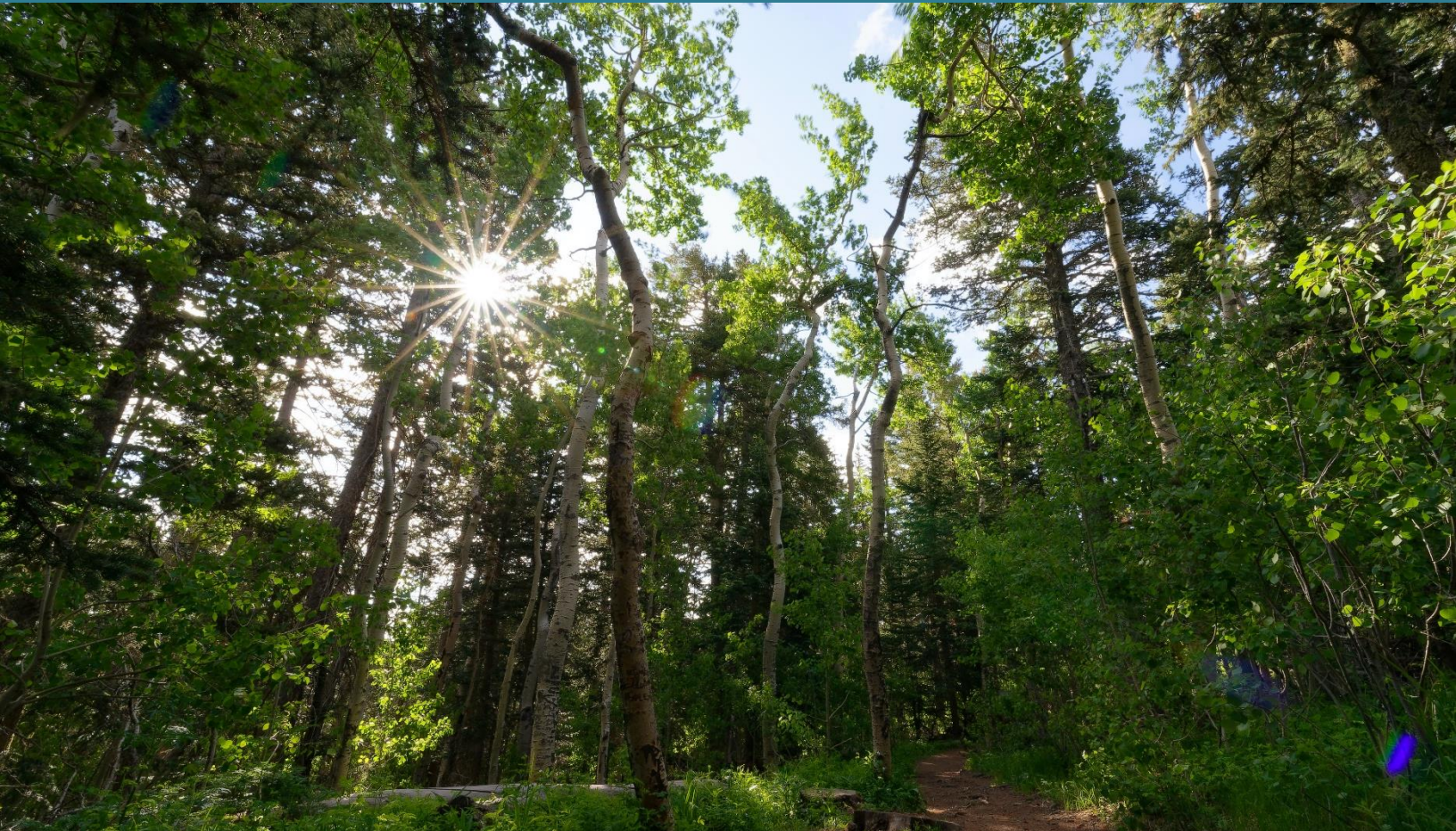


# *Final Resource Restoration Plan and Environmental Assessment for the Fort Wingate Depot Activity Site*



February 1, 2024

Prepared by:  
Navajo Nation  
New Mexico Office of Natural Resources Trustee  
United States Department of the Army  
Zuni Tribe

With support from:  
Abt Associates  
1200 17th Street  
10th Floor  
Denver, CO 80202

*This page intentionally left blank*

CONTENTS

List of Acronyms and Abbreviations .....iii

Executive Summary .....iv

**1. Introduction to the Restoration Plan.....1**

    1.1. Summary of Settlement .....1

    1.2. Trustee Responsibility and Authority .....1

    1.3. Public Participation .....1

    1.4. Additional Information .....1

**2. Purpose and Need for Restoration.....2**

    2.1. Overview of the Site.....2

        2.1.1 History.....3

        2.1.2 Climate.....3

        2.1.3 Topography.....4

        2.1.4 Soils .....4

        2.1.5 Surrounding Land Use .....4

    2.2. Summary of Remedial Actions.....4

    2.3. Summary of Natural Resource Injuries and Service Loss .....5

**3. Affected Environment .....7**

    3.1. Physical and Biological Environment and Resources.....7

        3.1.1 Plants .....7

        3.1.2 Wildlife .....7

        3.1.3 Species of Concern .....8

    3.2. Socioeconomic Resources.....8

    3.3. Cultural Resources .....8

**4. Restoration Screening and Evaluation Criteria.....10**

    4.1. Regulatory Criteria Set Forth in DOI NRDA Regulations.....10

    4.2. Screening Criteria .....10

    4.3. Evaluation Criteria Utilized by the Trustees to Select the Preferred Alternatives.....11

**5. Restoration Alternatives .....12**

    5.1. Summary of Alternatives.....12

    5.2. Preferred Alternatives (Tier 1).....13

        5.2.1 Alternative A: Forest Restoration and Fuelwood Production – Cibola National Forest.....13

        5.2.2 Alternative B: Zuni Bluehead Sucker Habitat Conservation .....16

    5.3. Preferred Alternatives (Tier 2).....19

        5.3.1 Alternative C: Forest Restoration and Fuelwood Production – Parcel 1 (Navajo Nation) .....19

        5.3.2 Alternative D: Forest Restoration and Fuelwood Production – Parcel 1 (Zuni Tribe) .....20

    5.4. Non-Preferred Alternative .....22

        5.4.1 Alternative E – Riparian and Upland Restoration on the Rio Puerco .....22

    5.5. No Action-Natural Recovery Alternative.....24

- 6. Environmental and Socioeconomic Impacts of Restoration Alternatives.....26**
  - 6.1. Requirements for NEPA Analysis and Trustee Approach.....26
  - 6.2. Analysis of Environmental Consequences .....26
    - 6.2.1 Forest Management Through Tree Thinning on Cibola National Forest.....26
    - 6.2.2 Forest Management Through Tree Thinning on FWDA .....26
    - 6.2.3 Zuni Bluehead Sucker Conservation .....27
- 7. Conclusions.....28**
- References .....29**
- Appendix A: Consent Decree .....A-1**
- Appendix B: Public Comments.....B-1**



## LIST OF ACRONYMS AND ABBREVIATIONS

### List of Acronyms and Abbreviations

---

AOC	Area of Concern
Army	United States Department of the Army
BIA	Bureau of Indian Affairs
BIAP	Base Realignment and Closure Installation Action Plan
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
DOI	U.S. Department of the Interior
Draft RP/EA	Draft Restoration Plan/Environmental Assessment
EA	Environmental Assessment
EIS	Environmental Impact Statement
Final RP/EA	Final Restoration Plan/Environmental Assessment
FONSI	Finding of No Significant Impact
FWDA	Fort Wingate Depot Activity
MSL	Mean Sea Level
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NM	New Mexico
NMSA	New Mexico Statutes Annotated
NOAA	National Oceanographic and Atmospheric Administration
NRDA	Natural Resource Damage Assessment
ONRT	New Mexico Office of Natural Resources Trustee
PEIS	Programmatic Environmental Impact Statement
PRP	Potential Responsible Party
Puerco EA	Puerco Collaborative Forest Landscape Restoration Project Environmental Assessment
RC	Restoration Center
RC PEIS	National Oceanographic and Atmospheric Administration Restoration Center Programmatic Environmental Impact Statement for Habitat Restoration Activities Implemented Throughout the Coastal United States
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/ Feasibility Study
SWMU	Solid Waste Management Unit
USDA	United States Department of Agriculture
USC	United States Code
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
WWTP	Waste Water Treatment Plant

## Executive Summary

---

In 2022, Trustees for the FWDA, including the Navajo Nation, the Zuni Tribe, the New Mexico Office of the Natural Resources Trustee (ONRT), and the United States Department of the Army (Army) signed a Consent Decree (Appendix A), after arriving at a total settlement of \$1,451,069.84 for restoration to compensate for natural resource damages at the Fort Wingate Depot Activity (FWDA) Site in McKinley County, New Mexico. At this Site, the Army is both the potentially responsible party (PRP) and a Trustee. The Consent Decree specifies that the funds awarded to compensate for natural resource damages are to be used to restore upland habitats (forested ponderosa, piñon / juniper woodlands), lowland habitats (including seasonal wetlands), groundwater, and cultural services. The total settlement funds allocated for restoration are \$1,137,150. Additional funds of \$313,919.84 were allocated in the settlement to cover the Trustees' past costs and future restoration implementation costs.

As part of the restoration planning process, the Trustees developed a Draft Restoration Plan/Environmental Assessment (Draft RP/EA), in which the Trustees provided information to the public regarding the restoration alternatives the Trustees identified and evaluated, including the preferred alternatives selected by the Trustees to compensate for natural resource damages at the FWDA. The Trustees identified and evaluated several restoration alternatives, including a no-action alternative. The Draft RP/EA was released for public review and comment on December 15, 2023, for a period of over 30 days ending on January 19, 2024.

This Final Restoration Plan/Environmental Assessment (Final RP/EA) presents restoration alternatives evaluated by the FWDA Natural Resources Trustee Council and the preferred alternatives selected by the Trustees to restore injured natural resources and lost services at the FWDA Site. This Final RP/EA has been prepared pursuant to Section 107(f) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the U.S. Department of the Interior (DOI) natural resource damage assessment (NRDA) regulations at 43 CFR Part 11.

All projects that were evaluated are listed in Table ES.1. Preferred alternatives are grouped into two tiers. Projects in the first tier are selected for funding. If funding remains after the first-tier projects have been implemented, or if unanticipated events prevent the implementation of first-tier projects in part or in full, the Trustees may fund projects in the second tier. The projects and the allocation of funding are provided in Table ES.1. In addition, the Trustees identified two non-preferred alternatives that are not selected for funding: the no-action alternative and one other project is listed in Table ES.1. These alternatives are non-preferred because they do not sufficiently meet the Trustees' goals and restoration criteria.

