Water Act, which regulates National Pollutant Discharge Elimination System (NPDES) permitting. Since the total area that would be disturbed by project construction is only .51 acres, NPDES permitting is not required. However, erosion and sediment control best management practices would be implemented to minimize potential short-term impacts on water quality.

Alternative A: No Action Alternative

Under the No Action Alternative, the existing pipeline would continue to be vulnerable to bank erosion, debris accumulation, and sedimentation, leading to the continued transport of sediment into the San Juan River. This could result in long-term degradation of water quality by increasing turbidity and sediment deposition, which could adversely impact aquatic habitat and designated uses of the river.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative involves bank stabilization and erosion control measures along a 98.70-foot section of the San Juan Riverbank to protect the Farmers Mutual Ditch at arroyo crossing 1. The primary objective is to prevent further erosion, maintain the integrity of the ditch system, and reduce sediment transport into the river. Construction activities include the excavation of approximately 27 cubic yards of material below the OHWM and the placement of 32.25 cubic yards of riprap to establish a stable 3:1 streambank slope.

Sedimentation can impact fish breeding and access to floodplain habitats, particularly for larval Colorado Pikeminnow, which rely on backwater areas for early development. However, sedimentation from the proposed project is expected to be minimal. The project would not involve in-stream work or direct modification of the river channel, reducing the risk of sediment transport into the San Juan River. BMPs, including silt fences, erosion control measures, and sediment barriers, would be implemented in accordance with NWP 13 and Section 401 WQC conditions to mitigate sediment runoff.

Additionally, the project would utilize existing borrow and staging areas from previous work to minimize ground disturbance. All existing ACB matting, and 30 cubic yards of eroded material would be removed and disposed of off-site in accordance with applicable regulations. These measures would ensure compliance with the CWA and state water quality standards.

The project would adhere to the New Mexico Administrative Code (§20.6.4.405) water quality standards, ensuring that water temperature, dissolved oxygen levels, and flow regimes remain unaffected. Given these considerations, the project is expected to result in minimal impacts on water quality, aquatic habitat, or designated uses of the San Juan River.

3.2. Biological Resources

3.2.1. Special Status Species

The Information for Planning and Consultation System (IPaC, 2025) lists seven species protected under the ESA that may potentially occur within the proposed project area (**See Table 2 below.**). These species include two birds, two fish, two invertebrates, and one flowering plant.

Table 2: Federal and State Endangered and Threatened Species

Common Name	Scientific Name	Federal Status	State of NM Status
Southwestern Willow Flycatcher (SWFL)	<i>Empidonax traillii extimus</i>	E	E
Yellow-billed Cuckoo (YBCU)	<i>Coccyzus americanus</i>	T	SGCN
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E	SGCN
Monarch butterfly	<i>Danaus plexippus</i>	PT	---
Suckley's Cuckoo Bumble Bee	<i>Bombus suckleyi</i>	PE	---
Mesa Verde Cactus	<i>Sclerocactus mesae-verdae</i>	T	E

* E – Endangered, T – Threatened, PE – Proposed Endangered, PT – Proposed Threatened, SGCN-Species of Greatest Conservation Concern

Federally Listed Riparian Bird Species: Southwestern Willow Flycatcher & Yellow-billed Cuckoo

The Southwestern Willow Flycatcher (SWFL) and Yellow-billed Cuckoo (YBCU) are federally protected riparian species that were evaluated for their potential presence in the Erosion Repair Project area. Habitat within the immediate project site is not suitable for nesting; however, SWFLs have been documented migrating along riparian corridors and irrigation ditches similar to the project area.

Most of the riparian habitat adjacent to the project area is managed by the BLM and designated as an Area of Critical Environmental Concern (ACEC). This ACEC provides nesting habitat for the SWFL but lacks the essential elements required for YBCU, particularly mature cottonwood trees. The proposed project would not remove riparian vegetation outside of the erosion repair site, and all construction and stabilization measures would take place between October and the first week of April, avoiding the critical nesting period for these species.

Exploratory surveys for YBCU and SWFL conducted during preparation of the original EA on June 20 and July 8, 2020, found no detections of either species in the project vicinity (U.S. Army Corps of Engineers, 2023). Due to the absence of documented nesting, the implementation of seasonal restrictions, and the avoidance of vegetation disturbance, the project is expected to have no effect on these species.

Bald Eagles & Other Raptors

The San Juan River has been identified as wintering habitat for Bald Eagles (*Haliaeetus leucocephalus*), which are listed as Threatened by the State of New Mexico and are federally protected under the Bald and Golden Eagle Protection Act (BGEPA). No impacts are expected due to the lack of roost areas for Bald Eagles within the project area and the absence of Golden Eagle nests within 0.5 miles. The cliffs near the project site do not contain known nesting sites for Peregrine Falcons or other raptors.

