



— BUREAU OF —  
RECLAMATION

Environmental Assessment and Finding of No Significant Impact

# **NNMP NECA Bluff Road**

## **Realignment Project**

**Upper Fruitland Chapter, San Juan County, New Mexico**

**Upper Colorado Basin**



**U.S. Department of the Interior**

**December 2023**

## **Mission Statements**

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Environmental Assessment and Finding of No Significant Impact

# **NNMP NECA Bluff Road Realignment Project**

**Upper Fruitland Chapter, San Juan County, New Mexico  
Interior Region 7, Upper Colorado Basin**

This Environmental Assessment was prepared for Reclamation by McIntyre Environmental LLC under Contract No. R09AV40001.

**McIntyre Environmental LLC  
Tucson, AZ 85737**



Cover Photo: Potential pad location western terminus. Source: McIntyre Environmental LLC.

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## **FINDING OF NO SIGNIFICANT IMPACT**

United States Department of the Interior  
Bureau of Reclamation  
Interior Region 7: Upper Colorado Basin  
Western Colorado Area Office  
Durango, Colorado

### **NNMP NECA Bluff Road Realignment Project**

#### **Introduction**

In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Bureau of Reclamation (Reclamation) has conducted an environmental assessment (EA) for the Proposed Action of repairing the Navajo Nation Municipal Pipeline (NNMP) so that it can serve as a permanent augmentation of the Animas La Plata (ALP) Project. Under the authority of the Animas La Plata Settlement Act, Reclamation will repair the NNMP, and is the lead agency for purposes of compliance with the NEPA for this proposed action.

The EA was prepared by Reclamation to address the potential impacts to the human environment due to implementation of the proposed action. The EA is attached to this Finding of No Significant Impact (FONSI) and is incorporated by reference.

#### **Alternatives**

The EA analyzes the No Action Alternative and the Proposed Action Alternative to implement the NNMP NECA Bluff Road Realignment Project.

#### **Decision and Finding of No Significant Impact**

Based upon a review of the EA and supporting documents, Reclamation has determined that implementing the proposed action will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the area. No environmental effects meet the definition of significance in context or intensity as defined at 40 CFR 1508.27. Therefore, an environmental impact statement is not required for this Proposed Action. This finding is based on consideration of the context and intensity as summarized in the EA. Reclamation's decision is to implement the Proposed Action Alternative.

#### **Context**

The project is located in the Upper Fruitland Chapter of the Navajo Nation on Tribal Trust land in San Juan County, New Mexico. The affected locality is the Upper Fruitland Chapter of the Navajo Nation. Affected interests include Reclamation, Navajo Engineering and Construction Authority (NECA), Navajo Tribal Utility Authority, Shiprock Irrigation District, the ALP, and adjacent landowners.

#### **Intensity**

The following discussion is organized around the 10 significance criteria described in 40 CFR 1508.27. These criteria were incorporated into the resource analyses and issues described in the EA.

**1. Impacts that may be both beneficial and adverse.** As described in Table 9 of the EA, the Proposed Action will incur both beneficial and adverse impacts. The short-term adverse effects of the Proposed Action include temporary insignificant impacts to air quality, soils, surface water resources and water quality, vegetation and noxious weeds, and Indian Trust Assets. There will be no long-term adverse effects. Beneficial effects include effects to socioeconomics as it will allow irrigation water to be pumped again.

None of the environmental effects analyzed in the EA are considered significant. None of the effects from the Proposed Action, together with other past, current, and reasonably foreseeable future actions, rise to a significant cumulative impact.

**2. The degree to which the Proposed Action affects public health or safety.** As described in Section 1.6 of the EA, NECA Bluff Road is closed to the public so there will be no potential for traffic accidents. The Proposed Action will not affect any routes used for emergency response. Local police, fire and emergency medical services will not be hindered in their response due to implementation of the Proposed Action. Therefore, there will be no significant effect on public safety.

**3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** There are no cultural resources, park lands, prime farmlands, wild and scenic rivers, or ecologically critical areas that will be adversely affected by the proposal.

**4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.** Controversial, in this context, means a substantial dispute as to the size, nature, or effect of the action. Reclamation contacted representatives of other federal agencies, the Upper Fruitland Chapter of the Navajo Nation, state and local governments, public and private organizations, and individuals regarding the proposal and its effects on resources. Based on the responses received, the effects of the proposal on the quality of the human environment are not highly controversial.

**5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** There are no effects on the human environment that are highly uncertain or that involve unique or unknown risks; therefore, there will be no significant site-specific effects.

**6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.** Implementing the action will not establish a precedent for future actions with significant effects and will not represent a decision in principle about a future consideration. Therefore, there are no significant site-specific effects.

**7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** Cumulative impacts are possible when the effects of the Proposed Action are added to other past, present, and reasonably foreseeable future actions as described under related NEPA documents and plans. At present, there are no known reasonably foreseeable future actions with the potential to affect the same resources impacted by the Proposed Action; therefore, there would be no effects from other actions which could incrementally contribute to cumulative impacts on the resources impacted by the Proposed Action.

**8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** As described in Section 3.7, the Proposed Action will have no direct or indirect impact to cultural resources. There will be no significant effect to districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and the Proposed Action will not cause the loss or destruction of significant scientific, cultural, or historical resources.

**9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** As described in Section 3.6, Reclamation consulted with the Navajo Nation Department of Fish and Wildlife (NNDFW) regarding the effects on threatened or endangered species and critical habitat from the impacts of the Proposed Action. The NNDFW determined that the Proposed Action will not have any adverse effects to any threatened or endangered species or their critical habitats.

**10. Whether the action threatens a violation of Federal, state, or local laws or requirements imposed for the protection of the environment.** The project does not violate any federal, state, local, or tribal law, regulation, or policy imposed for the protection of the environment. In addition, this project is consistent with applicable land management plans, policies, and programs. State, local, and interested publics were given the opportunity to participate in the environmental analysis process.

#### **Environmental Commitments**

Environmental commitments to lessen the potential adverse insignificant effects of the Proposed Action shall be implemented as specified in Chapter 4 of the EA. Chapter 4 of the EA is herein incorporated by reference in this FONSI document.

Approved by:

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Ed Warner  
Area Manager, Western Colorado Area Office



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## ABBREVIATIONS AND ACRONYMS

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ACQR	Air Quality Control Region
ALP	Animas La Plata
AQB	Air Quality Bureau
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practice
BRCF	Biological Resources Compliance Form
CAA	Clean Air Act
CBG	Census block group
CEQ	Council on Environmental Quality
CRCF	Cultural Resources Compliance Form
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CWA	Clean Water Act
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FE	Species listed as Endangered Under the ESA
EIS	Environmental Impact Statement-
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutants
HDD	Horizontal Directional Drill
HDPE	high density polyethylene
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
N <sub>2</sub> O	Nitrous Oxide

NAAQS	National Ambient Air Quality Standards
NATA	National Air Toxics Assessment
NECA	Navajo Engineering and Construction Authority
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NESL	Navajo Endangered Species List
NHPA	National Historic Preservation Act
NMED	New Mexico Environmental Department
NMDA	New Mexico Department of Agriculture
NNDA	Navajo Nation Department of Agriculture
NNDFW	Navajo Nation Department of Fish and Wildlife
NNHP	Navajo Natural Heritage Program
NNHHPD	Navajo Nation Heritage and Historic Preservation Department
NNMP	Navajo Nation Municipal Pipeline
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTUA	Navajo Tribal Utility Authority
O3	Ozone
Pb	Lead
PL	Public Law
PM	Particulate Matter
Ppb	parts per billion
Ppm	parts per million
Ug/m3	micrograms per cubic meter
RCP	Resource Land Clearance Policies and Procedures
Reclamation	U.S. Department of the Interior Bureau of Reclamation
ROW	Right-of-Way
SIP	State Implementation Plan
SMA	Souder Miller and Associates
SO2	Sulfur Dioxide
SWPP	Storm Water Protection Plan
TCP	Traditional Cultural Place
TMDL	Total Maximum Daily Load

USC	United States Code
Ug/m <sup>3</sup>	micrograms per cubic meter

# 1 INTRODUCTION

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This Environmental Assessment (EA) has been prepared to explain and evaluate the potential environmental effects of Reclamation's proposed Navajo Nation Municipal Pipeline (NNMP) Navajo Engineering and Construction Authority (NECA) Bluff Road Realignment Project ("Project" or "Proposed Action"). The Federal action evaluated in this EA is whether the U.S. Department of the Interior Bureau of Reclamation (Reclamation) would repair the NNMP waterline. Reclamation is authorized by Colorado Ute Indian Water Rights Settlement Act to construct the NNMP.

As the lead federal agency, Reclamation has prepared this EA in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ's) NEPA regulations at 40 Code of Federal Regulations (CFR) Parts 1500 – 1508 (2020). Reclamation has determined that a Finding of No Significant Impact (FONSI) for the Proposed Action is warranted.

## 1.1 Background

Reclamation is proposing to repair a portion of the NNMP which was designed to convey water to the area of the Navajo Nation encompassing the Farmington and Shiprock areas by utilizing waters supplied from Reclamation's ALP Project.

The NNMP system was designed to be an augmentation of source water to the Navajo Nation under the ALP Project. The ALP Project is a larger project receives surface water from the Animas-La Plata River, which flows south from La Plata and terminates into the west-flowing San Juan River near the east end of the Upper Fruitland Chapter. The NNMP underwent design and construction in 2008 with the goal of designing and constructing a transmission pipeline to the area of the Navajo Nation encompassing the Farmington and Shiprock area by utilizing waters supplied from the ALP Project. The water supplied by the ALP Project would provide additional water for the existing distribution system operated by the NTUA (SMA 2021).

The existing Navajo Tribal Utility Authority (NTUA) municipal pipeline was built in the 1960s and is made up of various pipe sizes ranging from 14 to 18-inch ductile iron pipe, reducing in size when teeing off to distribution for residents. The pipeline teeing off from the Farmington reach to the Nenahnezad Tank is 18-inch cement lined ductile iron pipe.

The NNMP following the Fruitland Irrigation Canal on Bluff Road in the Upper Fruitland Chapter was washed out by a landslide in 2014. The landslide resulted in pipe exposure and damage to the paved road. The road that the NNMP pipeline parallels is known as N367, aka Bluff Road. Prior to the landslide, the road was controlled by the Bureau of Indian Affairs (BIA). After the landslide, the BIA removed it from their road system. The ownership of the Fruitland Irrigation Canal was transferred to the Navajo Nation and the Shiprock Irrigation District (SMA 2021).

Prior to the landslide, the road was regularly used by community members. Currently, the road is blocked off by jersey barriers, and can only be accessed for irrigation system maintenance due to safety concerns by the Shiprock Irrigation District. This landslide has halted operation of the NNMP that serves as an augmentation of the ALP Project (SMA 2021).

## 1.2 Project Location

The NTUA would be the end owner and operator of the NNMP. The project area is located in the Upper Fruitland Chapter of the Navajo Nation on Tribal Trust land in San Juan County, New Mexico. The Chapter itself is approximately 8 miles west of Farmington, NM (Figure 1).