This document also constitutes the Environmental Assessment (EA) for the selected restoration of natural resources as defined under the National Environmental Policy Act [42 USC § 4321 et seq.] and addresses the potential impact of selected restoration actions on the quality of the physical, biological, and cultural environment.

**Table ES.1. Summary of Preferred and Non- Preferred Alternatives**

Alternative	Alternative Name	Funding Allocation	Implementing Trustee
<b>Preferred Alternatives: Tier 1</b>			
A	Forest Restoration and Fuelwood Production – Cibola National Forest	Up to \$568,575	Navajo Nation
B	Bluehead Sucker Habitat Conservation	Up to \$568,575	Zuni Tribe
<b>Total allocation across Tier 1</b>		Up to \$1,137,150	
<b>Preferred Alternatives: Tier 2</b>			
C	Forest Restoration and Fuelwood Production – FWDA Parcel 1	To be determined – based on funding remaining after implementation of Alternative A	Navajo Nation
D	Forest Restoration and Fuelwood Production – FWDA Parcel 1	To be determined – based on funding remaining after implementation of Alternative B	Zuni Tribe
<b>Total allocation across Tier 2</b>		<b>To be determined – based on funding remaining after Tier 1</b>	
<b>Non-Preferred Alternatives</b>			
Riparian and Upland Restoration on the Rio Puerco		Not Applicable	Not Applicable
No Action-Natural Recovery		Not Applicable	Not Applicable

# SECTION 1: INTRODUCTION TO THE RESTORATION PLAN

## 1. Introduction to the Restoration Plan

---

This Final Restoration Plan/Environmental Assessment (Final RP/EA) presents restoration alternatives evaluated by the Trustees and the preferred alternatives selected by the Trustees to restore injured natural resources and lost services resulting from released hazardous substances at the Fort Wingate Depot Activity (FWDA) Site, McKinley County, New Mexico. This Final RP/EA has been prepared pursuant to Section 107(f) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the U.S. Department of the Interior (DOI) natural resource damage assessment (NRDA) regulations at 43 CFR Part 11.

### 1.1. Summary of Settlement

In 2022, Trustees for the FWDA, including the Navajo Nation, the Zuni Tribe, the New Mexico Office of the Natural Resources Trustee (ONRT), and the United States Department of the Army (Army) signed a Consent Decree (Appendix A), after arriving at a total settlement of \$1,451,069.84 for restoration to compensate for natural resource damages at the Site. At this Site, the Army is both the potentially responsible party (PRP) and a Trustee. The Consent Decree specifies that the funds are to be used to restore upland habitats (forested ponderosa, piñon / juniper woodlands), lowland habitats (including seasonal wetlands), groundwater, and cultural services. The total settlement funds allocated for restoration are \$1,137,150. Additional funds of \$313,919.84 were allocated in the settlement to cover the Trustees' past costs and future restoration implementation costs.

### 1.2. Trustee Responsibility and Authority

The Trustee's authority to pursue NRDA and restoration claims is identified in the New Mexico Natural Resources Trustee Act [NMSA 1978, §§ 75-7-1 et seq.] and in the following federal statutes:

- The Oil Pollution Act of 1990 [33 USC § 2701 et seq.]
- CERCLA, as amended [42 USC § 9601 et seq.]
- The Clean Water Act [33 USC § 1251 et seq.]

Under those authorities, the Trustees are responsible for making the public whole by assessing natural resource damages and identifying restoration projects to compensate for natural resource injuries and service losses. The Trustees prepared this Final RP/EA pursuant to and in fulfillment of the responsibilities imposed by the Trustee Act and CERCLA.

### 1.3. Public Participation

Under CERCLA, the Trustees must notify the public of the availability of the Draft RP/EA. The Trustees published a notice of the availability of the Draft RP/EA in the Gallup Independent and notification was circulated to stakeholders via email. The document was made available for review at the Octavia Fellin Public Library, the ONRT office in Albuquerque, and online at <https://onrt.env.nm.gov/?p=1441>.

The public comment period on the Draft RP/EA commenced on December 15, 2023, and ended on January 19, 2024. All comments received on the Draft RP/EA were considered prior to issuing this Final RP/EA. Summaries of all comments received by the Trustees and responses to comments are included in Appendix B.

### 1.4. Additional Information

To facilitate public comments, additional information was made available at <https://onrt.env.nm.gov/fort-wingate-depot/> and could also be accessed by digital storage means that do not require internet access upon request to the New Mexico Office of Natural Resources Trustee, 121 Tijeras Avenue NE, Suite 1000, Albuquerque, NM 87102 or [nm.onrt@onrt.nm.gov](mailto:nm.onrt@onrt.nm.gov).



## SECTION 2: PURPOSE AND NEED FOR RESTORATION

### 2. Purpose and Need for Restoration

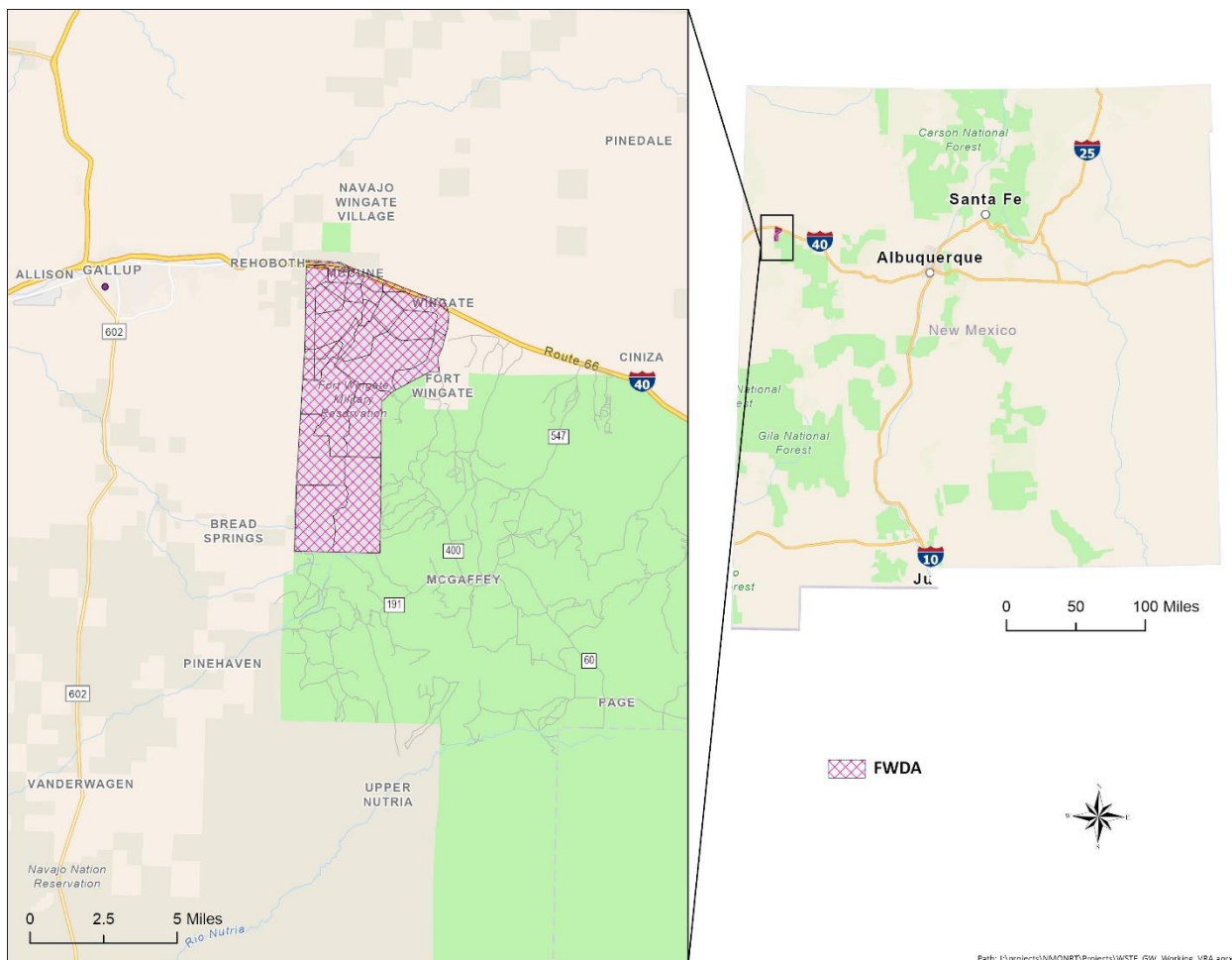
This section generally describes the Site, summarizes the response actions undertaken to date by the Army, and summarizes the Trustees' assessment of natural resource injuries and service losses at the Site.

#### 2.1. Overview of the Site

FWDA is a closed U.S. Army depot whose former mission was to receive, store, maintain, and ship assigned materials (primarily explosives and military munitions), and to dispose of obsolete or deteriorated explosives and military munitions. FWDA is approximately 24 square miles (approximately 15,277 acres) of land in McKinley County in northwestern New Mexico (FWDA, 2023). The installation is located 8 miles east of Gallup on U.S. Route 66 and approximately 130 miles west of Albuquerque on Interstate 40 (Figure 2.1).

FWDA contains facilities formerly used to operate a reserve storage activity providing for the care, preservation, and minor maintenance of assigned commodities, primarily conventional military munitions. The installation mission included the disassembly and demilitarization of unserviceable and obsolete military munitions. Ammunition maintenance facilities existed for the clipping, linking, and repackaging of small arms ammunition (ERM, 1997).

Figure 2.1. Location of FWDA



## SECTION 2: PURPOSE AND NEED FOR RESTORATION

### 2.1.1 History

The lands encompassing FWDA were used and/or occupied by Native Americans ranging from an estimated 4,000 to 13,000 years before the present. Cultural relics identified within FWDA confirm this inhabitation and include stone artifacts, such as simple tools and projectile points, ceramic fragments, remains of campsites (such as campfire ashes), and remnants of sizable structures (ERM, 1997). The most obvious relics are the ruins of dwellings from the Ancient Puebloan period. Features remaining from activities in more recent times include remnants of temporary camps and utilitarian objects (e.g., cooking vessels) dating from the 1800s (ERM, 1997).

The FWDA history at the site begins in more recent history, with the establishment of Old Fort Wingate in 1860. However, almost all present FWDA facilities were constructed post-1941. As an Army depot, the location of Fort Wingate has been moved three times within New Mexico and has had seven name changes (ERM, 1997). The first post, Fort Fauntleroy, later Fort Lyon (1861), was located east of the current FWDA site (ERM, 1997). In early 1941, a rebuilding and reconstruction program started at the site of the present FWDA. At the end of 1941, the administrative buildings and igloo-shaped structures for storing ammunition were installed. In 1962, Fort Wingate became a part of the new U.S. Army Supply and Maintenance Command, and in the same year, the Army designated the installation Fort Wingate Army Depot (ERM, 1997).