Federally Listed Fish Species: Colorado Pikeminnow & Razorback Sucker

The Colorado Pikeminnow (*Ptychocheilus lucius*) and Razorback Sucker (*Xyrauchen texanus*) are both federally listed as endangered fish species. According to the U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) mapper, designated critical habitat for the Colorado Pikeminnow includes portions of the San Juan River adjacent to the Erosion Repair Project (USFWS, 2008). There is no designated critical habitat for the Razorback Sucker near or adjacent to the project area.

The primary constituent elements (PCEs) of Colorado Pikeminnow critical habitat include water quality and quantity, physical habitat, and the biological environment (Federal Register, 1994). The proposed project's potential effects on these PCEs were analyzed to determine whether any significant impact would occur.

The project does not alter flow volumes, seasonal high flows, or base flows within the San Juan River. Additionally, BMPs would be in place to prevent sedimentation during construction, ensuring no significant impact on water quality and flow regimes.

The project area does not contain designated spawning cobbles, nursery backwaters, or eddies essential to the species (USFWS, 2008). The riprap placement would be confined to the bank and would not obstruct habitat connectivity or migration corridors, resulting in no significant impact on the species' physical habitat.

While temporary increases in turbidity may occur during construction, erosion control measures would be implemented to minimize impacts. The project does not introduce nonnative species or alter the availability of prey species, ensuring that foraging conditions remain stable, and no measurable impact is expected on the biological environment.

Sedimentation & Mitigation Measures

Sedimentation can affect fish breeding if it occurs during sensitive periods and may also impact Colorado Pikeminnow larvae by reducing access to floodplain habitats, which serve as critical nursery areas during early life stages (Federal Register, 1994). The work would occur along the San Juan Riverbank near the Farmers Mutual Ditch crossing, within the cliffs and uplands above the river, but would not involve in-stream work or direct modification of the river channel.

Sediment from construction would be contained using BMPs, including silt fences, erosion control measures, and sediment barriers, to prevent excessive sediment transport into the San Juan River. These measures align with NWP 13 requirements for bank stabilization and ensure compliance with CWA 404 (U.S. Army Corps of Engineers, 2022).

Additionally, the project would utilize existing borrow and staging areas from previous work to minimize additional ground disturbance and limit erosion risk. All existing ACB matting and unsuitable materials within the project area would be removed from the site in accordance with applicable regulations. No suitable material is available onsite due to

recent erosion activity; therefore, no onsite material would be used in the erosion repair, and no disposal sites would be located within the project site.

Other ESA-Listed Species in the Project Area

The Mesa Verde Cactus (*Sclerocactus mesae-verdae*) and the New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*) have no suitable habitat in the project area, and no impacts are anticipated.

Final Determination

Based on the project design, BMPs, and location outside of the active river channel, USACE has determined that the project would not adversely affect any federally or state listed species or designated critical habitat within the action area.

Alternative A: No Action Alternative

Under the No Action Alternative, no construction would occur, resulting in no direct effects on federally or state-listed species, but ongoing erosion could contribute to habitat degradation over time.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative involves bank stabilization and erosion control measures along a 98.7-foot section of the San Juan Riverbank at Drainage Crossing 1, with all work confined to previously disturbed areas within the project footprint. The project has been designed to avoid adverse impacts on federally and state-listed species by scheduling construction outside of the migratory bird nesting season and implementing BMPs to minimize sedimentation. While temporary increases in turbidity may occur, sediment control measures such as silt fences, erosion barriers, and proper disposal of damaged ACB matting and unsuitable material would be used to prevent significant impacts on Colorado Pikeminnow critical habitat and maintain water quality. No in-stream work, direct river modifications, channelization, or permanent habitat alterations would occur. Given these considerations, the Erosion Repair Alternative is not expected to adversely affect any federally or state-listed species, their critical habitats, or essential ecological functions within the project area.

3.3. Cultural Resources

The project area is located in San Juan County, New Mexico, approximately one-half mile west of Farmington, New Mexico. The USACE has previously consulted with the State Historic Preservation Office (SHPO) about this section of the Ditch. The USACE consulted about the adverse effect that rehabilitation work would have on the Ditch and entered into a Memorandum of Agreement (MOA) to resolve those adverse effects in 2021 (HPD Log No. 113444). Additional consultation was done in 2022 when it was determined that rock scaling would need to be performed on the cliffs above the Ditch before the rehabilitation work could proceed safely (HPD Log No. 118691). The USACE has been in communication with Jeff Tafoya (Assistant Field Manager, Lands and Renewable Resources) and David (Erik) Simpson (BLM Archaeologist) regarding the need for an archaeological survey on their land where the erosion damage occurred. Pursuant to 36 CFR 800.4, the Area of Potential Effects (APE) includes an area of .95 acres. Access to the APE would be achieved with an existing access road. On 12 February 2025 USACE archaeologist Jessica Gisler conducted a search of the State of New Mexico Archaeological Records Management Section's New Mexico Cultural Resources Information System (NMCRIS) database and map server, the State Register of Cultural Properties, and the National Register of Historic Places.