### **1.3 Purpose and Need for the Action**

The need and purpose of the proposed action is to repair the NNMP so that it can serve as a permanent augmentation of the ALP Project.

### **1.4 Decisions to be Made**

In accordance with NEPA, Reclamation will decide whether to implement the Proposed Action and repair the NNMP.

### **1.5 Relationship to Statutes, Regulations or Other Plans**

Compliance with the following laws and Executive Orders (E.O.) are required prior to and during project implementation:

#### *Natural Resource Protection Laws*

- Clean Air Act of 1963 (42 U.S.C. § 7401)
- Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1544, 87 Stat. 884)
- Clean Water Act of 1972 as amended (33 U.S.C. 1251 et seq.)
- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712)
- Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668- 668c)
- Federal Land Policy and Management Act of 1976 (FPLMA) as amended (43 U.S.C. 1701-1785)
- The Act of October 27, 1986, amended Title V of FLPMA aka the Colorado Ditch Bill (43 U.S.C. 1761; 90 Stat. 2776)
- 2012 Colorado Roadless Rule (16 U.S.C. 472, 529, 551, 1608, 1613; 23 U.S.C. 201, 205.)
- 1866, July 26 – 14 Stat. 251, Act Granting Right of Way to Ditch and Canal Owners Over Public Land
- Farmland Protection Policy Act (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, et seq.)

#### *Cultural Resource Laws*

- National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa-470mm et seq.)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq.)
- American Indian Religious Freedom Act of 1978 (42 U.S.C. Public Law 95-341)
- Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44716)

#### *Paleontological Resource Laws*

- Paleontological Resources Preservation Act of 2009 [Section 6301-6312 of the Omnibus Land Management Act of 2009 (Public Law 111-11 123 Stat. 991-1456)]





**Figure 1. Location Map**

## 1.6 Scoping, Coordination, and Public Review

The Upper Fruitland Chapter of the Navajo Nation has been involved in the planning process of the realignment of the municipal pipeline. The Chapter has been involved in the review of the proposed realignment alternatives and in official meetings regarding the status of this project. The community has provided feedback regarding their preferred alternatives. The engineering contractor, Souder Miller Associates (SMA), Reclamation, the Navajo Engineering and Construction Authority (NECA), the Shiprock Irrigation District, and representatives from the geotechnical subcontractor met at the project site June 17th, 2021, to discuss the ongoing Upper Fruitland Canal Improvements project from Shiprock Irrigation District. Following Navajo Nation Heritage and Historic Preservation Department (NNHHPD) guidelines, a good faith effort was made to consult with all community members who are current land users and/or farmers living within sight of the proposed project area. Sixteen individuals, including two Upper Fruitland Chapter representatives, were interviewed in conjunction with this project. The following key issues (Table 1) were identified as requiring analysis in the EA.

**Table 1: Key Issues**

<b>Issue No.</b>	<b>Issue Statement</b>	<b>Impact Indicator</b>
Issue 1	What are the potential impacts to air quality from emissions related to construction activities.	Emissions of criteria air pollutants.
Issue 2	What are the potential impacts to soil from equipment and soil removal from construction activities?	Acres of soil impacted.
Issue 3	What are the potential impacts to water quality?	Decreased water quality from sediment transport through erosion or spills/leaks of industrial fluids.
Issue 4	What are the potential impacts to federally listed threatened and endangered species?	Take of threatened or endangered species due to construction activities.  Acres of habitat available before and after construction of the Proposed Action.
Issue 5	What are the potential impacts to riparian and upland vegetation?	Acres of vegetation impacted.
Issue 6	What are the potential impacts to the integrity of known cultural sites?	Cultural sites impacted.
Issue 7	What are the potential impacts to waters of the U.S. and jurisdictional wetlands?	Acres of surface water and wetland areas impacted.
Issue 8	What impact would the Proposed Action have on Indian Trust Assets (ITAs)?	Acres or amount of ITAs to be impacted.

Resources analyzed in this EA are discussed in Chapter 3. Table 2 lists resources which were identified as not present or associated with the project area, and are not analyzed further in this EA.

**Table 2: Resources Not Carried Forward for Analysis**

<b>Resource</b>	<b>Rationale for Not Further Discussing in Detail</b>
Geology, Hydraulics and Hydrology?	<p>The project area is located on a bluff overlooking the San Juan River approximately 8-miles downstream (west) from the city of Farmington, New Mexico. The bluff is intersected with multiple deep drainages that create three potential pad areas for the HDD. The opposite side of the river is generally flat with a broad, level floodplain that yields on its north side to low, rolling hills. The project area is located in the San Juan Basin of the Colorado Plateau physiographic province.</p> <p>The Proposed Action would not result in impacts to geologic features, nor would it have any effect on hydraulics and hydrology. The pipeline is being installed via HDD. The only ground disturbing activity would be at the two HDD pads, and this area would be restored to match the existing landscape and surrounding geology. There would be no change to the drainages adjacent to the pad areas. Therefore, the Proposed Action would not result in impacts to geologic features, nor would it have any effect on hydraulics and hydrology.</p>
Water Quantity	<p>The Proposed Action would not affect water quantity upstream. The project would be designed to eliminate any offsite erosion into the gullies. This would eliminate any sedimentation from draining into the gullies and being deposited into the river. Replacement of the washed out pipeline with a new pipeline would allow augmentation of the ALP Project.</p>
Hazardous Materials?	<p>No chemical subject to reporting under the Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000 pounds would be used, produced, stored, or disposed of annually in association with the Proposed Action. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported, or disposed of in association with the Proposed Action. Therefore, the Proposed Action would have no impact on hazardous materials.</p>
Socioeconomics and Environmental Justice	<p>The Project Area is within Census Block group (CBG) 350459430001 which has a population of 1,646 as of 2020. This CBG has approximately 53% of individuals in poverty which is greater than compared to San Juan County at 48% and 14.3% for the State. The CBG's racial makeup is American Indian at 93%. This percentage of American Indian is much greater than the population in the San Juan County which is at 39% and for the State which is at 10% (EPA 2023a and b; Census Bureau 2020a and b). This indicates that there are no disproportionately adversely affected minority or low-income populations in the project area, and therefore there would be no effect to environmental justice communities. The Proposed Action would allow irrigation water to flow through the NNMP again which would provide a beneficial socioeconomic impact to local farmers. Because the only socioeconomic impact is beneficial in nature, socioeconomics has not been described in further detail in this EA.</p>

Resource	Rationale for Not Further Discussing in Detail
Public Health and Safety	<p>Primary activities that could pose a risk to public health and safety from the Proposed Action are related to construction traffic and the operation of heavy equipment near public roadways. Health and safety risks for construction workers are related to the operation of heavy equipment. These activities pose a risk of physical injury associated with auto accidents, however, NECA Bluff Road is currently closed to the public so there would be no potential for safety incidents. To further ensure public safety during construction, any trenches left open while unattended (e.g., overnight) that could pose a hazard to the public would be covered. The Proposed Action would not interfere with emergency plans or access. The Proposed Action would not affect any routes used for emergency response. Local police, fire and emergency medical services would not be hindered in their response due to implementation of the Proposed Action.</p>

## 2 PROPOSED ACTION and ALTERNATIVES

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Alternatives evaluated in this EA include the No Action Alternative and the Proposed Action Alternative.

### 2.1 No Action Alternative

Under the No Action Alternative, the NNMP waterline would not be repaired and would continue to be not operational. The Navajo Nation would continue to be without augmentation of source water under the ALP.

### 2.2 Proposed Action Alternative

#### Project Overview

The NNMP pipeline on Bluff Road would be repaired using a 0.69-mile long 24-inch-high density polyethylene (HDPE) pipeline that would be installed via horizontal directional drilling (HDD) to secure the pipe within the underlying bed rock to protect from future risk of landslide (Figures 2, 3 and 4). The existing pipeline along Bluff Road would be abandoned. The replacement NNMP pipeline would be installed south of Bluff Road and the Fruitland Irrigation Canal at a depth at which future landslides would not affect the pipeline. Additionally, the HDPE material used for the mainline would be fused together and would be more robust than sectionally installed pipe if the pipeline were ever exposed. A section of the pipeline would be installed within the current extent of the existing right of way (ROW). However, additional ROW for the updated waterline alignment, drill rig, mud pits, setup and laydown area needed for the HDD installation would be required.

To implement the project, construction would occur and there would be impacts to the native conditions. The proposed action would limit surface disturbances to only the entry and exit locations of the HDD installed pipeline. At both ends of proposed pipeline, the HDD requires area for installation, set up of required equipment, vegetation removal, grading of the natural terrain, and construction of mud pits. Conductor casings would be installed via hammering on both sides of the HDD. An HDD machine would drill a pilot hole from the exit pit to the entry pit. Multiple passes with reamers would occur to enlarge the bore enough to pull the HDPE pipe through. HDPE pipe would be fused together into strings and staged along the existing road. The drilling machine would pull the HDPE pipe through the bore. The tie in would be installed by excavating the areas around where the proposed pipeline would join the existing NNMP pipeline.

Soils from the HDD activities will be disposed of legally at a Reclamation approved site.

The NNMP's hydraulics would remain very similar to the original design. The water pressure coming into and exiting the repaired area would remain very similar to the original design. The system would continue to be operated by gravity and there would be no need for a new pump station. However, the pressure inside of the waterline that is installed by HDD would increase from the original design due to the deeper installation. The inner dimension of the HDPE pipeline would be designed to match that of the current inner dimension of the installed NNMP waterline.

The following subsections explain the construction methods and describe other aspects (staging, schedule, post-construction activities, habitat replacement) of the Proposed Action. For all aspects of the Proposed Action, Best Management Practices (BMPs) would minimize impacts of the project on the human and ecological environments. BMPs and other protective measures are incorporated as part of the Proposed Action, are described and analyzed as part of the Proposed Action in CHAPTER 3 (Affected

Environment & Environmental Consequences), and are summarized in CHAPTER 4 (Environmental Commitments).

### **Horizontal Directional Drilling**

The Proposed Action would limit surface disturbances to only the entry and exit locations of the HDD installed pipeline. An HDD machine would drill a pilot hole from the exit pit to the entry pit. Multiple passes with reamers would occur to enlarge the bore enough to pull the HDPE pipe through. HDPE pipe would be fused together into strings and staged along the existing road. The drilling machine would pull the HDPE pipe through the bore. The soil excavated for installation of the pipe would be removed from the site and would be disposed of legally at a Reclamation approved site.

### **Open Cut Pipe Installation**

The Proposed Action would include tying in the newly constructed HDPE HDD repair to the existing PVC NNMP waterline. Open cut trenches using excavators and backhoes would be excavated and PVC piping, new valving and ductile iron fittings would be used to connect the repair to the existing NNMP pipeline. The pipe trench would be backfilled and compacted, and the surface would be restored.

### **Pipeline Installation**

The existing NNMP pipeline would be excavated, and open trenches would be used to install the tie in between the existing NNMP pipeline, and the new HDPE repaired section. All surface disturbances would occur at the entry and exit locations of the HDD installed pipeline. Open trenching with backhoes would occur. PVC pipe and fittings would be installed. The trenches would be backfilled and compacted.