Between 1963 and 1967, the installation was used by White Sands Missile Range to test the mobility and accuracy of the Pershing missile. Several missiles were fired from the installation. In 1966, the installation increased its activities by shipping ammunition for the South Vietnam conflict. In July 1971, the installation was placed in Reserve Status under the command of Pueblo Army Depot (Colorado) and redesignated Fort Wingate Depot Activity. The active mission of FWDA ceased and the installation closed in January 1993, as a result of the Defense Authorization Amendments and Base Realignment and Closure (BRAC) Act of 1988 (FWDA, 2023). Remedial activities at the Site, which began in the late 1980s and are ongoing, are described in Section 2.2.

### 2.1.2 Climate

Northwestern New Mexico is characterized by a semiarid continental climate. Most precipitation occurs from July through September as brief, but frequently intense, summer storms, with the remainder resulting from winter snows (NOAA NCEI, 2021; WRCC, n.d.). Mean annual rainfall for McKinley County ranges from 7 to 16 inches, while the recorded average annual precipitation at the Gallup Municipal Airport (approximately 8 miles west of FWDA) is 11 inches (NOAA NCEI, 2023; NOAA NCEI, 2021).

Generally, temperatures in the area vary with elevation and topographic features. In summer, daily high temperatures at the Gallup Municipal Airport are around 87°F and average temperatures are around 69°F, with lows around 51°F (NOAA NCEI, 2021). In winter, daily high temperatures are around 47°F and average temperatures are around 31°F, with lows around 16°F (NOAA NCEI, 2021). Gallup, NM, has approximately 120 frost-free days during the year from late May to late September (National Weather Service, n.d. [a], n.d. [b]).

Northwestern New Mexico has generally sunny weather, receiving an average of 76 percent of possible sunshine annually (WRCC, 2016). Average monthly relative humidity ranges from 18 percent (afternoon; lowest values) to 70 percent (morning; highest values), with the lowest humidity levels occurring during the spring dry season (WRCC, 2016). During spring, the Gallup area experiences strong winds from the west-southwest, with wind speeds of around 8 to 10 miles per hour (WRCC, 2016). Strong wind, high temperature, and low relative humidity in the area contribute to high evaporation rates.

## SECTION 2: PURPOSE AND NEED FOR RESTORATION

### 2.1.3 Topography

FWDA is located within the western portion of the Red Mesa Valley. The South Fork of the Rio Puerco flows through the northern portion of the FWDA, and foothills of the Zuni Mountains are present in the southern portion (Argonne National Laboratory, 1990). FWDA is bordered on the west by the Defiance Plateau, on the northwest by the southern extremities of the Chuska Mountains, on the north by the San Juan Basin, on the east by the continental divide and the El Malpais volcanic flows, and on the south by the Zuni Mountains.

The elevation of FWDA ranges from approximately 8,200 feet above mean sea level (MSL) in the south to 6,660 feet above MSL in the north (Argonne National Laboratory, 1990; ERM, 1997). Main drainages, following the topography, flow from south to north and discharge to the South Fork of the Rio Puerco. However, many tributaries follow the regional trend, flowing from southwest to northeast. Because of the nature of precipitation in this semi-arid region, the surface drainage is relatively shallow near headwaters (Argonne National Laboratory, 1990; ERM, 1997). Downward erosion intensifies as the stream moves downstream, resulting in a system of well-developed steep-walled arroyos. Arroyos form because of the erodibility of localized areas of silt- and clay-rich bedrock (Argonne National Laboratory, 1990; ERM 1997).

### 2.1.4 Soils

The soils found on the installation are similar to those occurring in cool plateau and mountain regions of New Mexico. The major soil types at FWDA are variants/complexes of sands, loams, clays, and rocks (Sundance Consulting, 2017). These soils are relatively thin and the parent bedrock is either at or near the surface in more than a quarter of the installation (Sundance Consulting, 2017). Wind and water cause extensive soil erosion, especially where vegetative cover is absent.

### 2.1.5 Surrounding Land Use

FWDA is almost entirely surrounded by federally owned national forest and Tribal lands, with some minor industry and developed areas.

To the south and southeast is the largely undeveloped Cibola National Forest. The Bureau of Indian Affairs manages lands to the east of FWDA. The town of Fort Wingate, which was the original FWDA headquarters site, is located immediately to the east of FWDA. Development north of FWDA includes Red Rock Park, Fire Rock Navajo Casino, and the Navajo community of Church Rock. Transportation corridors for Interstate 40 and old U.S. Highway 66 border FWDA to the north as well as the Burlington, Northern, and Santa Fe Railroad (FWDA, 2023). The land to the west is mostly undeveloped Tribal trust and allotment land administered by the Bureau of Indian Affairs (BIA), Navajo Nation, and individual Native American owners (FWDA, 2023). The current Zuni reservation is located approximately 6 miles to the south. As noted above, the FWDA and surrounding lands were traditionally/historically inhabited by the Navajo Nation and the Zuni Tribe.

Gallup is located approximately 8 miles west of FWDA. Gallup has a varied base of service, government, mining and refinery industries, and Native American jewelry production. Tourism attracts thousands of visitors annually, and Native American culture yields a significant economic influence (FWDA, 2016). Small manufacturing includes printing, sheet metal products, food products, piñon nut gathering, and cattle and sheep byproducts. Heavier manufacturing includes gasoline refining, a natural gas compressor station, and coal mining. The natural resource base includes uranium reserves and coal (FWDA, 2016).

## 2.2. Summary of Remedial Actions

The remediation process at FWDA began in 1989 and is still ongoing. Prior to issuance of a Resource Conservation and Recovery Act (RCRA) permit in 2005, approximately 44 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) had been identified, and these SWMUs and AOCs were at various states of remediation when the permit process began in 2002 (FWDA, 2016). The finalized

## SECTION 2: PURPOSE AND NEED FOR RESTORATION

RCRA Permit listed one Hazardous Waste Management Unit (the OB/OD Unit – located within the west central portion of the installation and encompassing approximately 1,800 acres) and a total of 93 SWMUs and AOCs. The permit lists the cleanup requirements that are necessary to transfer land over to the DOI for subsequent placement into trust with the Navajo Nation or Zuni Tribe (FWDA, 2016). As part of the planned property transfer, the installation has been divided into reuse parcels (Figure 2.2). To outline the multiyear cleanup program at FWDA, a BRAC Installation Action Plan (BIAP) was developed and identifies environmental cleanup requirements, and proposes a comprehensive, installation-wide approach to remediation, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (FWDA, 2016). As of November 2022, 8,351 acres have been transferred to DOI, including Parcels 1, 4B, 5A, 5B, 8, 10A, 10B, 12, 14, 15, and 17, and 25 (Figure 2.2). Ultimately the transferred parcels will be put into trust for the Navajo Nation or Zuni Tribe (FWDA, 2023).

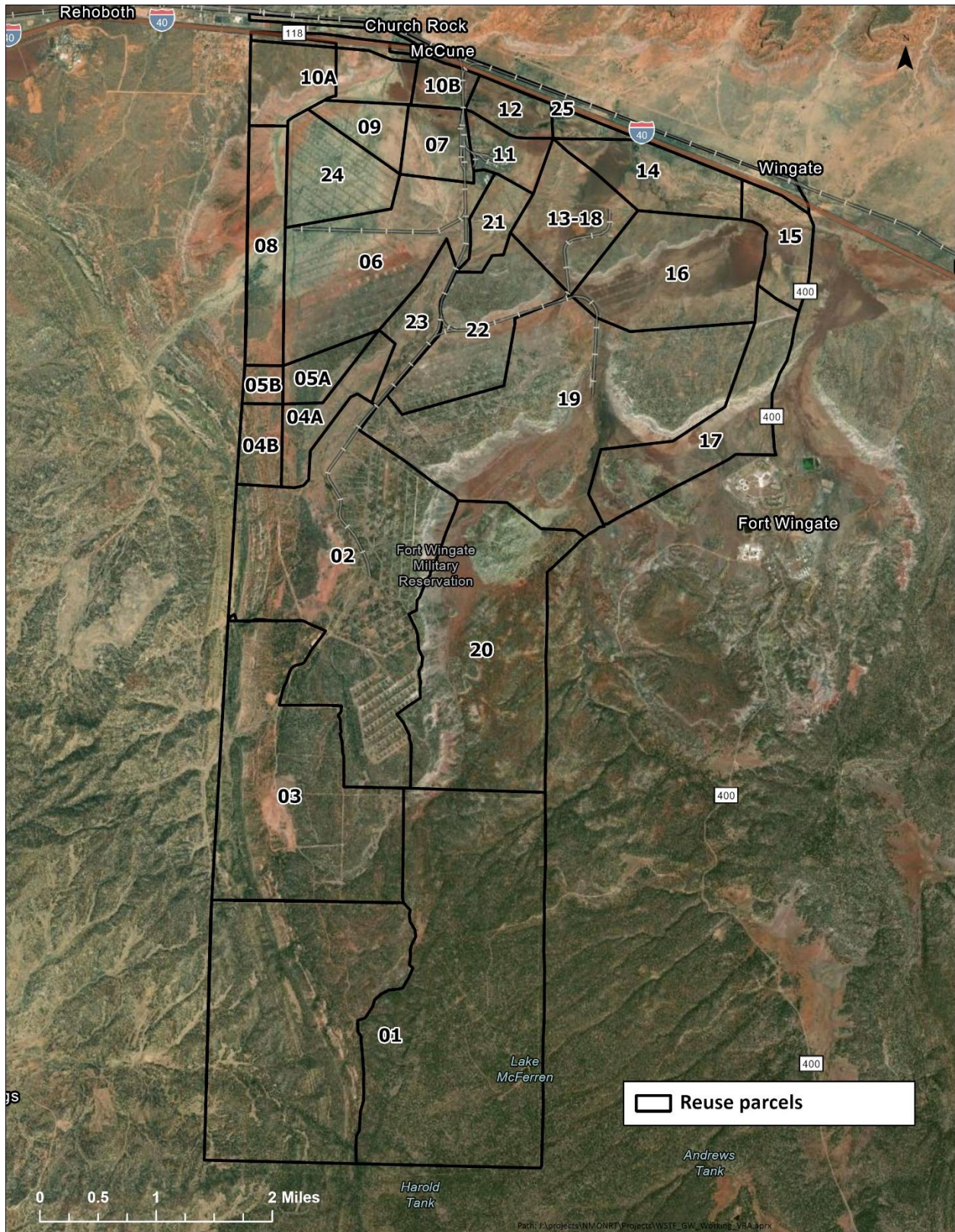
### **2.3. Summary of Natural Resource Injuries and Service Loss**

The Zuni Tribe, the Navajo Nation and ONRT conducted a cooperative assessment of natural resource injuries and service loss at the Site with the Army. For this assessment, the Trustees relied upon existing information and data generated through the Remedial Investigation/Feasibility Study (RI/FS) process. The RI/FS identified 72 hazardous substances that were used and/or released at multiple AOCs and SWMUs across the Site. The Trustees undertook a systematic review of data and information available for each individual AOC and SWMU, and conservatively identified AOCs/SWMUs where hazardous substances were known or suspected to have been released. Based on this analysis, approximately 60 acres of habitat across 14 AOCs/SWMUs (including the OB/OD Unit) were identified as potentially injured at the Site. The Trustees then estimated the severity of injury and service loss, based upon information about these hazardous substances in the existing scientific literature and their own knowledge of and experience in semi-arid environments. They determined that there were lost upland habitat, lowland habitat, groundwater, and cultural services resulting from the released hazardous substances at the FWDA Site. Accordingly, the Trustees determined that the restoration to be implemented to compensate for the losses should provide a combination of upland habitat, lowland habitat, groundwater, and cultural benefits.