The APE for the erosion repair project was partially surveyed in 2021 By BRIC, LLC and a Class III Inventory report was prepared to satisfy MOA requirements. This inventory documented the ditch, two archaeological sites, and three isolated occurrences (IOs). The Class III Inventory report was submitted on 17 June 2021. USACE received concurrence from the SHPO on 29 June 2021 (HPD Log No. 115375). No cultural resources were located within the APE for the proposed erosion repair. There have been five other surveys performed within .5 miles of the erosion repair APE. They are summarized in the table below.

Table 3: Previous Cultural Surveys Within 0.5 Miles of the APE

NMCRIS Activity No.	Performing Organization	Date of Survey	Acres	Resources Located
4513	NM State University San Juan Campus	2/22/1978	243.44	3
55783	4-Corners Archaeological Services	2/5/1996	61.8	0
58634	Archaeological Services by Laura Michalik	10/9/1997	7.38	0
58942	Archaeological Services by Laura Michalik	10/9/1997	52.17	0
147384	BRIC, LLC	2/23/2020	23.34	4
151375	US Army Corps of Engineers Albuquerque District	11/1/2022	42.7	0

Gisler conducted a survey of the proposed erosion repair APE on 14 February 2025. Gisler performed an intensive survey by walking 15m E-W and then N-S transects. A total of .95 acres were surveyed. Surface visibility was approximately 80-90 percent. The understory consisted primarily of mixed grasses. No overstory was present in the majority of the APE. Willows were present along the San Juan River. No cultural resource sites and no isolated occurrences were identified during this survey. During the survey it was noted that the contractor had installed the ACB matting slightly outside (approximately 50 ft) of the corridor surveyed by BRIC, LLC in 2021. This was a contractor error. It also appears that out of compliance construction has been completed in the past in this drainage valley. Prior to this USACE project, a large cement culvert had been installed upslope from the erosion repair APE in an area with no previous survey. The APE is within a drainage valley that funnels large amounts of water into the San Juan River. It has also been subjected to multiple construction efforts throughout the recent past. Therefore, there was a low probability of finding intact cultural resources.

During consultation the SHPO asked USACE to change their determination of effect from **no historic properties affected** to **no adverse effect** in recognition that the acequia itself is a historic property. That change was made, and an email was sent out notifying the tribes of the change. SHPO Concurrence was received on 25 April 2025 (HPD Log No. 125285). The Pueblo of Pojoaque responded that they would not provide consultation but would defer to Pueblos that would like to participate. No further responses were received.

Final Determination

Based upon the information above, the USACE determines that the proposed erosion repair project would result in **no adverse effect** to historic properties.

Alternative A: No Action Alternative

Under the No Action Alternative, no construction would occur, resulting in no direct effects on historic properties, but ongoing erosion could contribute to damage to the acequia over time.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative involves bank stabilization and erosion control measures along a 98.7-foot section of the San Juan Riverbank at Drainage Crossing 1, with all work confined to previously disturbed areas within the project footprint. While the Farmer's Mutual Ditch is within the project area, the proposed work is to repair damage to the portion of the construction that has already been consulted on. The adverse effect to the Ditch that occurred during that construction has already been mitigated through the executed MOA. Given these considerations, the Erosion Repair Alternative is not expected to adversely affect any historic properties.

3.4. Socioeconomic Considerations

3.4.1. Population

The socio-economic characteristics of San Juan County, New Mexico, provide important context for assessing potential impacts of the Erosion Repair Project. According to the U.S. Census Bureau, the county had an estimated population of 127,455 in 2023, with over half of the land area falling within the Shiprock Agency of the Navajo Indian Reservation. More than one-third of the county's residents identify as Native American (39.56%), and approximately 21 percent of the population lives at or below the poverty line (U.S. Census Bureau, 2023) (Table 4). As of March 2023, the county's unemployment rate was 7.3 percent (Table 4; NM Workforce Connection, 2023).

The Erosion Repair Project is designed to protect critical agricultural infrastructure, ensuring continued water delivery to farms that support local livelihoods. The project

would not alter existing land use or displace residents and is expected to provide long-term stability to the Farmers Mutual Ditch System, benefiting both agricultural users and the broader community. Consideration has been given to potential economic and social impacts to ensure that the project does not place a disproportionate burden on any segment of the population.