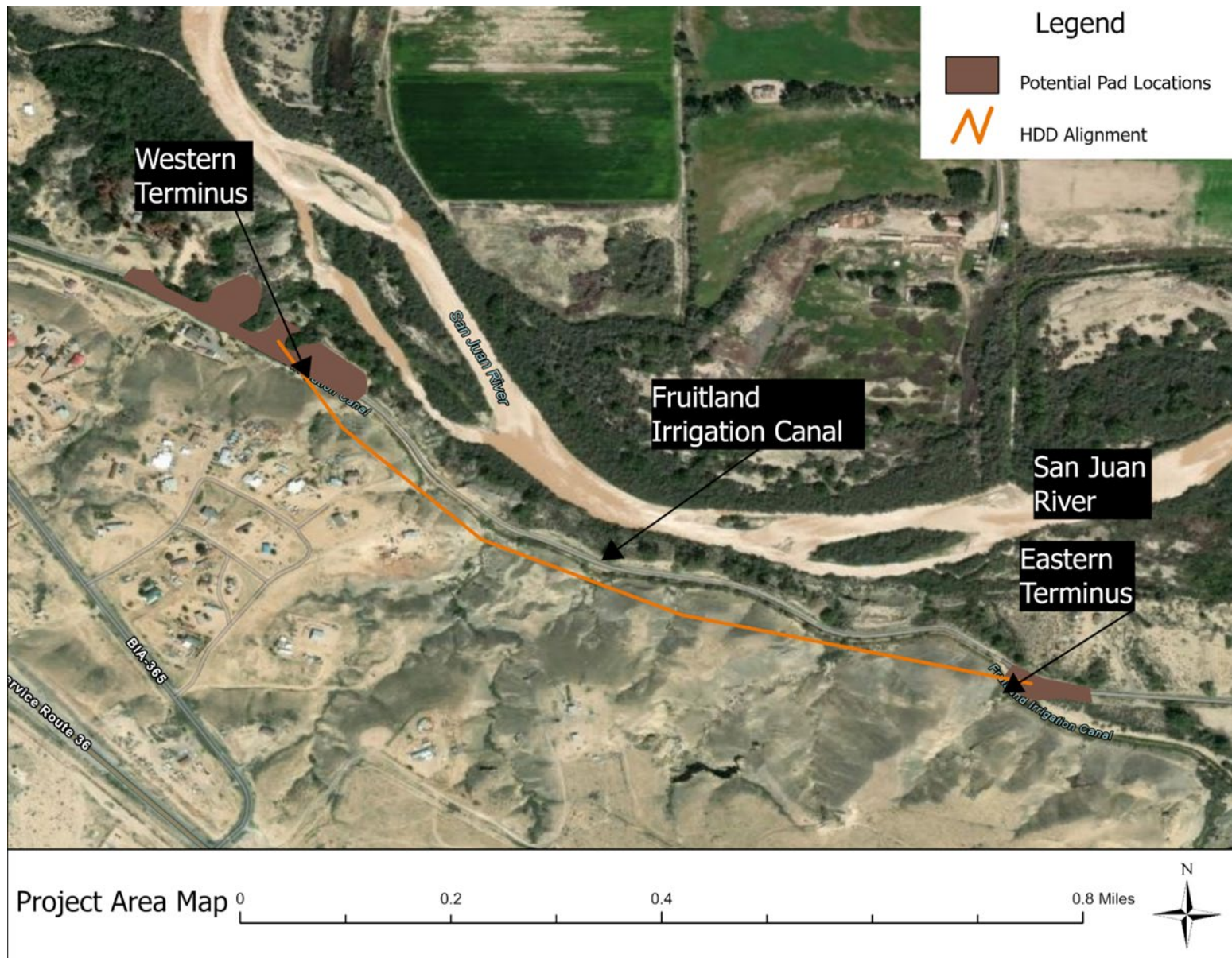
### **Vegetation Clearing and Post-Project Reclamation**

Vegetation removal and grading of the natural terrain would occur prior to HDD or open cut pipe installation. A Stormwater Protection Plan (SWPP) would be created by the contractor and BMPs would be used to minimize surface erosion and pollution. After construction activities are completed, reclamation of the area would occur, including grading disturbed areas to gradually meet the undisturbed areas, then seeding of all the disturbed areas.

### **Area of Disturbance**

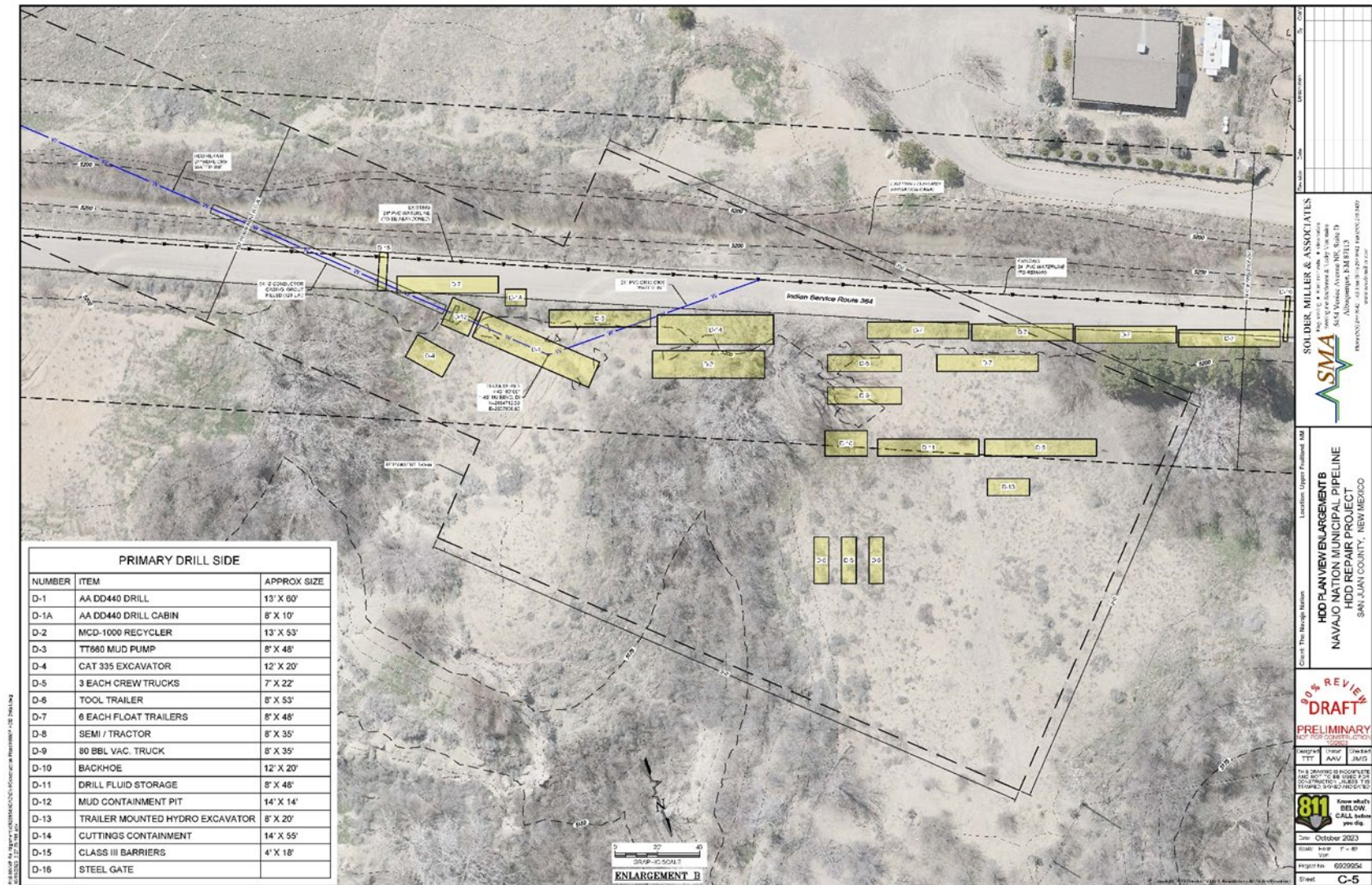
The footprint for the entrance and the exit of the HDD at both the eastern and western terminus would be approximately 200 feet by 300 feet (0.9 acres per site, 1.8 acres total). All the HDD equipment would be located in this footprint. There are three potential locations the HDD could be sited on the western terminus and one location at the eastern terminus (Figure 2). Most of the operations and equipment placement would be on the eastern terminus of the alignment. On the western terminus, there would be a 300-class excavator for the HDD operations and a 200-class excavator, loader, and fusion machine for the fusion operations. No slope stabilization measures would be required.





**Figure 2: Project Area Map**





### Figure 3: Eastern Pad Layout



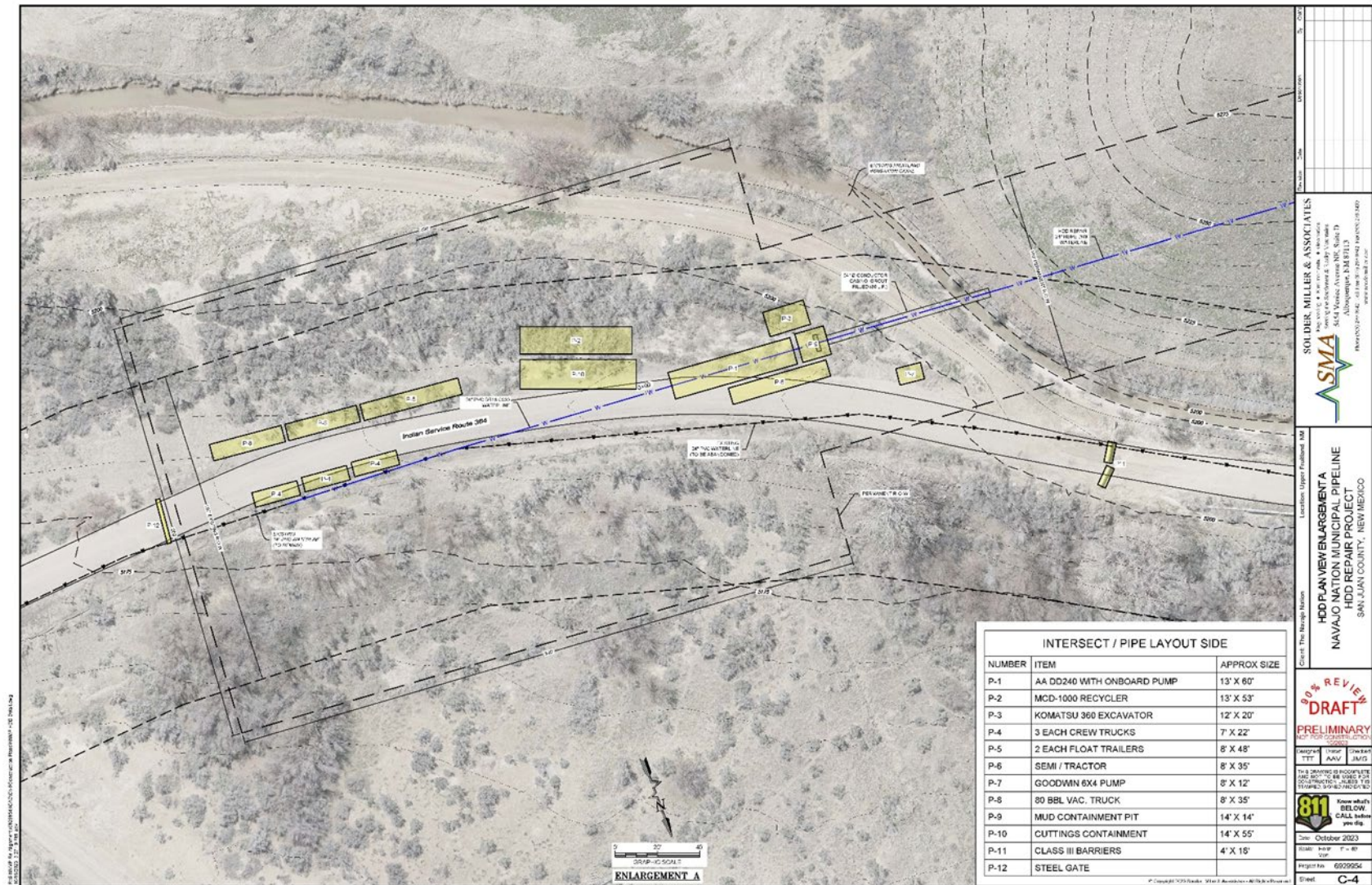


Figure 4: Western Pad Layout

## **Equipment**

Equipment required for the project would include:

- Directional Drill
- Mud Cleaner
- Mud Pump
- (2) 300 Class Excavator
- 200 Class Excavator for Pipe Fusion
- Pit Pump
- 53-foot Tool Trailer
- Vacuum Truck
- Tandem Dump Truck
- Rubber Tier Backhoe Crew Trucks
- Float Trailers for Drill Pipe, Tooling, and Drilling Fluid Additives
- Semi Tractor
- T900 Fusion Machine
- Loader to Assist with Pipe Fusion

## **Access**

The project area would be accessed via N367, aka Bluff Road. No new access roads would need to be constructed for this project, and no additional repairs of the road would be required.

## **Staging**

Staging would occur in the 200 feet by 300 feet areas located at the entry and exit pits. Staging of the HDPE carrier pipe would be located along the existing road.

## **Schedule**

The project is estimated to take 3 to 4 months and would take place during the winter when the Fruitland Irrigation Canal, located adjacent to Bluff Road, is drained. There would be an 8-person crew on site. Depending on the time of year, the work shift would be between 9 and 12 hours per day, 6 days a week.

## **2.3 Alternatives Considered but Dismissed**

Alternatives that were considered, but ultimately dismissed from further analysis, were dismissed for one or more of the following reasons:

- They are technically or economically infeasible.
- They do not resolve the purpose and need for taking action.
- They are duplicative of other less environmentally damaging or expensive alternatives.
- They conflict with a previously approved plan.
- They are beyond the scope of this EA.

Ultimately three action alternatives were considered during the feasibility study for the project (SMA 2021). These alternatives were analyzed but not carried forward for further analysis (Table 3).

**Table 3: Alternatives Considered but Dismissed**

Alternatives or Elements Considered	Reason for Dismissal
Pipeline Reroute to Fruitland Pumping Plant	<p>Under this alternative, the NNMP pipeline would be rerouted to avoid Bluff Road. The waterline alignment would be routed above the current location onto the mesa to the south. The existing pipeline along Bluff Road would be abandoned.</p> <p>A pumping plant would be required to boost the hydraulic grade line of the waterline over the mesa. The location of the pumping plant would be near the existing NTUA distribution pumping plant. A surge tank might be required. The pump station would require a new pump site, a power drop, Supervisory Control and Data Acquisition, site grading, and fencing. The pipeline alignment would traverse up the mesa to the south. HDD would be used to install the pipeline up the slope of the mesa. Once on top of the mesa, the alignment would parallel existing roads and would be routed through a neighborhood.</p> <p>There are many subsurface existing utilities within this area. In addition, community support is a potential issue with this alternative. Previous attempts at rerouting through this neighborhood have not been supported by the community. Additional ROWs would need to be acquired.</p> <p>This alternative would be more costly and more environmentally damaging than the preferred alternative.</p>
Pipeline Repair and Fruitland Canal Improvements	<p>Under this alternative, the sections of the NNMP pipeline that were damaged from the landslide would be repaired. Damaged sections of the pipeline would be removed and replaced with the same size and type as the existing pipeline. Due to the nature of the expansive soils present throughout the Bluff Road mesa area, the slope in this area would be stabilized based upon design by the geotechnical engineer.</p> <p>The Shiprock Irrigation District would replace the Fruitland Canal with two (2) 48" diameter pipelines in this area. By routing the irrigation water through pipelines there is the potential that there would be less leakage of irrigation water, which could help the slope stabilization.</p> <p>It is assumed that the Bluff Road repairs made by the Shiprock Irrigation District's future project would occur, and the road would be safe for maintenance vehicles to access the NNMP pipeline, and no additional repairs of the road would be required.</p> <p>Even with the slope stabilization measures in place, there would still be a potential for future landslides to damage the pipeline, thus, this alternative would fail to meet the purpose and need for action.</p>

Alternatives or Elements Considered	Reason for Dismissal
HDD under Mesa	<p>Under this alternative, the NNMP pipeline would be rerouted to avoid Bluff Road. The waterline alignment would be routed above the current location onto the mesa to the south. The pipeline would be installed via HDD at a depth below the hydraulic grade line of the tie in. This would allow the system to continue to run by gravity and avoid having to construct the new pump station.</p> <p>This alternative would not require pumping water over the mesa, instead it would flow by gravity through the pipe that cuts into mesa. In addition to allowing the system to run by gravity, the HDD install would secure the pipe within the underlying bedrock to protect from future risk of landslide. The existing pipeline along Bluff Road would be abandoned.</p> <p>The pipeline alignment would traverse up the mesa to the south. HDD would be used to install the pipeline up the slope of the mesa and deep bury until the ground elevation is lower than the incoming hydraulic grade line plus any head loss through the pipe. The pipe would need to be buried between 35 and 53 feet deep under the highest point of the mesa. The pipe could be installed deeper to add more pressure in the waterline and add a factor of safety.</p> <p>Once on top of the mesa, the alignment would parallel existing roads and would be routed through a neighborhood. There are many subsurface existing utilities within this area. In addition, community support is a potential issue with this alternative. Previous attempts at rerouting through this neighborhood have not been supported by the community. Additional ROWs would need to be acquired.</p> <p>This alternative was deemed riskier and more difficult to construct than the preferred alternative.</p> <p>This alternative would be more costly and more environmentally damaging than the preferred alternative.</p>

### **3 Affected Environment and Environmental Consequences**

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This section describes the affected environment and environmental consequences relevant to the issues presented in Table 1 and provides a comparative analysis of the direct, indirect, and cumulative impacts of the alternatives. For each resource, the potentially affected area and/or interests are identified; existing conditions described; past, present, and reasonably foreseeable actions identified; and potential impacts are analyzed. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Environmental commitments described in Chapter 4 are considered part of the Proposed Action and are taken into consideration when predicting environmental consequences. As defined by NEPA regulations (40 CFR 1501.3[b][1]), only those resources and conditions having the potential to be affected by the action are discussed and analyzed within this section.

#### **3.1 Air Quality**

This section discusses air quality visibility, climate, and meteorological conditions in and around the Project Area.

##### **3.1.1 Affected Environment**

The Project Area is located in San Juan County, New Mexico. Much of the information referenced in this section is incorporated from the Mancos-Gallup Resource Management Plan Amendment and Environmental Impact Statement Assessment of the Management Situation (BLM 2015) and the Air Resources Technical Report for BLM Oil and Gas Development in New Mexico, Kansas, Oklahoma, and Texas (BLM 2017) and updated with more recent information from the U.S. Environmental Protection Agency (EPA) and other resources.

The National Ambient Air Quality Standards (NAAQS), established by the U.S. EPA under the Clean Air Act (CAA) (1990), specify limits for pollutants considered harmful to public health and the environment. These six principal pollutants, called “criteria” air pollutants include carbon monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), lead (pb), and nitrogen. If the levels of a criteria pollutant in an area are higher than the NAAQS, the airshed is designated as a nonattainment area. Areas that meet the NAAQS for criteria pollutants are designated as attainment areas. The CAA identifies a two-tiered standard. Standards may be primary or secondary. Primary standards set limits to protect public health, including the health of sensitive populations, such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Averaging periods vary by pollutant, based on potential health and welfare effects of each pollutant. States may set their own ambient air quality standards, but they must be at least as stringent as the national standards (U.S. EPA 2019a). All areas in San Juan County, New Mexico are in attainment with the National Ambient Air Quality Standards (NMED 2022a).

##### **3.1.2 Impacts from the No Action Alternative**

Under the No Action the waterline would not be installed. There would be no impacts to air quality or greenhouse gases.

### **3.1.3 Impacts from the Proposed Action**

During site preparation and construction, air quality would temporarily be impacted by fugitive dust and pollution by exhaust emissions from motorized equipment. Air pollution from dust and exhaust emissions would cease at the completion of the project. The increase in emissions from site preparation, horizontal directional drilling (HDD) and installation of the new pipeline would be temporary and minor and would not result in the exceedance of the ambient air quality standards for any criteria pollutants in the Project Area or San Juan County. Therefore, these temporary impacts would not rise to the level of significant. The Proposed Action would comply with BMPs outlined in Chapter 4 for Air Quality. Fugitive dust from site preparation and construction activities would be controlled as necessary with the application of water or other dust suppressants.

## **3.2 Soil Resources**

### **3.2.1 Affected Environment**

There are three soil map units in the project area. Information on soil types was obtained from the NRCS web soil survey (<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). The predominant soil at the western terminus of the project area is the Haplargids-Blackston-Torriorthents complex, very steep soil mapping unit. A majority of the soils in the central part of the project area, where the HDD would occur, are Haplargids-Blackston-Torriorthents complex with a much smaller percentage of the Badland and the Blackston gravelly loam complex. The predominant soil at the eastern terminus of the Project Area is the Badland mapping unit. None of these soil types are considered to be Prime Farmland (NRCS 2023).

The potential pad locations on the western terminus of the project area are highly disturbed as they have been used for various activities including dumping of construction materials such as concrete, rocks and fill soils. There are large areas of bare soils on the pads (Photos 1 and 2). The drainages between the pads are heavily incised with very steep slopes. Erosion has been documented on the north side of Bluff Road as well as on the hill below the current pipeline (SMA 2021). There is evidence of erosion along the edges of the drainages that is likely occurring due to wind and stormwater runoff. The eastern terminus shows no obvious evidence of erosion.

Six (6) Geotechnical borings were completed along the proposed alignment of the HDD to an approximate depth of 32 feet. No bedrock was encountered from the geotechnical borings. However, shale was encountered at varying depths between 7 and 40 feet that were inconsistent and difficult to draw conclusions from across the boring areas. Cobble was also encountered (SMA 2021).