## SECTION 2: PURPOSE AND NEED FOR RESTORATION

Figure 2.2. As Part of the Property Transfer Agreement, the Installation Has Been Divided Into Reuse Parcels Shown on the Map





### 3. Affected Environment

---

This section describes the ecological and socioeconomic environment in which the preferred restoration activities will be implemented. The purpose of this section is to summarize the current conditions in McKinley County near FWDA and provide a foundation for assessing the relative impacts of the restoration alternatives considered.

#### 3.1. *Physical and Biological Environment and Resources*

##### 3.1.1 Plants

Because of the FWDA's location and the range of topographic elevations found at the site, the property provides suitable conditions to support three different life zones comprised of various cold desert and semiarid vegetative communities. The three major life zones present on the FWDA property include the Upper Sonoran Life Zone, the Transition Life Zone, and the Montane Life Zone (ERM, 1997). The Transition Zone occurs in the higher elevations and the mountain slopes of the Zuni Mountains in the central and southern section of the FWDA. This zone forms a transitional area where the flora and fauna from the lower Upper Sonoran and the higher Montane Life Zones mix. The lower elevations of the Transition Life Zone are represented by open piñon-juniper forests, shrublands, and some grassland communities. The Montane Life Zone is restricted to the higher elevations of the Zuni Mountains along the southern third of the FWDA where ponderosa pine forests dominate (ERM, 1997).

Desert Scrubland and Piñon / Juniper Woodland occupy the majority of land area near FWDA (ERM, 1997). Desert shrubland community is primarily dominated by big sagebrush, fourwing saltbrush, golden rabbitbrush, and black greasewood. However, other shrub species such as dune broom, winterfat, broom snakeweed, Mormon tea, mock heather, antelope brush, and spineless horsebrush also occur interspersed among the dominant shrubs. The species in the herbaceous stratum of this community include western wheatgrass, ring muhly, wild oats, blue grama, alfileria, needle and thread, bottlebrush squirrel tail, and various forbs (NWSU, 2011).

The piñon / juniper woodland community is dominated by piñon and juniper trees usually less than 30 feet tall that have short, twisted trunks and wide, spreading crowns. This community is best characterized by its widely spaced, mixed stand of piñons and junipers that occur in dry and rocky or gravelly terrain (NatureServe, 2023).

Specific species of pine and junipers that are located in this community include two needle piñon pine, one-seed juniper, and Utah juniper (NatureServe, 2023). The shrub stratum of this community is similar to species found in the desert scrubland community, and includes species such as big sagebrush, antelope brush, cliff rose, fourwing saltbrush, golden rabbitbrush, tomatillo, broom snakeweed, dune broom, Mormon tea, and shadscale. The species in the herbaceous stratum of this community included many of the same grasses and forbs found in the desert scrubland and grassland communities. Additional flora in the herbaceous stratum include species such as cushion cactus and prickly pear cactus (NMSU, 2011).

##### 3.1.2 Wildlife

Various species of mammals, birds, amphibians, and reptiles can be found in the habitats described above. Mammals include species of bats, carnivores, rodents, and hoofed mammals. Birds include various species of waterfowl, birds of prey, and songbirds. Amphibians include species of salamanders, toads, and frogs. Reptiles include species of lizards, skinks, and snakes (NMSU, 2013; NatureServe, 2023).

Larger mammals can also be found in the area, including black bear, badger, coyote, gray fox, mountain lion, bobcat, mule deer, and pronghorn antelope. Smaller mammals in the area include rodents such as chipmunks, prairie dogs, squirrels, deer mice, pack rats, cottontail rabbit, and black-tailed jack rabbit (NMSU, 2013; NatureServe, 2023).

## SECTION 3: AFFECTED ENVIRONMENT

### 3.1.3 Species of Concern

Suitable habitat exists in McKinley County that may support a number of federal or state-listed threatened or endangered species. Table 3.1 lists threatened and endangered wildlife found in McKinley County, and Table 3.2 lists threatened and endangered plant species found in McKinley County.

**Table 3.1. Listed Wildlife Species Located in McKinley County, NM<sup>1</sup>**

Species	Federal Designation <sup>2</sup>	NM State Designation <sup>2</sup>
<b>Birds</b>		
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )		T
Costa's Hummingbird ( <i>Calypte costae</i> )		T
Gray Vireo ( <i>Vireo vicinior</i> )		T
Mexican Spotted Owl ( <i>Strix occidentalis lucida</i> )	T	
Least Tern ( <i>Sternula antillarum</i> )		E
Peregrine Falcon ( <i>Falco peregrinus</i> )		T
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	E	E
Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	T	
<b>Fish</b>		
Colorado Pikeminnow ( <i>Ptychocheilus lucius</i> )	E	
Razorback Sucker ( <i>Xyrauchen texanus</i> )	E	
Zuni Bluehead Sucker ( <i>Catostomus discobolus yarrowi</i> )	E	E
<b>Mammals</b>		
Canada Lynx ( <i>Lynx canadensis</i> )	T	
Mexican Wolf ( <i>Canis lupus baileyi</i> )	E	

1. Data compiled from USFWS (2023) and BISON-M (2023).

2. Designations defined as E = endangered and T = threatened.

**Table 3.2. Listed and Sensitive Plant Species Located in McKinley County, NM<sup>1</sup>**

Species	Federal Designation <sup>2</sup>	NM State Designation <sup>2</sup>
Goodding's Onion ( <i>Allium gooddingii</i> )		E
Knowlton's Cactus ( <i>Pediocactus knowltonii</i> )	E	
Parish's Alkali Grass ( <i>Puccinellia parishii</i> )		E
Zuni Fleabane ( <i>Erigeron rhizomatus</i> )	T	E

1. Data compiled from USFWS (2023) and New Mexico Rare Plant Technical Council (2023).

2. Designations defined as E = endangered and T = threatened.

### 3.2. Socioeconomic Resources

As of the 2022 U.S. Census, the population of McKinley County was estimated to be 69,830 (US Census, 2022). In 2021, the largest racial or ethnic group in McKinley County was the American Indian/Alaska Native (non-Hispanic) group, which had a population of 53,265. Between 2010 and 2021, the Hispanic/Latino population had the most growth increasing by 9.6% (USA Facts, 2022). The median household income is \$40,262, and there is a 30.3% poverty rate (US Census, 2022).

### 3.3. Cultural Resources

Numerous areas indicating prehistoric and historic inhabitation by Native Americans are found within the facility boundaries and surrounding areas, confirming the area was inhabited for centuries prior to the establishment of FWDA, by farming and hunting communities including the Zuni Tribe and the Navajo Nation (ERM, 1997). Both the Navajo Nation and the Zuni Tribe, whose current territories are situated in

## SECTION 3: AFFECTED ENVIRONMENT

close proximity to FWDA, inhabited the area prior to 1860 when Fort Wingate was established. Traditionally, the FWDA lands were used for seasonal herding, farming, trapping, and hunting and hold a variety of resources which are culturally significant to the Navajo Nation and Zuni Tribe (ERM, 1997). However, in 1928, FWDA became an active military depot and civilian use was restricted at that time.

## SECTION 4: RESTORATION SCREENING AND EVALUATION CRITERIA

### 4. Restoration Screening and Evaluation Criteria

---

CERCLA requires that restoration activities restore, rehabilitate, replace, or acquire the equivalent of the resources and services that were injured or lost and natural resource trustees have discretion in identifying and selecting preferred restoration projects. As described in Section 4.1 below, DOI NRDA regulations set forth factors to be considered in the evaluation and selection of preferred restoration projects. With those factors as a guide, the Trustees developed Screening Criteria and Evaluation Criteria to select the preferred restoration alternatives. The Screening Criteria were used to determine if projects met minimum standards for acceptability (Section 4.2). Projects that met these Screening Criteria were then evaluated with the project Evaluation Criteria (Section 4.3).

#### 4.1. *Regulatory Criteria Set Forth in DOI NRDA Regulations*

DOI NRDA regulations identify factors to be considered in the evaluation and selection of preferred alternatives (43 CFR § 11.82):

- Technical feasibility.
- The relationship of the expected costs of the proposed actions to the expected benefits from the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.
- Cost-effectiveness.
- Results of any actual or planned response actions.
- Potential for additional injury resulting from the proposed actions, including long-term and indirect impacts to the injured resources or other resources.
- Natural recovery period.
- Ability of the resources to recover with or without alternative actions.
- Potential effects of the action on human health and safety.
- Consistency with relevant federal, state, and Tribal policies.
- Compliance with applicable federal, state, and Tribal laws.

The Trustees incorporated the ten factors described above into its Screening and Evaluation Criteria.

#### 4.2. *Screening Criteria*

The criteria listed below were used to screen potential projects for further evaluation. Projects needed to meet all six Screening Criteria to be further considered and evaluated by the Trustees using the Evaluation Criteria.

The six Screening Criteria with which each potential project was reviewed are as follows:

1. Address the type of resources potentially injured by releases from the facility, or the services lost as a result of injuries.
2. Comply with applicable and relevant Tribal, federal, state, and local laws, regulations, and policies.
3. Be protective (does not jeopardize) of public health and safety, cultural and environmental resources.
4. Be technically and administratively feasible.
5. Consider and not conflict with planned response actions.
6. Provide a net resource benefit.