Table 4: 2023 ACS 5-Year Estimates of Race (U.S. Census Bureau, 2023)

Race	Number of People	% of Population
Total	127,455	
White alone	50,416	39.56%
Black or African American alone	714	0.56%
American Indian and Alaska Native alone	50,021	39.25%
Asian alone	916	0.72%
Native Hawaiian and Other Pacific Islander alone	71	0.056%
Some other race alone	8,456	6.63%
Two or more races	11,067	8.68%

Table 5: Median Household Income and Poverty Status (U.S. Census Bureau, 2023)

Median household income (in 2018 dollars), 2014-2018	\$57,324
Per capita income in past 12 months (in 2018 dollars), 2014-2018	\$29,194
Persons in poverty, percent	21.1%

The majority of the persons living in the San Juan County are employed in retail, construction, health care, mining, manufacturing, and accommodations and food. A significant mining industry is associated with deposits of coal, oil, natural gas, and sand and gravel. Since most of the county is arid, agriculture is restricted to the floodplains of the San Juan, Animas, and La Plata rivers and to irrigated land on the Navajo reservation.

Alternative A: No Action Alternative

The No Action Alternative would allow continued erosion at Drainage Crossing 1, increasing maintenance costs and potentially impacting agricultural irrigation in the region.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative would ensure the stability and functionality of the Farmers Mutual Ditch System, which supports local agriculture in San Juan County. Agriculture in the county is largely dependent on irrigation, as the region's arid conditions limit farming to floodplains and designated irrigation areas. By repairing the embankment and mitigating further erosion, this alternative would help sustain water delivery for agricultural users, reducing maintenance costs and preventing disruptions to irrigation-dependent livelihoods. Given that a significant portion of the county's employment is in industries such as mining, construction, and manufacturing, maintaining a stable agricultural system is important for supporting the broader local economy.

3.4.2. Land Use

The San Juan River watershed supports a mix of historic and current land uses, including mineral extraction, forestry, farming, ranching, and recreational activities. Within New Mexico, land use and cover in areas above the Hogback are primarily forest (56%) and rangeland (42%), with agriculture (1%), urban/residential areas (<1%), and barren soil (<1%) making up the remaining portion. Land ownership in the New Mexico portion of the watershed is divided among tribal lands (46%), BLM-managed lands (27%), private lands (14%), U.S. Forest Service (8%), and state-owned lands (5%) (NMED SWQB 2012). The area served by the Farmers Mutual Ditch and the immediate project area remains predominantly agricultural, with minor residential and light industrial uses.

Alternative A: No Action Alternative

The No Action Alternative would not directly alter land use; however, failure to address ongoing bank erosion and stabilization issues could threaten the long-term viability of agriculture in this portion of the San Juan River valley. Without necessary repairs, continued erosion could lead to further bank destabilization, sedimentation issues, and increased maintenance costs, making irrigation less reliable for agricultural users. Over

time, this could reduce crop production and farming viability, leading to negative economic effects on local landowners and the agricultural sector.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative would not change existing land use in the project area. The project is entirely within the existing ditch right-of-way and will not convert agricultural or natural lands to a different use. Stabilization of the embankment at Drainage Crossing 1 will prevent further erosion and ensure continued irrigation access for agricultural users. While the borrow site for fill material is located on BLM-managed land, the primary repair work does not overlap with BLM land, and no additional land-use changes are expected. The bank stabilization efforts would help sustain long-term agricultural viability in the area and reduce the need for future maintenance activities.

3.4.3. Needs and Considerations for Communities

Federal policies require agencies to evaluate how their activities may impact communities with limited resources and ensure that infrastructure improvements support long-term economic stability. The WRDA Section 1113 Acequia Program, which authorizes the proposed project, is designed to provide technical and financial assistance to acequia and community ditch associations to address challenges in maintaining and improving water infrastructure. Many of these systems serve communities with limited resources, where access to consistent and reliable water for agriculture is critical to economic sustainability.

Alternative A: No Action Alternative

Under the No Action Alternative, continued erosion and sediment accumulation would increase maintenance demands on the Farmers Mutual Ditch system. Given that San Juan County residents experience higher-than-average poverty rates, additional maintenance costs could place a financial strain on local farmers and ditch users who rely on affordable irrigation water. If the erosion continues unchecked, long-term impacts on agricultural productivity could disproportionately affect small-scale farmers and landowners who depend on irrigation for their livelihoods.

Alternative B: Erosion Repair Alternative

The Erosion Repair Alternative would ensure continued access to reliable irrigation for Farmers Mutual Ditch users, helping to sustain agricultural livelihoods in the region. The

project does not involve land displacement, changes to housing, or public services, and no long-term negative effects on at-risk communities are anticipated. By reducing long-term maintenance costs and preventing further erosion damage, the project provides direct economic benefits to farmers and landowners who depend on the ditch.