Source: McIntyre Environmental LLC.

**Picture 1: Middle Pad on Western Terminus**



Source: McIntyre Environmental LLC.

**Picture 2: Edge of Middle Pad on Western Terminus**

### **3.2.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no direct or indirect impacts to soil resources would occur as there would be no ground disturbing activities. Erosion would continue to occur around the existing pipeline.

### **3.2.3 Impacts from the Proposed Action**

Under the Proposed Action up to 1.8 acres (80,000 square feet) of soil would be disturbed in the eastern and western terminus of the project area through the use of equipment for HDD. The soil excavated for installation of the pipe would be removed from the site and would be disposed of legally at a Reclamation approved site. The potential for a temporary increase in water and wind related-soil erosion would depend on precipitation and wind events; however, the risk of erosion would be low due to the generally flat terrain, the surrounding vegetation which would act as a windbreak in the project area and the implementation of BMPs outlined in Chapter 4, including preparation of a SWPP. The reestablishment of permanent, perennial vegetation after project implementation would prevent the potential for adverse, long-term soil-erosion effects, and therefore impacts to erosion as a result of the Proposed Action would not rise to the level of significant.

## **3.3 Surface Water Resources and Water Quality**

### **3.3.1 Affected Environment**

The closest surface water resources near the project area are the Fruitland Irrigation Canal and the San Juan River. The Fruitland Irrigation Canal is immediately south of the western and eastern terminus of the alignment and would be crossed underneath its bed via HDD by the alignment. The Fruitland Irrigation Canal is only operational during the irrigation season. The Proposed Action area lies in the San Juan River basin. Surface water is the primary source of water (approximately 99%) in the San Juan Basin Water Planning Region. The San Juan Basin Water Planning Region encompasses the New Mexico part of the San Juan Hydrologic Unit, which falls primarily within San Juan County, but includes parts of McKinley, Sandoval, and Rio Arriba counties as well (Figure 1-1). The San Juan region is one of 16 water planning regions in the State of New Mexico (New Mexico Commission of Public Records 2016).

The San Juan River and its tributaries (the Animas River, Canon Largo, Chaco River, and La Plata River) are the primary surface water sources in the San Juan Basin region. The Navajo Reservoir, a reservoir with 1.7 million acre-feet of storage capacity, impounds the San Juan River in this region and extends into Colorado. Colorado, Utah, and Arizona all share the San Juan River watershed; however, it is not shared with any other New Mexico planning regions. The NTUA may divert water for municipal and domestic purposes from the San Juan River near Shiprock or from the Animas River through the City of Farmington's water diversion, treatment, and distribution system to which Navajo Nation pipelines are connected (New Mexico Commission of Public Records 2016).

Designated uses of the San Juan River in the project area include municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal cold water fishery, and warmwater fishery. (NMED 2005). Under Section 303(d) of the Clean Water Act (CWA), states, territories, and authorized tribes are required to develop lists of impaired waters. Within the San Juan Basin Water Planning Region, surface water quality is evaluated through periodic monitoring and comparison of sample results to the relevant water quality standards. Several reaches of the San Juan, La Plata and Animas rivers, as well as several lakes, have been listed on the 2014-2016 New Mexico 303(d) list. The reach that is located adjacent the project area (Reach NM-2401\_10 from the Navajo Boundary at Hogback to the Animals River) is listed in the 2022-2024 State of New Mexico Clean Water

Act §303(d)/§305(b) Integrated Report as being in Impairment Category 4A for E. Coli and 5/5C for sedimentation/siltation (New Mexico Commission of Public Records 2022).

Category 4A is defined as “Impaired for one or more designated uses but does not require development of a total maximum daily load (TMDL) because TMDL has been completed.” Category 5/5A is defined as “impaired for one or more designated or existing uses and a TMDL is underway or scheduled” (New Mexico Commission of Public Records 2022).

### **3.3.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no direct impacts to surface water or water quality would occur as no ground disturbance would occur.

### **3.3.3 Impacts from the Proposed Action**

Under the Proposed Action up to 1.8 acres (80,000 square feet) would be disturbed. While soil disturbance and associated erosion has the potential to result in soil transport into surface water features, silt fencing, geotextiles, or straw bales would be utilized to prevent runoff of sediment from the construction area into surface water. The reestablishment of permanent, perennial vegetation would prevent long-term erosion-induced water quality effects. Therefore, there would be no effect to surface water or water quality in associated with the San Juan River. There would be no change in Reach NM-2401-10 303(d) listing in Impairment Category 4A for E. Coli and 5/5C for sedimentation/siltation.

There would be no impacts to surface water or water quality associated with the Fruitland Irrigation Canal as the HDD would occur 20 feet below the bottom of the canal prism and the canal surface water would be avoided.

## **3.4 Riparian and Wetland Resources**

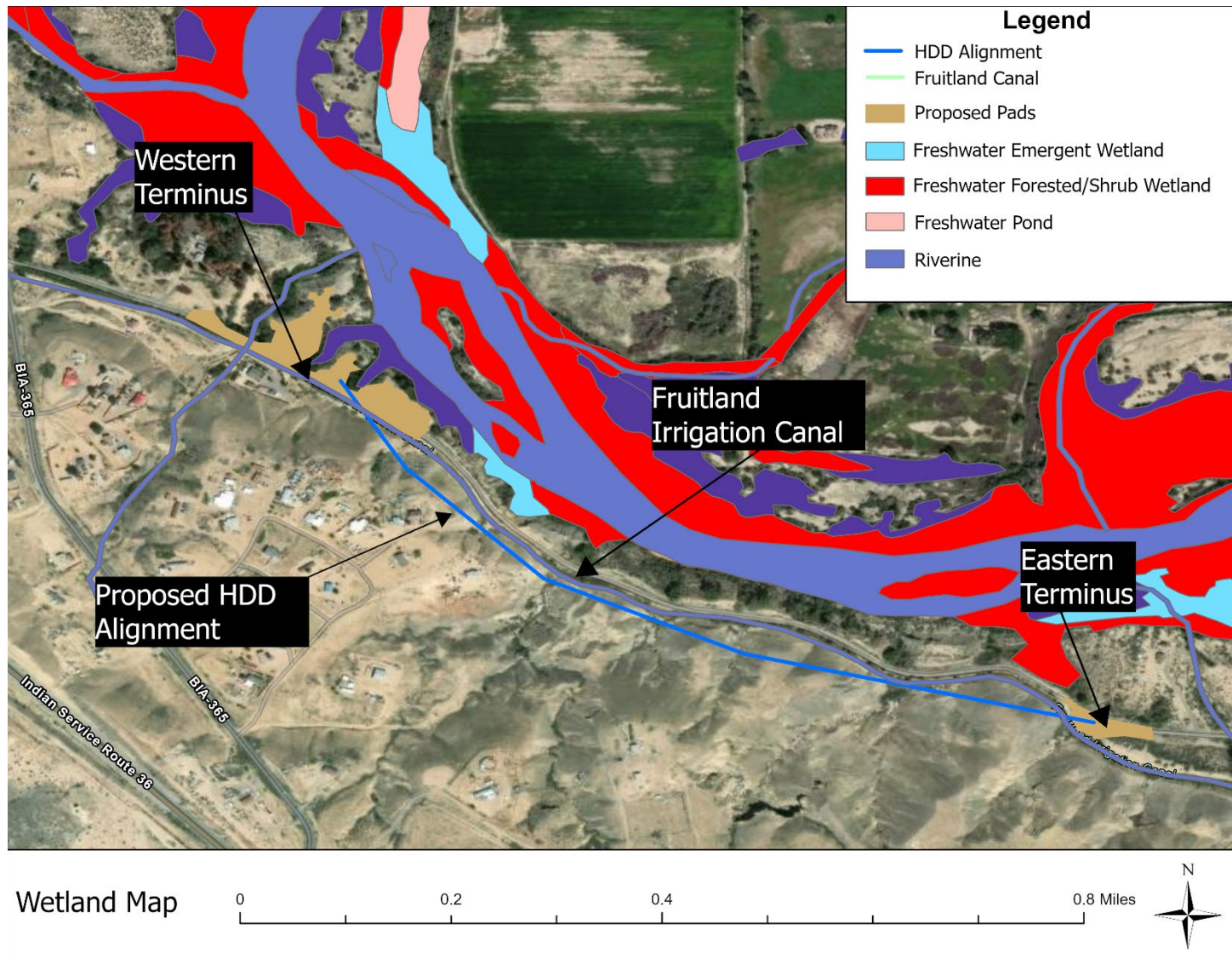
### **3.4.1 Affected Environment**

The project area is located on a bluff overlooking the San Juan River. The San Juan River and any associated wetlands lies to the north and approximately 100 feet in elevation below the project area. The Fruitland Irrigation Canal is adjacent to the Project Area and the pipeline would cross underneath the canal in two places. Fieldwork identified deep, ephemeral dry drainages between the flattened pad areas at the western terminus of the HDD alignment. These are listed as forested/shrub riparian areas in the National Wetlands Inventory and are identified with pink polygons on Figure 3.

Jurisdictional Waters of the United States, including wetlands, are protected under several rules and regulations including federal guidelines outlined by the CWA; Sections 401, 402, and 404, Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands) and by the review processes by the Pueblo and further downstream by the New Mexico Environment Department (NMED) Surface Water Quality Bureau. There are no wetlands or riparian areas within the Project area as indicated by a lack of wetland/riparian vegetation and lack of hydric soils.

The United States Department of Homeland Security Federal Emergency Management Agency Flood Insurance Rate Map and National Flood Hazard Layer designate special flood hazard areas, base flood elevations, and insurance risk zones. The project area is outside of the 100-year flood zone (Zone A) (SMA 2021).





**Figure 5: NWI Wetlands Near Project Area**

### **3.4.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no direct or indirect impacts to riparian or wetland resources are expected as no ground disturbing activities would occur. Erosion would continue to occur around the existing pipeline.

### **3.4.3 Impacts from the Proposed Action**

Under the Proposed Action up to 1.8 acres (80,000 square feet) would be disturbed. There would be no effect to riparian vegetation in the adjacent drainages or to Waters of the U.S. or floodplains as all of the ground disturbing activity would take place on the upland bluffs and would avoid the ephemeral dry drainages adjacent to the flattened pad locations. Because the Proposed Action would occur on the upland bluffs and would avoid all riparian and wetland areas, there would be no short or long-term direct impacts to riparian or wetland resources.

## **3.5 Vegetation & Noxious Weeds**

### **3.5.1 Affected Environment**

#### **Vegetation**

The habitat surrounding the project area is a mixed disturbed shrubland – grassland on the bluffs, and dense riparian vegetation in the deep drainages separating the three flattened areas. Shrubs and grasses are the dominant vegetation. A few junipers (*Juniperus* sp.) are present, but in general, trees are not present except in the deep drainages outside of the project area.