## SECTION 4: RESTORATION SCREENING AND EVALUATION CRITERIA

### 4.3. Evaluation Criteria Utilized by the Trustees to Select the Preferred Alternatives

Projects that passed the Screening Criteria were then evaluated and ranked based upon 17 Evaluation Criteria, grouped into five categories: project relevance, project administration and feasibility, project benefits, project cost, and consistency with regional planning and local needs. The Evaluation Criteria and the Trustee’s interpretation of the criteria are listed below in Table 4.1. For each applicable criterion, the Trustees assigned a rank of low, medium, or high, reflecting the extent to which the project satisfied that criterion. The Trustees used these evaluations to identify the preferred restoration alternatives.

**Table 4.1. Evaluation Criteria and the Trustees’ Interpretation of the Evaluation Criteria**

	Evaluation Criteria	Interpretation
<b>Project Relevance</b>	Proximity to injury location	Preference was given to projects that are geographically close to the FWDA.
	Nexus to injured resources	Preference was given to projects that are likely to provide benefits to resources similar to those injured (i.e., upland/lowland injury, injury to cultural services).
	Nexus to lost human services, including lost human use of natural resources	Preference was given to projects that are likely to benefit cultural services, including the human use of natural resources similar to those lost.
<b>Project Administration and Feasibility</b>	Technical and administrative feasibility	Preference was given to projects that have a high technical and administrative feasibility.
	Likelihood of success	Preference was given to projects that use techniques and approaches that have been demonstrated to be proficient elsewhere.
	Administrative and oversight needs	Preference was given to projects with low administrative and oversight needs.
	Implementation time	Preference was given to projects that can be implemented in a timely manner.
<b>Project Benefits</b>	Avoids additional impairment to resources	Preference was given to projects that have a low likelihood of adverse impacts, whether direct or indirect, on human health and safety or the environment.
	Benefits more than one resource and/or addresses multiple lost services	Preference was given to projects that benefit more than one resource and/or address multiple lost services.
	Provides long-term sustainable benefits	Preference was given to projects that provide long-term sustainable benefits.
	Time to achieve benefits	Preference was given to projects that are likely to provide benefits to resources or resource services soon after initiation.
<b>Project Cost</b>	Ratio of expected benefits to costs	Preference was given to projects that will have a high ratio of expected benefits to costs.
	Cost-effectiveness relative to other projects that provide the same type and level of benefits	Preference was given to projects that will provide the greatest benefit for the lowest cost, when compared against submitted projects providing similar benefits.
	Operation and maintenance costs	Preference was given to projects that have lower operation and maintenance costs.
<b>Consistent with Regional Planning, Local Needs</b>	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	Preference was given to projects that are consistent with any existing local, regional, or state plans. Lowest priority will be given to projects that are in opposition to such plans.
	Partnership potential	Preference was given to projects with a high partnership potential.
	Public acceptance	Preference was given to projects that are accepted by the public.



**5. Restoration Alternatives**

The Trustees identified and evaluated five restoration alternatives and also considered a no-action alternative. The preferred alternatives identified by the Trustees consist of restoration projects intended to compensate for injuries to natural resources and associated service losses that resulted from releases of hazardous substances at the FWDA.

This section presents a summary of the evaluated alternatives (Section 5.1) and then describes the preferred alternatives (Sections 5.2 and 5.3), the non-preferred alternatives (Section 5.4), and the no-action alternative (Section 5.5).

**5.1. Summary of Alternatives**

All the alternatives except the no-action alternative met all of the Screening Criteria and were further considered and evaluated by the Trustees using the Evaluation Criteria. The next section provides the detailed evaluation of each alternative. Three alternatives, Alternatives A, C, and D, are focused on tree thinning. These alternatives are similar in concept; however, these projects will be implemented at various locations.

**Preferred Alternatives:** The preferred alternatives selected by the Trustees are those projects which the Trustees believe will best compensate the public for injuries to natural resources resulting from releases of hazardous substances at the FWDA (Table 5.1). Among the preferred alternatives, Tier 1 projects have priority for funding. If funding remains after completing the Tier 1 projects, the Trustees will consider funding Tier 2 projects, up to the funding allocation amount summarized in Table 5.1. Figure 5.1 shows the geographic location of the Tier 1 and Tier 2 preferred alternatives.

**Non-Preferred Alternative:** The project ideas submitted by the Trustees that best met the Evaluation Criteria were included as the preferred alternatives. One eligible project idea, Riparian and Upland Restoration on the Rio Puerco, was not selected for funding because, using the Evaluation Criteria, it ranked lower than the preferred alternatives. The non-preferred alternative is described and evaluated in Section 5.4. The Trustees selected projects for funding that best fit their criteria and that could be accomplished with the available funding. A recommendation for no funding should not be viewed as a judgment on the overall value of a project idea.

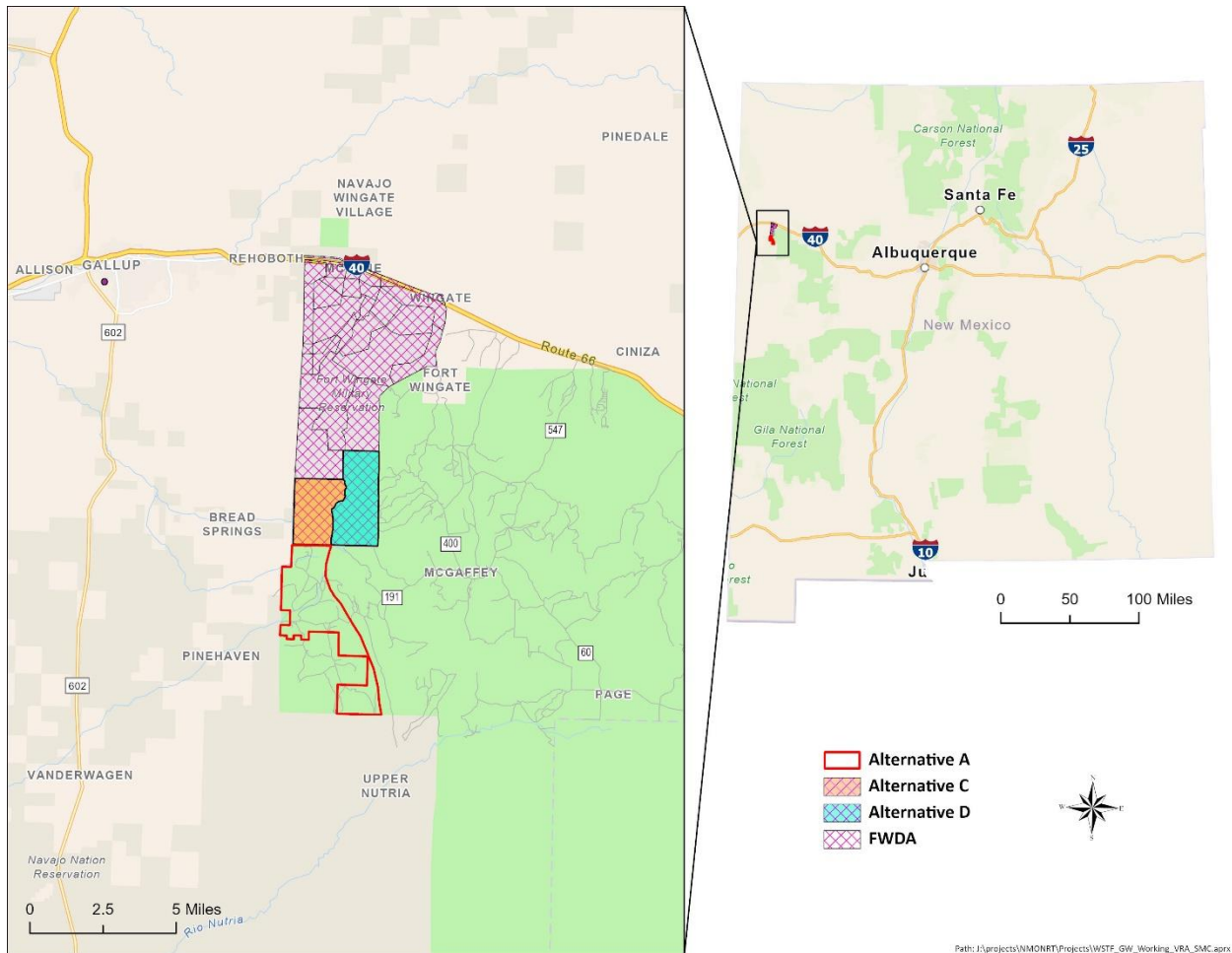
**No Action-Natural Recovery Alternative:** A no action-natural recovery alternative is required to be considered under CERCLA NRDA regulations (43 CFR § 11.82(c)(2)). This alternative is described further in Section 5.4 and is also a non-preferred alternative.

**Table 5.1. Summary of Preferred Alternatives**

Alternative	Alternative Name	Funding Allocation	Implementing Trustee
<b>Tier 1</b>			
A	Forest Restoration and Fuelwood Production – Cibola National Forest	Up to \$568,575	Navajo Nation
B	Bluehead Sucker Habitat Conservation	Up to \$568,575	Zuni Tribe
<b>Total allocation across Tier 1</b>		Up to \$1,137,150	
<b>Tier 2</b>			
C	Forest Restoration and Fuelwood Production – FWDA Parcel 1	To be determined – based on funding remaining after implementation of Alternative A	Navajo Nation
D	Forest Restoration and Fuelwood Production – FWDA Parcel 1	To be determined – based on funding remaining after implementation of Alternative B	Zuni Tribe
<b>Total allocation across Tier 2</b>		<b>To be determined – based on funding remaining after Tier 1</b>	

## SECTION 5: RESTORATION ALTERNATIVES

**Figure 5.1. Location of Preferred Alternatives.** See Table 5.1 for corresponding alternative names, funding allocations, and implementing Trustee. Alternative B, the Zuni Bluehead Sucker Habitat Conservation project, will generally be in the area to the southeast of the FWDA. In order to protect sensitive Zuni bluehead sucker habitat, we do not show specific locations.



### 5.2. Preferred Alternatives (Tier 1)

This section provides project descriptions and a summary of the Trustees' evaluation of each of the Tier 1 preferred alternatives.

#### 5.2.1 Alternative A: Forest Restoration and Fuelwood Production – Cibola National Forest

Alternative A is a project focused on forest restoration in the Cibola National Forest, with the Navajo Nation as the implementing Trustee. The project will involve tree thinning and the distribution of firewood to Navajo Nation citizens.

##### *Project Description*

There is a need for fuels management on US Forest Service (USFS) land adjacent to FWDA. This project, with the Navajo Nation as the implementing Trustee, will reduce the risk of fire and improve habitat while also providing opportunities for local Navajo Nation citizens to collect fuelwood. The USFS and the Navajo Nation have identified forests near the boundary of the forest and FWDA (Figure 5.1) that could be restored using fuels reduction techniques. Restoration activities will include cutting and removing trees and making the cut wood available to local Navajo Nation citizens as fuelwood.