With respect to public health and safety, the project is not expected to introduce conditions that would pose an increased risk to children or vulnerable populations. The construction would take place during daylight hours in a low-traffic area, and no hazardous materials or significant air quality concerns are associated with the work. BMPs will be implemented to prevent excessive sediment transport, ensuring that local water resources remain unaffected.

The Erosion Repair Alternative ensures equitable access to critical infrastructure improvements by addressing ongoing maintenance challenges that could disproportionately impact at-risk communities if left unaddressed. The project would have long-term positive effects on local agriculture and economic stability, supporting both ditch association members and the broader community.

4. RECOMMENDED ALTERNATIVE

The recommended alternative for the proposed Farmers Mutual Ditch project is Alternative B: Erosion Repair Alternative.

The proposed project lies within a rural area in San Juan County, New Mexico (See Section 1.2: Project Location.). The erosion repair work would stabilize the stream bank, reduce future erosion risk, and protect the integrity of the Farmers Mutual Ditch system. Project impacts have been assessed in the context of past, present, and reasonably foreseeable future activities, and no significant environmental or socioeconomic impacts are anticipated. The project is expected to provide long-term benefits to agricultural operations and reduce maintenance costs for the Ditch Association.

5. CONCLUSIONS

This SEA evaluates the potential effects of the proposed Erosion Repair Project for the Farmers Mutual Ditch. The analysis indicates that impacts to the environment would be

minor, localized, and short-term, primarily occurring during construction. The project is expected to provide long-term benefits by stabilizing the streambank, reducing future erosion risk, and preserving the functionality of the Farmers Mutual Ditch system.

The project does not introduce significant environmental or socioeconomic impacts and would be implemented in accordance with best management practices to minimize effects on natural and cultural resources. Based on the findings of this SEA, the proposed Erosion Repair Project is not expected to significantly affect the quality of the human environment and is recommended for implementation.

5.1. Summary of Findings and Impacts

Table 5 provides a summary comparison of the alternatives (Preferred Alternative and No Action Alternative) with respect to the resources discussed in this SEA.

Table 6: Summary of Findings and Impacts

Resources	Alternative B: Erosion Repair Alternative (Preferred Alternative)	Alternative A: No Action Alternative
Physical Landscape		
<i>Water Resources and Water Quality</i>	Short-term Negative Impacts Long-term Positive Impacts	Long-term Negative Impacts
Biological Resources		
<i>Special Status Species</i>	No Impacts	No Impacts
Cultural Resources	No adverse effect	Long-term Negative Impacts
Socioeconomic Considerations		
<i>Socioeconomics</i>	No Impacts	Long-term Negative Impacts
<i>Land Use</i>	No Impacts	Long-term Negative Impacts

5.2. Summary of Conditions to Minimize Potential Adverse Impacts

Water Resources and Water Quality

BMPs would be implemented during construction to reduce potential short-term erosion and sedimentation during construction. Measures would include silt fences, straw wattles, and erosion control blankets in disturbed areas to prevent runoff into adjacent

waterways. To minimize airborne dust and sediment transport, access roads and disturbed soil would be wetted regularly.

In addition, to reduce the risk of biological contamination, all construction equipment would be cleaned before entering and upon leaving the project area. Equipment previously used in a waterway or wetland would be disinfected with U.S. EPA registered products applied in accordance with the label.

To ensure compliance with Section 401 certification conditions, all applicable State of NM water quality requirements would be followed. Construction activities would be limited to designated work areas to minimize unnecessary soil disturbance. All servicing and fueling of equipment would be conducted in a designated area hydrologically isolated from surface waters. Emergency spill kits would be placed in the designated fueling area.

Biological Resources – Special Status Species

No direct impacts to special status species are expected. Construction would occur outside of the nesting season for migratory birds to avoid disturbance. If any protected species are observed in the project area during construction, work would be modified or temporarily halted as needed to prevent impacts. Although project activities would not directly impact in-stream habitats, erosion control measures would be implemented to prevent sedimentation that could degrade water quality and affect the species' habitat.

Socioeconomic Considerations, Land Use, and Communities

The project would maintain existing infrastructure and agricultural stability by preventing further erosion that could impact irrigation. No new infrastructure development or displacement would occur, and no adverse socioeconomic impacts are anticipated. The project would not alter existing land use or displace residents. The area would remain in agricultural use, ensuring continued functionality of the Farmers Mutual Ditch system. All disturbed lands would be reclaimed following construction. The project would not place a disproportionate burden on at-risk communities, including low-income or minority populations. Repairs would protect agricultural infrastructure and prevent long-term economic losses. No new environmental or health hazards would be introduced, and no disproportionate effects are expected.