Within the project area, four-wing saltbush (*Atriplex canescens*) occurs across the flattened disturbed pad areas, with variable shrub cover, sparse grass, and typically over 50 percent bare ground. Other plant species seen were grama grasses (*Bouteloua* sp.), cholla (*Cylindropuntia* sp.), Indian rice grass (*Achnatherum hymenoides*), rabbitbrush (*Chrysothamnus* sp.), sagebrush (*Artemisia* sp.), black greasewood (*Sarcobatus vermiculatus*), prickly pear (*Opuntia* sp.), evening primrose (*Oenothera* sp.), and other grasses and forbs. Cottonwoods (*Populus* sp.). Tamarisk (*Tamarix ramosissima*), Russian olive (*Elaeagnus angustifolia*) and other riparian vegetation is present in the deep drainages and along the river bottom. Photos 3 and 4 show representative habitat throughout the project area.

#### **Noxious Weeds**

Specific plants have been designated as noxious weeds by New Mexico State law due to their potential to harm the state economy. Development of weed management programs is required by EO 11312 Invasive Species 1999, the Federal Noxious Weed Act of 1974, the New Mexico Noxious Weed Management Act of 1978, and the Federal Plant Protection Act of 2000 (BLM 2003). The New Mexico Class C noxious weeds Tamarisk and Russian olive were observed in the drainages between the pad locations at the western terminus of the Project Area; however, no upland noxious weed species were observed within the project area. The ground in the western terminus of the Project area is heavily disturbed which makes it easier for these weeds to spread. Class C noxious weed species are widespread in the state. Management decisions for these species should be determined at the local level, based on feasibility of control and level of infestation (NMDA 2016).

### **3.5.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no direct or indirect impacts to riparian or wetland resources are expected as no ground disturbing activities would occur. Erosion would continue to occur around the existing pipeline.

### **3.5.3 Impacts from the Proposed Action**

#### **Upland Vegetation**

Under the Proposed Action up to 1.8 acres (80,000 square feet) of vegetation would be disturbed. The pads located at the western terminus of the project area are all heavily disturbed mixed shrubland – grassland with large portions of these areas being barren. The native vegetation would be cleared from the pad areas. All vegetation with the potential to be disturbed is common in the vicinity of the project area, and the loss of the vegetation would not constitute significant impacts since the affected area is diminishingly small in comparison to surrounding habitat that would remain undisturbed. After construction, the disturbed area would be reseeded with a native seed mixture, and the upland vegetation in the project area would be restored. Therefore, impacts to upland vegetation would be minor and temporary and would not rise to the level of significant.

#### **Noxious Weeds**

Although upland noxious weed species are not currently present within the Project area, the ground is already heavily disturbed; therefore, the potential for noxious weeds to spread is already present, and ground disturbance associated with the Proposed Action would not introduce or increase the potential for spread. In accordance with the BMPs outlined in Chapter 4, construction equipment would be power washed before entering the project area to ensure that no equipment or machinery transport noxious weed seeds into the project area. The disturbed area would be reseeded with a native seed mixture to create a ground cover to prohibit the colonization of noxious weed species. Therefore, the Proposed Action would have no effect on noxious weeds

## **3.6 Special Status Species**

### **3.6.1 Affected Environment**

#### **Threatened and Endangered Species**

The Navajo Natural Heritage Program (NNHP) provided a data report including a list of species of concern to the NNDFW, which is inclusive of U.S. Fish and Wildlife Service species listed under the Endangered Species Act (ESA) (NNHP 2023). These species lists are geographically broad in that they report species known or projected to occur in a general area around the Proposed Action area. The NNHP report provides information on Known and Potential species within 1 and 3 miles of the Project area. Known Species are “species of concern” known to occur within 1 or 3 miles of the Proposed Action area. Potential Species are species potentially occurring near or on the Proposed Action area that need to be evaluated for presence/absence. According to the NNDFW, for any Known species, “planning for avoidance of these species is expected.”

There are no known special status species within 1 to 3 miles of the Project area. There are ten (10) potential species that could occur within 1 or 3 miles of the Project area. Suitable habitat for all these species may not exist within a critical distance from Project area. Although the Project area is adjacent the San Juan River and several deep drainages that empty into the river, no aspect of the Proposed Action would take place within these areas. Thus, there is no suitable habitat present for the following

fish and amphibian species within the Project area and these species were not carried forward in this EA for further analysis:

- roundtail chub (*Gila robusta*),
- razorback sucker (*Xyrauchen texanus*),
- northern leopard frog (*Lithobates pipiens*), and
- Colorado pikeminnow (*Ptchocheilus lucius*).



Source: McIntyre Environmental LLC

**Picture 3: Proposed Western Terminus Pad Area Looking South Toward Irrigation Canal and Home Sites.**





Source: McIntyre Environmental LLC

**Picture 4: Habitat Adjacent to Upper Fruitland Eastern Terminus Pad Area Looking East**

A field survey was conducted on April 15, 2023, to determine the presence of potentially occurring species or their suitable habitats) within the Project area (Terra Technologies 2023). A later spring survey was performed April 29, 2023, at 1000 to 1245 hours for the potentially occurring San Juan milkweed (*Asclepias sanjuanensis*). Table 7 lists those species which were found to be present, or which had suitable habitat located within or proximate to the Project area, and these species are being carried forward in this EA for further analysis.

The Project Area is designated by Navajo Nation Department of Fish and Wildlife as Biological Resource Land Use Clearance Policies and Procedures (RCP) 1. RCP 1 areas contain the best habitat for endangered and rare plants, animal and game species, and the highest concentration of these species on the Navajo Nation. The purpose of this area is to protect these valuable and sensitive biological resources to the maximum extent practical. The general rule for this area is no activity or development can occur that is going to result in significant impact to wildlife resources. Restricted development is allowable only if certain criteria are met.

Raptor surveys were conducted with binoculars from the proposed route and looking down along river bottom. No bald (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) or other raptors or raptor nests (i.e., large stick nests, cliff faces or rock outcrops with sheltered overhangs and whitewash) were seen.

Habitat for mountain plover (*Charadrius montanus*) is present but is not of high quality. Habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) is found in the drainages and along the river adjacent to the western terminus but is not within the Project Area. It should be noted that the insect prey base for southwestern willow flycatcher was not observed in the drainages adjacent the Project area.

Sora (*Porzana carolina*) are potentially occurring according to the data reported by the NNHP. They require wetlands with water at a shallow to intermediate depth for nesting (Table 5). There are no wetlands on the proposed route or pad areas, or areas of open water other than the irrigation canal on the south side of Bluff Road. No sora were observed, and preferred habitat is not available along the route but may occur along the river bottom.

Few rabbits or signs of rabbits were observed, and areas of kangaroo rat burrows or indications of small mammal use were minimal. Mule deer (*Odocoileus hemionus*) and tracks and scat were observed. Spotted towhees (*Pipilo maculatus*), mourning doves (*Zenaida macroura*), and mockingbirds (*Mimus polyglottos*) were observed near pads, and Canada geese (*Branta canadensis*) were observed along river edge. There are likely other breeding birds present during spring and summer

**Table 4: Potentially Occurring Species**

Scientific Name	Common Name	Status	Habitat	Presence
<i>Aquila chrysaetos</i>	Golden Eagle	NESL G3, BGEPA	Nest on steep cliffs which are normally directly adjacent to foraging habitat of desert grasslands or desert scrub.	No birds or nests observed during surveys.
<i>Asclepias sanjuanensis</i>	San Juan Milkweed	NESL G4	Mostly in sandy or sandy loam soils in pinion-juniper woodlands and Great Basin grassland communities. Often in disturbed sites.	Not observed during surveys.
<i>Charadrius montanus</i>	Mountain Plover	NESL G4 MBTA; not listed under the ESA	Typically nests in flat to slightly rolling expanses of grassland, semi-desert, or badland, in an area with short, sparse vegetation, large bare areas, and that is typically disturbed (e.g., grazed).	Not observed during surveys.
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	NESL G2 FE	Nesting is in dense riparian vegetation near surface water or saturated soil; either in monotypic or mixed stands of native and/or exotic species, with or without an over-story.	This habitat is present in the drainages adjacent to the project area.

Scientific Name	Common Name	Status	Habitat	Presence
<i>Haliaeetus leucocephalus</i>	Bald Eagle	NESL G2, BGEPA	Typically nest within trees in forested areas, especially mature and old-growth stands, adjacent to large bodies of water. Winter roosts in large trees in forests, river bottoms, or near canyon rims.	No birds or nests observed during surveys.
<i>Porzana carolina</i>	Sora	NESL G4	Nests in wetlands with shallow to intermediate-depth water and fine-leaved emergent vegetation Migration habitat is typically wetlands with tall, dense vegetation and shorter seed-producing plants.	Preferred habitat not present in drainages and species not observed during surveys.

Notes:

BGEPA – Bald and Golden Eagle Protection Act

ESA – Endangered Species Act

FE – Listed as endangered under the ESA

NESL – Navajo Endangered Species List

G2 – Species or subspecies whose survival or recruitment are in jeopardy.

G3- Species or subspecies whose survival or recruitment are likely to be in jeopardy in the foreseeable future.

G4 – Species or subspecies for which information is lacking to list as G2 or G3, but the NNDFW has reason to consider the

### 3.6.2 Impacts from the No Action Alternative

Under the No Action Alternative, no direct or indirect impacts to special status species or habitats would occur as there would be no ground disturbing activities.

### 3.6.3 Impacts from the Proposed Action

#### Threatened and Endangered Species

Under the Proposed Action, there would be no effect to any special status species or habitats. A Biological Resources Compliance Form (BRCF) indicating no effect to threatened or endangered species was granted to the project by the NNDFW in August 2023 (Appendix A).

Justification on the determination of no effect to evaluated special status species or habitats is summarized in Table 8:

**Table 5: Summary of Field Survey Results and Conclusions**

Common Name	Status	Conclusion	Justification
Golden Eagle	NESL G3	No effect.	No golden eagles or other raptors or raptor nests (i.e., large stick nests, cliff faces or rock outcrops with sheltered overhangs and whitewash) were observed during surveys. The Project area is heavily disturbed with human activity proximate to both the eastern and western terminus.
San Juan Milkweed	NESL G4	No effect.	Area is disturbed, but habitat is adequate. A focused survey during the appropriate time did not find any specimens.
Mountain Plover	NESL G4	No effect.	There are disturbed and large bare areas, but overall, the vegetation appears too tall to be considered preferred habitat. Species was not observed during spring surveys.
Southwestern Willow Flycatcher	NESL G2 FE	No effect.	Any dense riparian vegetation near surface water or saturated soil occurs 100 feet down in elevation and 100 feet or more away horizontally from the Project Area. Habitat does not occur within pad areas, and underground boring would not affect any habitat. Prey species (insects) are not present. Habitat would not be affected, and project would occur outside the breeding season.
Bald Eagle	NESL G2	No effect.	No bald eagles or other raptors or raptor nests (i.e., large stick nests, cliff faces or rock outcrops with sheltered overhangs and whitewash) were observed during surveys. The Project area is heavily disturbed with human activity proximate to both the eastern and western terminus.
Sora	NESL G4	No effect.	The wetlands by the San Juan River are 100 feet down in elevation and 100 feet or more away horizontally from the Project Area. Habitat does not occur within pads, and underground boring would not affect any habitat.