## SECTION 5: RESTORATION ALTERNATIVES

Fuel thinning by mechanical and manual removal of trees is an established practice to reduce the risk of wildfire where fire suppression practices have resulted in overly dense forest stands (USFS, 2011, 2014; DOE, 2019). Reducing fuelwoods by thinning overly dense tree stands may also improve habitats by promoting a shift in species composition towards a more natural range, and may promote tree health, as thinning increases stand photosynthetic efficiency and net primary productivity in remaining trees (Smith et al., 1997). Forest thinning may also improve watershed function that can positively influence groundwater recharge (Schenk et al., 2020). Cultural benefits associated with this project will include improved access to fuelwood and possibly improved habitat for culturally important plant species.

The forest restoration and fuelwood production will involve a mixture of mechanical and hand-thinning treatments. Mechanical treatments may involve the use of equipment such as tractors, skidders, feller bunchers, excavators, bobcats, or specially designed vehicles with attached implements. Manual treatments may include the use of hand tools and hand-operated power tools. This project will be implemented in one to two years depending on the timing of the necessary surveys and clearances in the area (the USFS is actively working on archaeological/heritage surveys within a broader area).

This project will benefit forest habitat and reduce the risk of overly intense fires due to historical fire suppression practices. Cultural benefits associated with this project include improved access to fuelwood and possibly improved habitat for culturally important plant species. The expected benefits of the project will begin immediately after implementation.

Costs associated with the project will include surveys and clearances to comply with National Forest Management Act (NFMA) planning, preparation for treatment (unit layout, timber marking, cruising, contract development), treatment (thinning, slash disposal), and firewood distribution. The project will have little to no operation and maintenance costs. The total cost will be approximately \$1,950/acre. With the \$568,575 allocated towards restoration on behalf of the Navajo Nation, the Navajo Nation could restore up to approximately 291 acres under this alternative.

### ***Trustee Assessment with the Evaluation Criteria***

Overall, the Trustees evaluated Alternative A favorably, based on the established Evaluation Criteria. Table 5.2 provides a narrative evaluation and ranking of the alternative with the Evaluation Criteria.

**Project Relevance:** The project had a medium to high ranking across the project relevance criteria. The project had a medium ranking for the *proximity to injury location* criterion because the tree thinning and firewood distribution will occur near, but not on, the FWDA site. The project had a high ranking for the *nexus to injured resources* criterion because it will benefit resources similar to those injured, including upland habitats and human use services. The project had a high ranking for the *nexus to lost human services* criterion because it will benefit the human use of natural resources, specifically firewood.

**Project Administration and Feasibility:** The project had a medium to high ranking across the project administration and feasibility criteria. The project had a high ranking for the *technical and administrative feasibility* criterion and a high ranking for the *likelihood of success* criterion because tree thinning and distribution of firewood are demonstrated approaches for reducing wildfire risk while improving natural resource services (USFS, 2011, 2014; DOE, 2019). The project had only a medium ranking for the *administrative and oversight needs* criterion because it will require moderate coordination and administration for the tree thinning as well as the distribution of the wood to community members. The project will be implemented in a timely manner, and therefore it had a high ranking for the *implementation time* criterion.

**Project Benefits:** The project had a high ranking across the project benefits criteria. The project will have a low likelihood of adverse impacts to natural resources and human health and safety, because any adverse impacts (physical disturbance of the forest floor, noise disturbance, etc.) will be short-lived during the tree thinning itself, and therefore the project had a high ranking for the *avoids additional*

## SECTION 5: RESTORATION ALTERNATIVES

*impairment to resources* criterion. The project had a high ranking for the *benefits more than one resource and/or addresses multiple lost services* criterion because it will benefit upland habitat and groundwater as well as human use. The project will provide long-term sustainable benefits, and therefore it had a high ranking for the *provides long-term sustainable benefits* criterion. The project also had a high ranking for the *time to achieve benefits* criterion because its benefits will begin immediately after implementation.

**Project Cost:** The project had a high ranking across the applicable project cost criteria. The project had a high ranking for the *ratio of expected benefits to costs* criterion because it will benefit multiple natural resources and services and had a low cost on a unit basis, compared to the other evaluated projects. The project ranked high for *cost-effectiveness relative to other projects* that provide the same type and level of benefits. There are three tree-thinning projects. All three projects are within a similar price range and provide similar benefits, and thus have similar cost-effectiveness relative to other projects that provide same type and level of benefits. The project will have little to no longer-term operation and maintenance costs after the tree thinning is completed, and therefore it had a high ranking for the *operation and maintenance costs* criterion.

**Consistent with Regional Planning, Local Needs:** The project had a high ranking across these criteria. The project will be consistent with existing land and resource management plans, and therefore it had a high ranking for the *consistent with existing management plans or activities* criterion. The project had a high ranking for the *partnership potential* criterion because the Navajo Nation will partner with multiple entities including USFS and BIA. The project will be accepted by the public, in particular the local Navajo Nation population, where there is support for a source of fuelwood, and therefore the project had a high ranking for the *public acceptance* criterion.

**Table 5.2. Forest Restoration and Fuelwood Production – Cibola National Forest**

Evaluation Criteria		Narrative Evaluation	Ranking
Project Relevance	Proximity to injury location	The project will be located offsite, but near the FWDA site.	Medium
	Nexus to injured resources	The project will benefit upland habitats and human use services.	High
	Nexus to lost human services, including lost human use of natural resources	The project will benefit the human use of natural resources.	High
Project Administration and Feasibility	Technical and administrative feasibility	The project will be technically and administratively feasible because tree thinning and distribution of firewood are demonstrated approaches for reducing wildfire risk while improving natural resource services.	High
	Likelihood of success	The project will use techniques and approaches that have been demonstrated to be proficient elsewhere.	High
	Administrative and oversight needs	The project will require moderate administrative and oversight needs because it will require moderate coordination and administration for the tree thinning as well as the distribution of the wood to community members.	Medium
	Implementation time	The project will be implemented in a timely manner.	High
Project Benefits	Avoids additional impairment to resources	The project will have a low likelihood of adverse impacts to resources.	High
	Benefits more than one resource and/or addresses multiple lost services	The project will benefit multiple resources/services, including upland habitat, groundwater, and human use.	High
	Provides long-term sustainable benefits	The project will provide long-term sustainable benefits.	High
	Time to achieve benefits	Benefits will be accrued immediately after implementation.	High

## SECTION 5: RESTORATION ALTERNATIVES

Evaluation Criteria		Narrative Evaluation	Ranking
Project Cost	Ratio of expected benefits to costs	The project will have a high ratio of expected benefits to costs compared to other proposed projects.	High
	Cost-effectiveness relative to other projects that provide same type and level of benefits	Proposed projects with similar benefits are within a similar cost range.	High
	Operation and maintenance costs	The project will have little to no operation and maintenance costs.	High
Consistent with Regional Planning, Local Needs	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	The project is consistent with existing land and resource management plans.	High
	Partnership potential	The project will have a high partnership potential including USFS and BIA.	High
	Public acceptance	The project will be accepted by the public.	High

### 5.2.2 Alternative B: Zuni Bluehead Sucker Habitat Conservation

Alternative B is a project focused on the conservation of Zuni bluehead sucker habitat, with the Zuni Tribe as the implementing Trustee. The project will involve preservation/protection of habitats in upland areas to prevent the degradation of downstream Zuni bluehead sucker habitat quality.

#### *Project Description*

The Zuni bluehead sucker (*Catostomus discobolus yarrowi*) is listed as a state-endangered species in New Mexico and is culturally important to the Zuni Tribe. The New Mexico Department of Game and Fish developed a recovery plan in 2004 (NMDGF, 2004). This plan identified key habitat areas for the Zuni bluehead sucker occurring in McKinley County, on Zuni Tribal lands, and in surrounding areas. A large area of important habitat exists in and around the Cibola National Forest. There are some private inholdings within the USFS land that, if developed, could degrade downstream Zuni bluehead sucker habitat. For example, groundwater withdrawals associated with domestic wells can impact surface water flows. In addition, increases in erosion and sedimentation associated with development can decrease water quality.

The Zuni Tribe is the implementing Trustee, and this project involves conserving habitat in the upland areas important to downstream Zuni bluehead sucker habitat. If the habitat were developed, the Zuni bluehead sucker could be adversely affected by direct loss of stream habitat, reduced surface water flow (through groundwater depletions), and reduced water quality due to erosion and sedimentation. The project will be located within the current range of the species (Figure 5.2).

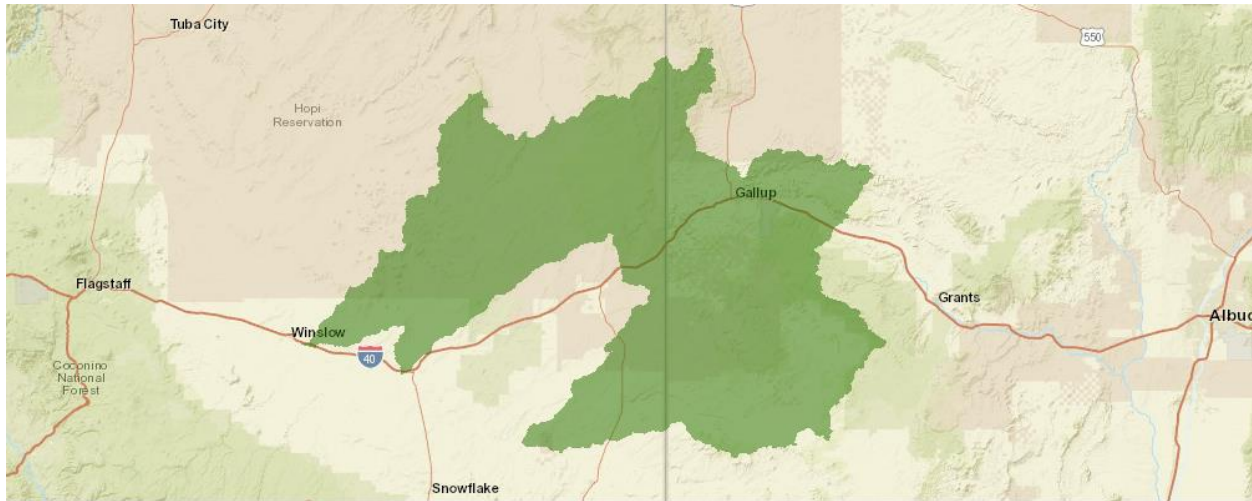
The Zuni bluehead sucker is highly sensitive to sediment; thus, preventing upland disturbance is an important preservation action. Preserving base flows in streams is also important for protecting the sucker. Habitat in the target area is primarily ponderosa pine forest with small stands of Gambel oak and one-seed juniper. Protecting these habitats also protects upland habitat comparable to upland habitat impacted by the release of hazardous substances at FWDA.