6. CONSULTATION AND COORDINATION

Agencies and entities contacted formally or informally in preparation of this SEA include:

- Famers Mutual Ditch Association, Farmington, NM
- NM Department of Game and Fish, Santa Fe, NM
- NM State Historic Preservation Office, Santa Fe, NM
- U.S. Bureau of Land Management, Farmington, NM
- U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, Albuquerque, NM
- New Mexico Interstate Stream Commission

Informal coordination with Federal, Tribal, State, and Non-Government Agencies was conducted by USACE Environmental staff during preparation of this SEA. Formal Section 106 consultation was conducted separately USACE Cultural Resources staff and concluded on 25 April 2025. Additional formal consultation letters from USACE Environmental Staff were sent out on 08 August 2025.

USACE consulted with SHPO under Section 106 of the NHPA regarding the adverse effect determination for Alternative B: Buried Pipe and the effect to the staging area on 22 July 2020. USACE consulted with the SHPO under Section 106 of the NHPA for the added rock scaling section of the project on 30 December 2022. USACE consulted with the SHPO under Section 106 of the NHPA for the added erosion repair portion of the project on 25 April 2025.

Consistent with the Department of Defense's American Indian and Alaska Native Policy, signed by Secretary of Defense William S. Cohen on 28 October 1998, and based on the State of New Mexico Indian Affairs Department and Historic Preservation Division's 2019 Native American Consultation List, American Indian Tribes that have indicated they have concerns in this portion of San Juan County, New Mexico, were sent tribal consultation letters on 24 July 2020. These tribes include the Navajo Nation, Ohkay Owingeh, the Pueblo of Laguna, the Southern Ute Indian Tribe, the Ute Mountain Ute Tribe, the Hopi Tribe, and the Kiowa Tribe. Responses were received from the Navajo Nation, the Southern Ute Indian Tribe (SUIT), the Pueblo of San Ildefonso, and the Pueblo of Sandia (Appendix C). The Navajo Nation, the Pueblo of San Ildefonso, and the Pueblo of Sandia each indicated that there were no cultural resource concerns with the project. The results of this round of consultation are summarized in a table in Appendix C.

USACE sent additional tribal letters detailing the expansion of the project scope to include rock scaling on 18 November 2022 and 05 December 2022. The list of tribes sent tribal consultation letters was expanded after discussion with the BLM. These Tribes include Pueblo of Acoma, Pueblo of Cochiti, Pueblo of Isleta, Pueblo of Jemez, Kewa Pueblo, Pueblo of Laguna, Pueblo of Nambe, Ohkay Owingeh, Pueblo of Picuris, Pueblo of Pojoaque, Pueblo of San Felipe, Pueblo of San Ildefonso, Pueblo of Sandia, Pueblo of Santa Ana, Pueblo of Santa Clara, Pueblo of Taos, Pueblo of Tesuque, Pueblo of Zia, Pueblo of Zuni, All Pueblos Council of Governors, Eight Northern Indian Pueblos Council Five Sandoval Indian Pueblos, Ten Southern Pueblos Council, Jicarilla Apache Tribal Council, Navajo Nation, Southern Ute Indian Tribe, The Hopi Tribe, Kiowa Tribe, and Ute Mountain Ute. The Pueblo of San Ildefonso, and the Pueblo of Sandia each indicated that there were no cultural resource concerns with the project.

On 22 December 2022, USACE received a response from the Southern Ute Tribal Historic Preservation Officer (THPO), expressing concern about a previously recorded cultural resource near the project area. The THPO recommended that all ground-disturbing activities avoid the area if possible. If avoidance was not feasible, they advised USACE to engage in tribal consultation to develop a monitoring plan that would address potential cultural concerns. USACE staff coordinated directly with the THPO to clarify that the proposed work would not occur in the vicinity of the resource. After reviewing the information provided, the THPO concurred with USACE's determination of no adverse effect. The concurrence was received via email on 14 February 2022. A summary of this consultation is provided in Appendix C.

USACE sent additional tribal letters detailing the expansion of the project scope to include the erosion repair work on 06 March 2025. The list of tribes sent tribal consultation letters was expanded after discussion with the BLM. These Tribes include Pueblo of Acoma, Pueblo of Cochiti, Pueblo of Isleta, Pueblo of Jemez, Kewa Pueblo, Pueblo of Laguna, Pueblo of Nambe, Ohkay Owingeh, Pueblo of Picuris, Pueblo of Pojoaque, Pueblo of San Felipe, Pueblo of San Ildefonso, Pueblo of Sandia, Pueblo of Santa Ana, Pueblo of Santa Clara, Pueblo of Taos, Pueblo of Tesuque, Pueblo of Zia, Pueblo of Zuni, All Pueblos Council of Governors, Eight Northern Indian Pueblos Council Five Sandoval Indian Pueblos, Ten Southern Pueblos Council, Jicarilla Apache Tribal Council, Navajo Nation, Southern Ute Indian Tribe, The Hopi Tribe, Kiowa Tribe, and Ute Mountain Ute. The Pueblo of Pojoaque responded that they would not provide consultation but would defer to Pueblos that would like to participate. No further responses were received.