**Footnotes:**

G1 - Extirpated on Navajo Nation (NNHP Species Accounts)

G2 - Endangered, prospects of survival or recruitment are in jeopardy (NNHP Species Accounts)

G3 - Endangered, global conservation status, vulnerable (NNHP Species Accounts; NatureServe, 2016)

G4 - Candidates but lack sufficient information (NNHP Species Accounts); Global conservation status apparently secure (NatureServe, 2016)

BGEPA Bald and Golden Eagle Protection Act

NESL-Navajo Endangered Species List

FE-Federally Endangered

### **Special Status Raptor and Bird Species**

The area does not currently have a large prey base for raptors and no raptors were observed flying over during the survey. No raptor nests were observed in the project vicinity. There is a large amount of human disturbance in the project area. Given the lack of evidence of nesting activity and raptor presence in general, as well as the fact the Proposed Action would take place outside the raptor nesting season, there would be no direct or indirect effects to raptors or raptor nests.

The Project area does not contain preferred habitat for the mountain plover and no mountain plover or nests were observed during surveys. Given the poor habitat and the lack of evidence of nesting activity and species presence in general, as well as the fact the Proposed Action would take place outside the nesting season, there would be no direct or indirect effects to mountain plovers.

All dense riparian vegetation near surface water or saturated soil occurs 100 feet down in elevation and 100 feet or more away horizontally. Southwestern willow flycatcher habitat does not occur within the Project area on either terminus and underground boring would not affect any southwestern willow flycatcher habitat between the two locations. Prey species (insects) for the southwestern willow flycatcher were not present. Given the fact no southwestern willow flycatcher habitat would be affected and the Proposed Action would take place outside the nesting season, there would be no direct or indirect effects to sora or least bell's vireo.

### **Migratory Birds**

There is sparse shrub habitat, as well as trees off to the side of the pad areas. No nests or trees with nests were found on the route, but this is subject to change during the next breeding season. Prior to construction, migratory bird nesting surveys would be conducted to identify active nests within the project area. If a nest is identified, the nest would be avoided with a buffer of 165 feet until the nest fledges. Because active nests would be avoided, there would be no impact to nesting migratory birds associated with the Proposed Action.

## **3.7 Cultural Resources**

### **3.7.1 Affected Environment**

Cultural resources are defined as physical or other expressions of human activity or occupation. Such resources include culturally significant landscapes, prehistoric and historic archaeological sites, isolated artifacts or features, traditional cultural properties, Native American and other sacred places, and artifacts and documents of cultural and historical significance.

Federal legislation mandates that Federal agencies such as Reclamation are responsible for the identification and protection of cultural resources. In compliance with Section 106 of the NHPA of 1966, as amended, and its implementing legislation, CFR, Title 36, Part 800, Reclamation is required to conduct an assessment of cultural resources that could potentially be affected by the Proposed Action. A Class III cultural resource inventory was conducted on the project's area of potential effect (APE) by Statistical Research, Inc in May of 2023. An associated Ethnographic Report was also compiled per Navajo Nation Policy. No cultural resources were located within the APE.

Following NNHPD guidelines, a good faith effort was made to consult with all community members who are current land users and/or farmers living within sight of the proposed project area. Sixteen individuals, including two Upper Fruitland Chapter representatives, were interviewed on April 27 and April 28, 2023, in conjunction with this project. No new, traditional cultural properties (TCP) were identified through this research. Of the 16 individuals interviewed, seven of the interviewees stated that they were all aware that wild onions, celery, and tea grow along the irrigation canal (SRI 2023).

One In-use TCP, one In-use baseball field and a jishcháá' were located through ethnographic inquiry; however, both of these areas are located just outside the buffer zones. They are mentioned because the baseball field is visible and the community members informed interviewers of the In-use Ndaa site, a feature of the site is visible. No TCPs were identified in the survey route. Several plants were named which are used to dye wool. None of the areas were defined and no recommendations for their projection were provided. Two families remembered two graves near the project area but, these graves are located outside the project area (SRI 2023).

Three interviewees talked of the history of the Fruitland/Hogback Irrigation system. One individual stated that the irrigation system was built in the 1930s. The irrigation system is important to the local communities. Individual families grow crops that are shared with families, shown at local fairs, sold and traded (SRI 2023).

### **3.7.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no direct or indirect impacts to cultural resources are expected as no ground disturbing activities would occur. Erosion would continue to occur around the existing pipeline.

### **3.7.3 Impacts from the Proposed Action**

None of the identified cultural resources are located within the project area. No direct or indirect impacts to cultural resources would occur since all ground disturbing activities would take place within the project area boundaries. Reclamation consulted under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800) with multiple tribes in the area and made the determination of No Historic Properties Affected (Appendix B). In response, a Cultural Resources Compliance Form (CRCF) was issued by the NNH&HPD on August 11, 2023 (Appendix C).

## **3.8 Indian Trust Assets**

### **3.8.1 Affected Environment**

The DOI Manual Release 512 Department Manual 2 (1995) requires each bureau and office to identify potential effects of Departmental activities upon Indian Trust Assets (ITAs). The ITAs are legal interests in assets held in trust by the federal government for federally recognized Indian tribes or individual Indians. Secretarial Order 3175 and Reclamation ITA policy require that Reclamation assess the impacts of its projects on ITA. An inventory of all ITA within the proposed project area is required. If any ITAs are impacted, mitigation or compensation for adverse impacts to these assets is required. ITAs in the project area include Tribal trust land. The proposed modifications would affect approximately 8 acres of Tribal Trust land. Reclamation would continue to collaborate with the Upper Fruitland Chapter throughout the process to ensure that the proposed action reflects Tribal expertise and consider indigenous knowledge (e.g., traditional ecological and historical knowledge).

### **3.8.2 Impacts from the No Action Alternative**

Under the No Action Alternative, no impacts to ITAs would be expected because no ground disturbing activities would occur. Erosion would continue to occur around the existing pipeline.

### **3.8.3 Impacts from the Proposed Action**

Approximately 2 acres of Tribal Trust lands would be temporarily disturbed at the east and west terminus of the alignment from the HDD activities. The Upper Fruitland Chapter understands there

would be impacts to trust lands and supports the Proposed Action. The Proposed Action would not change the existing land and primary use, and therefore impacts to trust lands would not rise to the level of significant.

### 3.9 Cumulative Impacts

As defined by NEPA regulations (40 CFR 1508.1(g)), Cumulative effects are “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.”

The direct and indirect effects of past and ongoing (present) actions are reflected in the current conditions described in the affected environment above in each of the resource topics of Chapter 3. Reasonably foreseeable future actions are specific actions, and not speculative actions, in that they have approved NEPA documentation or approved plans with the potential to impact the same resources affected by the Proposed Action. At present there are no known reasonably foreseeable future actions with the potential to affect the same resources impacted by the Proposed Action; therefore, there would be no effects from other actions which could incrementally contribute to cumulative impacts on the resources impacted by the Proposed Action.

### 3.10 Summary of Impacts

Table 9 provides a summary of environmental impacts for the resources evaluated in this EA. Resource impacts are outlined for both the No Action and the Proposed Action Alternatives. As described throughout Chapter 3, environmental impacts of the Action Alternative were not determined to be significant.

**Table 6: Summary of Impacts**

<b>Resource</b>	<b>Impacts: No Action</b>	<b>Impacts: Proposed Action</b>
Air Quality	No effect.	During site preparation and construction, air quality would temporarily be impacted by fugitive dust and pollution by exhaust emissions from motorized equipment. Air pollution from dust and exhaust emissions would cease at the completion of the project. The temporary increase in emissions from site preparation, horizontal directional drilling (HDD) and installation of the new pipeline would not result in the exceedance of the ambient air quality standards for any criteria pollutants in the Project Area or San Juan County. The Proposed Action would comply with BMPs outlined in Chapter 4 for Air Quality.
Soils	No direct or indirect impacts to soil resources would occur as there would be no ground disturbing activities. Erosion would continue to occur around the existing pipeline.	Up to 1.8 acres (80,000 square feet) of soil would be disturbed in the eastern and western terminus of the project area. The potential for a temporary increase in water and wind related-soil erosion would depend on precipitation and wind events; however, the risk of erosion would be low due to the generally flat terrain, the surrounding vegetation which would act as a windbreak in the project area and the implementation of BMPs outlined in Chapter 4. The reestablishment of permanent, perennial vegetation after project implementation would prevent the potential for adverse, long-term soil-erosion effects.

Resource	Impacts: No Action	Impacts: Proposed Action
Surface Water Resources and Water Quality	No effect.	Up to 1.8 acres (80,000 square feet) would be disturbed. While soil disturbance and associated erosion has the potential to result in soil transport into surface water features, silt fencing, geotextiles, or straw bales would be utilized to prevent runoff of sediment from the construction area into surface water. The reestablishment of permanent, perennial vegetation would prevent long-term erosion-induced water quality effects. There would be no impacts to surface water or water quality associated with the Fruitland Irrigation Canal as the HDD would occur 20 feet below the bottom of the canal prism and the canal surface water would be avoided.
Riparian and Wetland Resources	No direct or indirect impacts to riparian or wetland resources are expected as no ground disturbing activities would occur. Erosion would continue to occur around the existing pipeline.	Up to 1.8 acres (80,000 square feet) would be disturbed. There would be no effect to riparian vegetation in the adjacent drainages or to Waters of the U.S. or floodplains as all of the ground disturbing activity would take place on the upland bluffs and would avoid the ephemeral dry drainages adjacent to the flattened pad locations.
Vegetation and Noxious Weeds	No effect.	<p>Up to 1.8 acres (80,000 square feet) of vegetation would be disturbed. The native vegetation would be cleared from the pad areas. All vegetation with the potential to be disturbed is common in the vicinity of the project area, and the loss of the vegetation would not constitute significant impacts since the affected area is diminishingly small in comparison to surrounding habitat that would remain undisturbed. After construction, the disturbed area would be reseeded with a native seed mixture, and the upland vegetation in the project area would be restored.</p> <p>Although upland noxious weed species are not currently present within the Project area, the ground is already heavily disturbed; therefore, the potential for noxious weeds to spread is already present, and ground disturbance associated with the Proposed Action would not introduce or increase the potential for spread. In accordance with the BMPs outlined in Chapter 4, construction equipment would be power washed before entering the project area to ensure that no equipment or machinery transport noxious weed seeds into the project area. The disturbed area would be reseeded with a native seed mixture to create a ground cover to prohibit the colonization of noxious weed species.</p>