The project will provide ecological benefits, including preserving habitat for a fish species that is a New Mexico endangered species and important culturally to the Zuni Tribe, as well for as other biological resources in the area. The project will benefit water resources, by preserving surface water and groundwater quantity and quality. The project will also provide cultural benefits, by helping to protect a species that is of cultural importance to the Zuni Tribe. The expected benefits of the project will begin immediately after implementation. The project will have little to no operation and maintenance costs. The costs of the project will be up to \$568,575 of habitat conservation within lands shown in Figure 5.1.



## SECTION 5: RESTORATION ALTERNATIVES

Figure 5.2. Green Area Depicts the Current Range of the Zuni Bluehead Sucker



Source: USFWS ECOS. <https://ecos.fws.gov/ecp/species/3536#conservationPlans>

### ***Trustee Assessment with the Evaluation Criteria***

Overall, the Trustees evaluated Alternative B favorably, based on the established Evaluation Criteria. Table 5.3 provides a narrative evaluation and ranking of the alternative with the Evaluation Criteria.

**Project Relevance:** The project had a medium to high ranking across the project relevance criteria. The project had a medium ranking for the *proximity to injury location* criterion because the project will be located in close proximity to, but not on, the FWDA site. The project had a high ranking for the *nexus to injured resources* criterion because it will benefit resources similar to those injured, including upland and lowland habitats, as well as cultural services. The project had a high ranking for the *nexus to lost human services* criterion because the Zuni bluehead sucker is a species of cultural significance.

**Project Administration and Feasibility:** The project had a high ranking across the project administration and feasibility criteria. The project will be technically and administratively feasible because conserving habitat in the upland areas is feasible and routine approaches to habitat conservation will be utilized, therefore the project had a high ranking for the *technical and administrative feasibility* criterion. The project had high ranking for the *likelihood of success* criterion because conserving habitat in the upland areas is a routine approach to habitat conservation. The project had a high ranking for the *administrative and oversight needs* criterion because once habitats are conserved, little to no administration or oversight will be required. The project will be implemented in a timely manner, and therefore it had a high ranking for the *implementation time* criterion.

**Project Benefits:** The project had a high ranking across the project benefits criteria. Because the project will involve passive protection of Zuni bluehead sucker habitats, there is a low likelihood of adverse impacts to natural resources and human health and safety, and therefore the project had a high ranking for the *avoids additional impairment to resources* criterion. The project had a high ranking for the *benefits more than one resource and/or addresses multiple lost services* criterion because it will benefit Zuni bluehead sucker as well as other biological resources utilizing the same habitats; it will benefit surface water and groundwater, upland and lowland habitats, as well as cultural services. The project will involve long-term preservation, and thus will provide long-term sustainable benefits, and therefore it had a high ranking for the *provides long-term sustainable benefits* criterion. The project had a high ranking for the *time to achieve benefits* criterion because benefits will be accrued immediately after implementation.

## SECTION 5: RESTORATION ALTERNATIVES

**Project Cost:** The project had a high ranking across the applicable project cost criteria. The project had a medium ranking for the *ratio of expected benefits to costs* criterion because while it will benefit multiple natural resources and services, it had a medium cost on a unit basis compared to the other evaluated projects. The project will have little to no operation and maintenance costs and therefore it had a high ranking for the *operation and maintenance costs* criterion.

**Consistent with Regional Planning, Local Needs:** The project had a high ranking across these criteria. The project will be consistent with existing land and resource management plans, and therefore it had a high ranking for the *consistent with existing management plans or activities* criterion. The project had a high ranking for the *partnership potential* criterion because the Zuni bluehead sucker is listed as a state-endangered species in New Mexico and is important culturally to the Zuni Tribe. The species is monitored by the U.S. Fish and Wildlife Service (USFWS), New Mexico Department of Game and Fish, and the Navajo Nation Department of Fish and Wildlife (USFWS, 2020). The project will be accepted by the public, and therefore it had a high ranking for the *public acceptance* criterion.

**Table 5.3. Zuni Bluehead Sucker Habitat Conservation Project Evaluation**

	Evaluation Criteria	Narrative Evaluation	Ranking
<b>Project Relevance</b>	Proximity to injury location	The project will be located off site, but near the FWDA site.	Medium
	Nexus to injured resources	The project will benefit upland habitat, lowland habitat, and cultural services.	High
	Nexus to lost human services, including lost human use of natural resources	The Zuni bluehead sucker is a species of cultural significance.	High
<b>Project Administration and Feasibility</b>	Technical and administrative feasibility	The project will be technically and administratively feasible because routine approaches to habitat conservation will be utilized.	High
	Likelihood of success	Conserving habitat in the upland areas is a routine approach to habitat conservation.	High
	Administrative and oversight needs	The project will require little administrative and oversight need once habitats are conserved.	High
	Implementation time	The project will be implemented in a timely manner.	High
<b>Project Benefits</b>	Avoids additional impairment to resources	The project will have a low likelihood of adverse impacts to resources.	High
	Benefits more than one resource and/or addresses multiple lost services	The project will benefit upland habitat, lowland habitat, and cultural services.	High
	Provides long-term sustainable benefits	The project will provide long-term sustainable benefits.	High
	Time to achieve benefits	Benefits will be accrued immediately after implementation.	High
<b>Project Cost</b>	Ratio of expected benefits to costs	The project will have a moderate ratio of expected benefits to costs compared to other proposed projects.	Medium
	Cost-effectiveness relative to other projects that provide same type and level of benefits	There are no proposed projects with similar benefits.	N/A
	Operation and maintenance costs	The project will have no operation and maintenance costs.	High

## SECTION 5: RESTORATION ALTERNATIVES

Evaluation Criteria	Narrative Evaluation	Ranking	
<b>Consistent with Regional Planning, Local Needs</b>	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	The project is consistent with existing land and resource management plans.	High
	Partnership potential	The project has a robust partnership potential because the species is monitored by USFWS, New Mexico Department of Game and Fish, and the Navajo Nation Department of Fish and Wildlife (USFWS, 2020).	High
	Public acceptance	The project will be accepted by the public.	High

### 5.3. Preferred Alternatives (Tier 2)

This section provides descriptions and a summary of the Trustees’ evaluation of each of the Tier 2 preferred alternatives.

#### 5.3.1 Alternative C: Forest Restoration and Fuelwood Production – Parcel 1 (Navajo Nation)

Alternative C is a project focused on forest restoration on Parcel 1 of the FWDA, with the Navajo Nation as the implementing Trustee. The project will involve tree thinning and the distribution of firewood to Navajo Nation citizens.

#### *Project Description*

There is a need for fuels management on Parcel 1 of the FWDA. This project, with the Navajo Nation as the implementing Trustee, will reduce the risk of fire and improve habitat while also providing opportunities for local Navajo Nation citizens to collect fuelwood. The Navajo Nation has identified forests on the western side of the FWDA Parcel 1 (Figure 5.1) that could be restored using fuels reduction techniques. Restoration activities will include cutting and removing trees and making the cut wood available to local Navajo Nation citizens as fuelwood. This forest restoration and fuelwood production project is the same restoration concept as Alternative A, except it will occur on the western side of the FWDA Parcel 1 instead of the Cibola National Forest (see Section 5.2.1 for project details).

#### *Trustee Assessment with the Evaluation Criteria*

Overall, the Trustees evaluated Alternative C favorably, based on the established Evaluation Criteria (Table 5.4). Because the projects are similar, the narrative evaluation and ranking of Alternative C is the same evaluation and ranking for Alternative A for all but two criteria (see Section 5.2.1). For the *Proximity to injury location* criterion, Alternative C had a high ranking because it will be located on FWDA. For the *partnership potential* criterion, Alternative C had a low ranking because it had a lower partnership potential compared to the other alternatives.

**Table 5.4. Forest Restoration and Fuelwood Production – Parcel 1 (Navajo Nation)**

Evaluation Criteria	Narrative Evaluation	Ranking	
<b>Project Relevance</b>	Proximity to injury location	The project will be located on the FWDA site.	High
	Nexus to injured resources	The project will benefit upland habitats and human use services.	High
	Nexus to lost human services, including lost human use of natural resources	The project will benefit the human use of natural resources.	High

## SECTION 5: RESTORATION ALTERNATIVES

Evaluation Criteria		Narrative Evaluation	Ranking
Project Administration and Feasibility	Technical and administrative feasibility	The project will be technically and administratively feasible because tree thinning and distribution of firewood are demonstrated approaches for reducing wildfire risk while improving natural resource services.	High
	Likelihood of success	The project will use techniques and approaches that have been demonstrated to be proficient elsewhere.	High
	Administrative and oversight needs	The project will require moderate administrative and oversight needs because it will require moderate coordination and administration for the tree thinning as well as the distribution of the wood to community members.	Medium
	Implementation time	The project will be implemented in a timely manner.	High
Project Benefits	Avoids additional impairment to resources	The project will have a low likelihood of adverse impacts to resources.	High
	Benefits more than one resource and/or addresses multiple lost services	The project will benefit multiple resources/services, including upland habitat and human use.	High
	Provides long-term sustainable benefits	The project will provide long-term sustainable benefits.	High
	Time to achieve benefits	Benefits will be accrued immediately after implementation.	High
Project Cost	Ratio of expected benefits to costs	The project will have a high ratio of expected benefits to costs compared to other proposed projects.	High
	Cost-effectiveness relative to other projects that provide same type and level of benefits	Proposed projects with similar benefits are within a similar cost range.	High
	Operation and maintenance costs	The project will have little to no operation and maintenance costs.	High
Consistent with Regional Planning, Local Needs	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	The project is consistent with existing land and resource management plans.	High
	Partnership potential	The project will have a low partnership potential compared to the other alternatives.	Low
	Public acceptance	The project will be accepted by the public.	High

### 5.3.2 Alternative D: Forest Restoration and Fuelwood Production – Parcel 1 (Zuni Tribe)

Alternative D is a project focused on forest restoration on Parcel 1 of the FWDA, with the Zuni Tribe as the implementing Trustee. The project will involve tree thinning and the distribution of firewood to citizens of the Zuni Tribe.

#### *Project Description*

There is a need for fuels management on Parcel 1 of the FWDA. This project, with the Zuni Tribe as the implementing Trustee, will reduce the risk of fire and improve habitat while also providing opportunities for local citizens of the Zuni Tribe to collect fuelwood. The Zuni Tribe has identified forests on the eastern side of FWDA Parcel 1 (Figure 5.1) that could be restored using fuels reduction techniques. Restoration activities will include cutting and removing trees and making the cut wood available to local citizens of the Zuni Tribe as fuelwood. Like Alternative C, this forest restoration and fuelwood production project is very similar to the restoration concept in Alternative A, except for the location and a slight difference in cost. The project will occur on the eastern side of the FWDA Parcel 1 instead of the

## SECTION 5: RESTORATION ALTERNATIVES

Cibola National Forest. The costs for this project will be slightly different, \$1,250/acre, because a Biological Assessment has already been completed in this area (see Section 5.3.1 for remaining project details).