Coordination with the public and interested parties has taken place throughout the preparation of this SEA. The public review of the Draft SEA and FONSI was conducted from August 8, 2025, through September 6, 2025. A hardcopy of the draft SEA was made available for public review in the Farmington Public Library in Farmington, NM during the 30-day comment period beginning August 8, 2025, and ending September 6, 2025. The Draft SEA was posted electronically for public review and was updated to the Final SEA on September 26, 2025, at

<https://www.spa.usace.army.mil/Missions/Environmental/Environmental-Compliance-Documents/Environmental-Assessments-FONSI/>

Table 7: Mailing List for Supplemental Environmental Assessment

Shawn Sartorius, Field Supervisor USFWS - Ecological Services 2105 Osuna Road NE Albuquerque, NM 87113	Ms. Hannah Riseley-White, Director New Mexico Interstate Stream Commission P.O. Box 25102 Santa Fe, NM 87504
Ms. Christina Schroeder Regulatory Division U.S. Army Corps of Engineers Albuquerque District 4101 Jefferson Plaza NE Albuquerque, NM 87109	Ginny Seamster Ecological and Environmental Planning Section Wildlife Management Division New Mexico Department of Game and Fish 1 Wildlife Way Santa Fe, NM 87507
Ms. Shelly Lemon NM Environment Department Surface Water Quality Bureau P.O. Box 5469 Santa Fe, NM 87502	Mr. Scott Mason U.S. EPA Region 6 1201 Elm Street, Suite 500 Dallas, TX 75270
Ms. Jennifer Faler Bureau of Reclamation 555 Broadway Blvd. NE, Suite 100 Albuquerque, New Mexico 87102	Ms. Erica Rowe State Botanist Energy, Minerals, and Natural Resources Department P.O. Box 1948 Santa Fe, NM 87504

Shawn Williams NM Office of the State Engineer 100 Gossett Drive, Suite A Aztec, NM 87410	
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Comments during the public review period were received from NMDGF, USACE Regulatory Division, and NMED. A comment response table is provided below.

Figure 7: Comment Response Table

Commenter	Comment	Response
NMDGF (Letter of August 20)	"To prevent sediment and other pollutants from entering the San Juan River, the Department recommends developing a Storm Water Pollution Prevention Plan (SWPPP) and provides the following additional recommendations: divert water around construction whenever possible; preserve natural areas within the project site; maintain natural drainage systems; and phase construction to reduce impervious surface impacts."	Thank you for your thorough review and recommendations. As described in the SEA, project disturbance is less than 1 acre and does not require an NPDES permit (Section 402, p. 15). However, because the project is adjacent to the San Juan River, erosion and sediment control BMPs, such as silt fences, straw wattles, and erosion control blankets, will be implemented to minimize impacts on water quality (SEA Section 3.1.1, pp. 13–15; Section 5.2, p. 27). If at any time disturbance exceeds one acre, a SWPPP will be required.
NMDGF (Letter of August 20)	"Following construction, disturbed areas should be re-vegetated using native species that approximate pre-disturbance communities or those suitable under future climate conditions. Short-term erosion control mixes may be used for temporary stabilization, but all permanent seeding should use certified weed-free native mixes. Native ecotypes are available through Los Lunas Plant Materials Center and NMSU."	Thank you for this recommendation. As noted in the SEA, disturbed areas will be reseeded following construction with a weed-free native mix appropriate for the San Juan River floodplain and upland areas, including species such as sand dropseed (<i>Sporobolus cryptandrus</i>), galleta (<i>Pleuraphis jamesii</i>), Indian ricegrass (<i>Oryzopsis hymenoides</i>), and wild sunflower (<i>Helianthus annuus</i>), (SEA p. 12, Table 1). Please note this is not an exhaustive list. These

		measures will restore vegetation cover and provide erosion control while supporting native habitat conditions.
NMDGF (Letter of August 20)	"If erosion control blankets are used post-construction, edges should be buried, and non-fused mesh materials used to avoid wildlife entanglement. Blankets should be monitored regularly."	Noted; thank you. As described in the SEA, erosion control blankets or wattles will be installed in disturbed areas to stabilize soils (SEA Section 5.2, p. 27). Wildlife-safe products will be selected and included in the specifications for the contractor to obtain.
NMDGF (Letter of August 20)	"Maintain a vegetated buffer zone along all watercourses, including ephemeral arroyos, to minimize erosion and sediment delivery."	Thank you for this recommendation. As described in the SEA, no vegetation will be removed during construction, and all work will occur within the existing ditch right-of-way (SEA Section 2.2, pp. 8–11). In addition, a review of the USFWS Wetlands Mapper confirmed that no ephemeral arroyos occur within the project footprint. Therefore, vegetated buffers along the San Juan River and adjacent riparian areas will remain intact and protected.
NMDGF (Letter of August 20)	"Use engineered drainage swales and vegetated channel systems rather than storm sewers, lined channels, curbs, and gutters. Swales should be gently sloped (4:1) for wildlife passage."	The project is located in a steep ephemeral arroyo. While the erosion repair would grade the sides of the channel to gentle slopes as much as practicable, the arroyo channel is so highly eroded that it isn't possible to establish enough vegetation to stabilize it. Concrete block matting is required for erosion protection of the acequia pipe.
NMDGF (Letter of August 20)	"Construction should minimize impacts on	Concur. As described in the SEA, construction will use