Resource	Impacts: No Action	Impacts: Proposed Action
Special Status Species	No effect.	<p>The area does not currently have a large prey base for raptors and no raptors were observed flying over during the survey. No raptor nests were observed in the project vicinity. There is a large amount of human disturbance in the project area. Given the lack of evidence of nesting activity and raptor presence in general, as well as the fact the Proposed Action would take place outside the raptor nesting season, there would be no direct or indirect effects to raptors or raptor nests.</p> <p>The Project area does not contain preferred habitat for the mountain plover and no mountain plover or nests were observed during surveys. Given the poor habitat and the lack of evidence of nesting activity and species presence in general, as well as the fact the Proposed Action would take place outside the nesting season, there would be no direct or indirect effects to mountain plovers.</p> <p>All dense riparian vegetation near surface water or saturated soil occurs 100 feet down in elevation and 100 feet or more away horizontally. Habitat does not occur within the Project area on either terminus or underground boring will not affect any habitat. Prey species, insects, for the southwestern willow flycatcher were not present. Given the fact not habitat would be affected, and the Proposed Action would take place outside the nesting season, there would be no direct or indirect effects to sora or least bell's vireo.</p> <p>There is sparse shrub habitat, as well as trees off to the side of the pad areas. No nests or trees with nests were found on the route, but this is subject to change during the next breeding season. Prior to construction, migratory bird nesting surveys would be conducted to identify active nests within the project area. If a nest is identified, the nest would be avoided with a buffer of 165 feet until the nest fledges. Because active nests would be avoided, there would be no impact to nesting migratory birds associated with the Proposed Action.</p>
Cultural Resources	No effect.	<p>None of the identified cultural resources are located within the project area. No direct or indirect impacts to cultural resources would occur since all ground disturbing activities would take place within the project area boundaries. Reclamation conducted NHPA consultation with multiple tribes in the area and made the determination of No Historic Properties Affected, under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC § 306108), and its implementing regulations, 36 CFR Part 800 (Reclamation 2023). A Cultural Resources Compliance Form (CRCF) was issued by the NNH&amp;HPD on August 11, 2023.</p>

<b>Resource</b>	<b>Impacts: No Action</b>	<b>Impacts: Proposed Action</b>
Indian Trust Assets	No Effect	Approximately 2 acres of Tribal Trust lands would be temporarily disturbed at the east and west terminus of the alignment from the HDD activities. The Upper Fruitland Chapter understands there would be impacts to trust lands and supports the Proposed Action. The Proposed Action would not change the existing land and primary use, and therefore impacts to trust lands would not rise to the level of significant.
Socioeconomics	No Effect	Socioeconomics was not carried forward for further analysis due to the fact there would be no adverse effects to this resource. However, it should be noted that the Proposed Action would allow irrigation water to flow through the NNMP again which would provide a beneficial socioeconomic impact to local farmers.

## 4 ENVIRONMENTAL COMMITMENTS

This section summarizes the design features, BMPs, conservation measures, and other requirements (collectively, “Environmental Commitments”) developed to lessen the potential adverse insignificant effects of the Proposed Action (Table 10). The actions in the following environmental commitment list would be implemented as an integral part of the Proposed Action and shall be included in any contractor bid specifications.

Note that in the event there is a change in the Proposed Action description, or any construction activities are proposed outside of the inventoried Proposed Action Area or the planned timeframes outlined in this EA, additional environmental review by Reclamation would be required to determine if the existing surveys and information are adequate to evaluate the changed project scope. Additional NEPA documentation may be required.

**Table 7: Environmental Commitments**

Type	Environmental Commitment	Affected Resource	Authority
Construction Contractor Plan	<ul style="list-style-type: none"><li>• Prior to commencing construction, the Applicant would prepare a Dust Control Plan identifying all sources of particulate matter 10 microns or less in diameter (PM10) emissions and associated mitigation measures during the construction and operational phases of the project. The Dust Control Plan would meet all applicable requirements for control of fugitive dust emissions, including the following measures designed to achieve the no greater than 20-percent opacity performance standard for dust control:</li><li>• All disturbed areas, including bulk material storage that is not being actively used, would be effectively stabilized; and visible emissions would be limited to no greater than 20-percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material, such as vegetative groundcover. Bulk material is defined as earth, rock, silt, sediment, and other organic and/or inorganic material consisting of or containing particulate matter (PM) with 5 percent or greater silt content.</li><li>•</li></ul>	Air Quality	Clean Air Act

Type	• Environmental Commitment	Affected Resource	Authority
Construction Contractor Plan	<ul style="list-style-type: none"> <li>• The transport of bulk materials on public roads would be completely covered, unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks would be cleaned and/or washed at the delivery site after removal of bulk material, prior to using the trucks to haul material on public roadways.</li> <li>• All track-out or carry-out on paved public roads, which includes bulk materials that adhere to the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto the pavement, shall be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.</li> <li>• Movement of bulk material handling or transfer would be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.</li> </ul>	Air Quality	Clean Air Act
General BMP	<ul style="list-style-type: none"> <li>• The Applicant would implement all applicable standard mitigation measures for construction combustion equipment for the reduction of excess oxides of nitrogen (NOX) emissions. These measures include:</li> <li>• Minimize idling time, either by shutting equipment off when not in use or reducing the time of idling to five minutes at a maximum.</li> <li>• Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.</li> <li>• Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing construction activity during the peak hour of vehicular traffic on adjacent roadways.</li> <li>• Implement activity management (e.g., rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts).</li> </ul>	Air Quality	Clean Air Act

Type	Environmental Commitment	Affected Resource	Authority
General BMP	Each project proponent shall use all available U.S. EPA Tier 3 or better construction equipment.	Air Quality	Clean Air Act
General BMP	The construction contractor shall not allow construction, storage, or parking of vehicles or equipment outside the proposed project area footprint.	Soil, Vegetation, Weeds, Habitat	Archaeological Resources Protection Act of 1979; Paleontological Resources Preservation Act of 2009
General BMP	The proposed construction project footprint should be kept to the minimum area required for construction.	Soil, Vegetation, Weeds, Habitat	Archaeological Resources Protection Act of 1979; Paleontological Resources Preservation Act of 2009
General BMP	Equipment would be refueled at least 100 feet (outside of the floodplain) from the river.	Soils, Water Quality	Clean Water Act of 1972 as amended
General BMP	Fuel, oil, hydraulic fluid, or substances of this nature would be stored within sealed, storage containers or facilities that are located outside the floodplain and provide secondary containment per Storm Water Pollution Prevention Plan (SWPPP) and use SWPPP criteria for storage and refueling.	Soils, Water Quality	Clean Water Act of 1972 as amended
General BMP	Appropriate spill containment and clean-up materials will be onsite and construction and other on-site staff will have proper training to deploy and utilize.	Soils, Water Quality	Clean Water Act of 1972 as amended
General BMP	Prior to being onsite, all equipment would undergo high-pressure spray cleaning and inspection prior to initial operation in the project area.	Soils, Water Quality	Clean Water Act of 1972 as amended
General BMP	All equipment would be checked each morning for leaks. Leaking equipment would be removed from the project site until repaired and cleaned.	Soils, Water Quality	Clean Water Act of 1972 as amended
General BMP	Equipment would be parked on pre-determined locations on high ground away from the river overnight.	Soils, Water Quality	Clean Water Act of 1972 as amended

Type	Environmental Commitment	Affected Resource	Authority
General BMP	Equipment would be cleaned and free of plant and soil residue. All construction equipment would be pressure washed and/or steam cleaned before entering the watershed to ensure that all equipment, machinery, rocks, gravel, and other materials are cleaned and weed free and inspected daily for leaks. If equipment is used in an area containing invasive or noxious weeds, it would be cleaned before it is moved to another location.	Soil, Vegetation, Weeds, Habitat	Federal Noxious Weed Act
Conservation Measure	Construction activities should occur outside the migratory bird breeding and nesting season (April 15 to August 15). If construction occurs during this period, then a pre-construction migratory nesting survey should be completed. If any active nests are located within the project area and the contractor has determined that project activities cannot be avoided until after the birds have fledged (left the nest), then the contractor must contact the Navajo Nation Department of Fish and Wildlife (NNDFW) office in Window Rock, Arizona to determine appropriate next steps. Reclamation's Albuquerque Area Office biologist should be consulted prior to contacting the NNDFW.	Wildlife	Migratory Bird Treaty Act of 1918
General BMP and Design Feature	Disturbed soil surrounding the project area would be reseeded with a native seed mix.	Soil, Vegetation, Weeds, Habitat	Federal Noxious Weed Act
General NEPA Compliance	To control dust and wind erosion, soil within the construction zone would be kept wet. Stockpiles of debris, soil, or other materials that could produce dust would be watered or covered. Materials transported on or off-site by truck would be covered. The contractor would be required to comply with local sedimentation and erosion-control regulations.	Air Quality, Soils	Clean Air Act, Clean Water Act of 1972 as amended
Construction Contractor Plan or Certification Requirement	A SWPPP would be required. Aquatic and riparian habitat would be protected with silt fencing, geotextiles, or straw bales to prevent runoff of sediment from areas disturbed by construction.	Water Quality	Clean Water Act of 1972 As amended



Type	Environmental Commitment	Affected Resource	Authority
Conservation Measure	If previously unknown archeological resources or skeletal remains are discovered, ground disturbance would be stopped in the area of any discovery, protective measures would be implemented, and procedures outlined in 36 CFR Part 800 would be followed, as applicable. The Bureau of Reclamation, Western Colorado Area Office Archaeologist would be notified of the discovery. Resources would be evaluated for their National Register of Historic Places (NRHP) significance by the Reclamation, and adequate mitigation of project impacts would be implemented. Work would not commence until Reclamation has given approval.	Cultural Resou	Archaeological Resources Protection Act of 1979;

## 5 CONSULTATION and COORDINATION

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A species request was submitted to the NNHP in March 2023. The NNHP replied to the request for information on T&E Species on March 23, 2023, with a list of T&E Species known to be in the Project Area or that have the potential to occur in the Project Area. A biological evaluation was submitted to NNDFW in May 2023 and a Biological Resources Compliance Form (BRCF) was received in August 2023.

As part of Agency Scoping, letters were prepared and submitted to a variety of agencies on behalf of the BIA asking for input on the Proposed Action. Letters were sent in May 2023 to the following agencies:

- Navajo Nation Environmental Protection Agency;
  - Administration Department
  - Air and Toxics Department
  - Enforcement Department
  - Surface and Groundwater Detection Department
  - Waste Regulatory and Compliance Department
- Floodplain Section of the Water Management Branch of the Water Resources Department.

The NNEPA Surface and Groundwater Protection Department submitted a letter June 15, 2023, regarding the project (Appendix D). The letter indicated that all drinking water projects must follow design review and construction permit requirements of the PSWWP, and that surface disturbance of more than one acre that may impact “waters of the Navajo Nation” may require 401 Certification. It is not expected that the Proposed Action would require 401 Certification.

The NNMP NECA Bluff Road Realignment Project would comply with the American Indian Religious Freedom Act, NRHP, and other legislation pertaining to cultural resources. The NNHHPD has been consulted and a copy of this EA has been provided for review and comment. Reclamation consulted with NNHHPD as well as Native American tribes with ancestral ties to the project area.

## **6 LIST OF PREPARERS**

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## APPENDICES

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## **APPENDIX A: Biological Resources Compliance Documentation**

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## **APPENDIX B: Bureau of Reclamation Consultation Letter**

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## **APPENDIX C: Cultural Resources Compliance Documentation**

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## **APPENDIX D: NNEPA Letter**

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