	vegetative communities. Use existing roads and rights-of-way; avoid off-road driving. Stage equipment in previously disturbed areas.”	existing access roads, staging areas, and borrow sites from the previous project phase to minimize disturbance (SEA Section 2.2, pp. 9–11; No new access routes are proposed and impacts to undisturbed vegetation will be avoided.
NMDGF (Letter of August 20)	“The Project area appears to contain wetlands. Avoid disturbance where possible, avoid disrupting hydrology, and replant unavoidable impacts with appropriate native wetland species.”	Thank you for this recommendation. As part of the original Environmental Assessment prepared for the Farmers Mutual Ditch Rehabilitation Project, a USACE biologist conducted a field vegetation survey in 2023. That survey documented sparse, disturbed vegetation within the project footprint consisting of mixed grasses, cottonwoods, willows, Russian olive, and tamarisk, and confirmed that no jurisdictional wetlands occur within the project footprint. The USFWS National Wetlands Inventory identifies a 0.09-acre riparian scrub-shrub polygon (Rp1SS6MD, mixed deciduous) adjacent to the ditch. However, National Wetlands Inventory mapping alone does not establish jurisdictional wetland status, which requires hydrophytic vegetation, hydric soils, and wetland hydrology. These conditions were not documented within the construction limits during the field survey. All work will remain within the ditch right-of-way, avoiding disturbance to the San Juan River

		riparian corridor.
NMDGF (Letter of August 20)	“Consult with USFWS New Mexico Ecological Services Office prior to work; confirm overlap with Colorado pikeminnow critical habitat using IPaC.”	Thank you for this recommendation. As described in the SEA (Section 3.2.1, pp. 16–19), the San Juan River adjacent to the project is designated critical habitat for the federally endangered Colorado pikeminnow (<i>Ptychocheilus lucius</i>). The Primary Constituent Elements of this habitat include water quality and quantity, physical habitat, and the biological environment. Project activities will occur along the riverbank and uplands but will not involve in-stream work or modification of the river channel. BMPs, including silt fences, erosion control blankets, and sediment barriers will be implemented to prevent sediment transport into the river, protecting water quality. Flow regimes will not be altered, and no spawning cobble, nursery backwaters, or eddies occur within the project area. The Corps has confirmed critical habitat overlap in IPaC and has provided its determination to Melissa Mata at USFWS New Mexico Ecological Services Office for review.
NMDGF (Letter of August 20)	“The project area lies within Crucial Habitat (CHAT tool). A thorough environmental assessment should be completed prior to construction, with measures to avoid impacts to sensitive habitats.”	The original Environmental Assessment completed in 2023 for the entire acequia project analyzed impacts thoroughly. This SEA addresses only the impacts of the erosion repair project at hand. The CHAT tool provides a

		coarse scale view of potentially sensitive habitats. A detailed look at the project site reveals that it is outside the mapped riparian corridor. SWAP habitat mapped at the project location is Intermountain Dry Shrubland and Grassland.
USACE Regulatory (Response of September 3)	" Thank you for coordinating with our office. I reviewed your draft SEA for the above referenced project. The individual WQC for the original Farmers Mutual Ditch Rehabilitation EA should still be applicable based on the email you received from Shelly Lemon and references to the programmatic WQC for NWP's is not needed. I do not have any additional comments. I concur with the 404-analysis provided in the SEA."	Noted; thank you for your review.
NMED (Response of August 7)	"SWQB reviewed the original EA and issued an Individual Water Quality Certification for the Farmers Mutual Ditch Rehabilitation project back in May of 2023. SWQB staff reviewed the USACE coordination letter for the Erosion Repair Project and do not have any comments, concerns, or objections regarding the proposed erosion repair work. Thank you for the opportunity to review and comment."	Noted; thank you for your review.

7. LIST OF PREPARERS

This SEA was prepared and reviewed for quality control by the USACE, Albuquerque District. Personnel primarily responsible for preparation and review are listed below.

Table 8: List of Preparers and USACE Quality Control

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