### *Trustee Assessment with the Evaluation Criteria*

Overall, the Trustees evaluated Alternative C favorably, based on the established Evaluation Criteria (Table 5.5). Because the projects are similar, the narrative evaluation and ranking of Alternative D is the same evaluation and ranking for Alternative C.

**Table 5.5. Forest Restoration and Fuelwood Production – Parcel 1 (Zuni Tribe)**

	Evaluation Criteria	Narrative Evaluation	Ranking
<b>Project Relevance</b>	Proximity to injury location	The project will be located on the FWDA site.	High
	Nexus to injured resources	The project will benefit upland habitats and human use services.	High
	Nexus to lost human services, including lost human use of natural resources	The project will benefit the human use of natural resources.	High
<b>Project Administration and Feasibility</b>	Technical and administrative feasibility	The project will be technically and administratively feasible because tree thinning and distribution of firewood are demonstrated approaches for reducing wildfire risk while improving natural resource services.	High
	Likelihood of success	The project will use techniques and approaches that have been demonstrated to be proficient elsewhere.	High
	Administrative and oversight needs	The project will require moderate administrative and oversight needs because it will require moderate coordination and administration for the tree thinning as well as the distribution of the wood to community members.	Medium
	Implementation time	The project will be implemented in a timely manner.	High
<b>Project Benefits</b>	Avoids additional impairment to resources	The project will have a low likelihood of adverse impacts to resources.	High
	Benefits more than one resource and/or addresses multiple lost services	The project will benefit multiple resources/services, including upland habitat and human use.	High
	Provides long-term sustainable benefits	The project will provide long-term sustainable benefits.	High
	Time to achieve benefits	Benefits will be accrued immediately after implementation.	High
<b>Project Cost</b>	Ratio of expected benefits to costs	The project will have a high ratio of expected benefits to costs compared to other proposed projects.	High
	Cost-effectiveness relative to other projects that provide same type and level of benefits	Proposed projects with similar benefits are within a similar cost range.	High
	Operation and maintenance costs	The project will have little to no operation and maintenance costs.	High
<b>Consistent with Regional Planning, Local Needs</b>	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	The project is consistent with existing land and resource management plans.	High
	Partnership potential	The project will have a low partnership potential compared to the other alternatives.	Low
	Public acceptance	The project will be accepted by the public.	High



## SECTION 5: RESTORATION ALTERNATIVES

### 5.4. Non-Preferred Alternative

This section provides a description and a summary of the Trustees' evaluation of each the non-preferred alternative.

#### 5.4.1 Alternative E – Riparian and Upland Restoration on the Rio Puerco

Alternative E is a project designed to restore riparian habitat on the Rio Puerco and to restore associated upland habitat.

##### *Project Description*

The Rio Puerco is a tributary to the Little Colorado River in western New Mexico; it flows through the FWDA and through the City of Gallup, New Mexico, just west of FWDA. Much of the Rio Puerco has been degraded due to erosion and the presence of the invasive species tamarisk. The Rio Puerco has been further altered by discharge from the City of Gallup Waste Water Treatment Plant (WWTP). Although the Rio Puerco in Gallup was historically an ephemeral stream, discharge from the WWTP has made the Rio Puerco perennial west of the City of Gallup.

This alternative includes riparian habitat restoration on the Rio Puerco and associated upland habitat improvements. Some restoration work has been completed already in Gallup; the major accomplishment to date was removal (using herbicide application) of a stand of tamarisk along the river. This alternative would include re-directing WWTP effluent directly to the Rio Puerco instead of through a ditch, regrading the old ditch to reconnect the channel with the Rio Puerco, revegetation with native species including livestock exclusion fencing, and spot treatment of resprouting tamarisk along five miles of the river. Upland work would include upland restoration and erosion control, which would also enhance the value of riparian restoration activities. In total, this project would restore approximately 20 acres of riparian and stream bed habitat and 84 acres of upland habitat.

This project would benefit riparian habitat and resources, upland habitat and resources, wildlife, surface water quality, and it would facilitate planned recreational improvements for local residents. It would take some time after implementation for the expected benefits to be accrued and the project would have high operation and maintenance costs.

The costs associated with redirecting effluent water to the original Rio Puerco streambed, restore original streambed, spot treat tamarisk, native species revegetation, engineering and project management, and contingency is approximately \$1,500,150. The cost of the upland habitat improvements, including fencing out cattle, adding a livestock watering point, and offsite erosion control is approximately \$180,018.

##### *Trustee Assessment with the Evaluation Criteria*

Overall, the Trustees did not evaluate Alternative E favorably based on the established Evaluation Criteria and compared to the preferred alternatives. Table 5.6 provides a narrative evaluation and ranking of the alternative with the Evaluation Criteria.

**Project Relevance:** The project had a low to high ranking across the project relevance criteria. The project had a low ranking for the *proximity to injury location* criterion because the project would be located approximately 20 miles west of the FWDA site, which is a greater distance than the preferred alternatives. The project had a high ranking for the *nexus to injured resources* criterion because it would benefit resources similar to those injured, namely riparian and upland habitats. The project had a low ranking for the *nexus to lost human services* criterion because the project would mainly benefit riparian and upland habitats and would not significantly benefit human services. Although the overall project area has recreational trails, the project was scored only on the components proposed for NRDA funding.



## SECTION 5: RESTORATION ALTERNATIVES

**Table 5.6. Riparian and Upland Restoration on the Rio Puerco Project Evaluation**

Evaluation Criteria	Narrative Evaluation	Ranking	
<b>Project Relevance</b>	Proximity to injury location	The project would be located offsite, approximately 20 miles to the west, near the WWTP in Gallup, flowing to the west.	Low
	Nexus to injured resources	The project would benefit riparian and upland habitats.	High
	Nexus to lost human services, including lost human use of natural resources	The project would mainly benefit riparian and upland habitats.	Low
<b>Project Administration and Feasibility</b>	Technical and administrative feasibility	The project is technically feasible but includes complexities that lower its administrative feasibility.	Medium
	Likelihood of success	The project would use techniques and approaches that have been demonstrated to be proficient elsewhere. However, there are some challenges associated with its proximity to the WWTP.	Medium
	Administrative and oversight needs	The project includes high administrative and oversight needs.	Medium
	Implementation time	The project would require coordination with the City of Gallup and the McKinley Soil and Water Conservation District, which may lead to less timely implementation.	Medium
<b>Project Benefits</b>	Avoids additional impairment to resources	The project would have a low likelihood of adverse impacts to resources.	High
	Benefits more than one resource and/or addresses multiple lost services	The project would benefit multiple resources, including upland and riparian habitat.	High
	Provides long-term sustainable benefits	The project would provide long-term sustainable benefits.	High
	Time to achieve benefits	It would take some time after implementation for benefits to be accrued.	Low
<b>Project Cost</b>	Ratio of expected benefits to costs	The project would have a low ratio of expected benefits to costs compared to other evaluated projects.	Low
	Cost-effectiveness relative to other projects that provide same type and level of benefits	There are no proposed projects with similar benefits.	N/A
	Operation and maintenance costs	The project would have high operation and maintenance costs.	Low
<b>Consistent with Regional Planning, Local Needs</b>	Consistent with existing federal, state, local, and tribal land and resource management plans or activities	The project is consistent with existing plans.	High
	Partnership potential	The project would have a high partnership potential, because it would involve partnerships between the City of Gallup and the McKinley Soil and Water Conservation District.	High
	Public acceptance	The project would be accepted by the public.	High

## SECTION 5: RESTORATION ALTERNATIVES

**Project Administration and Feasibility:** The project had a medium ranking across the project administration and feasibility criteria. The project would be technically feasible but includes complexities that would lower its administrative feasibility, and therefore it had only a medium ranking for the *technical and administrative feasibility* criterion. The project would use techniques and approaches that have been demonstrated to be proficient elsewhere, but would have some technical challenges associated with its proximity to the WWTP, and therefore the project had a medium ranking for the *likelihood of success* criterion. The project had a medium ranking for the *administrative and oversight needs* criterion because it would have significant administration and oversight needs, particularly for the engineered components of the project. The project had a medium ranking for the *implementation time* criterion because it would require coordination among multiple stakeholders, which would likely lead to less timely implementation.

**Project Benefits:** The project had a low to high ranking across the project benefits criteria. The project would have a low likelihood of adverse impacts to natural resources and human health and safety, and therefore it had a high ranking for the *avoids additional impairment to resources* criterion. The project had a high ranking for the *benefits more than one resource and/or addresses multiple lost services* criterion because it would benefit multiple resources, including upland and riparian habitat. The project would provide long-term sustainable benefits, and therefore it had a high ranking for the *provides long-term sustainable benefits* criterion. However, the project had a low ranking for the *time to achieve benefits* criterion because the restored habitats would take several years after completion of restoration actions to achieve full function and provide full benefits.

**Project Cost:** The project had a low ranking across the applicable project cost criteria. The project had a low ranking for the *ratio of expected benefits to costs* criterion because while it would benefit multiple natural resources and services, it would be the costliest on a unit basis compared to the other evaluated projects. The project had a low ranking for the *operation and maintenance costs* criterion because it would have high operation and maintenance costs. In particular, it would require maintenance of the engineered alterations and of the replanted habitats (e.g., invasive species control) in order to achieve benefits.

**Consistent with Regional Planning, Local Needs:** The project had a high ranking across these criteria. The project would be consistent with existing land and resource management plans, and therefore it had a high ranking for the *consistent with existing management plans or activities* criterion. The project had a high ranking for the *partnership potential* criterion because it would involve partnerships between the City of Gallup and the McKinley Soil and Water Conservation District. The project would be accepted by the public, and therefore it had a high ranking for the *public acceptance* criterion.

### 5.5. No Action-Natural Recovery Alternative

The selection of this alternative by the Trustees would mean that no actions would be taken by the Trustees to restore injured natural resources and the services they provide. While the remedial process would continue, under this alternative, the Trustees would rely on natural recovery and would take no direct action to restore injured natural resources or compensate for interim lost natural resource services. Additionally, the No Action-Natural Recovery Alternative would not use the available \$1,137,150 in NRDA settlement funds for restoration, which is mandated through CERCLA, making this a non-viable alternative.

The Screening Criteria were used to determine if the No Action-Natural Recovery Alternative met the minimum standards for acceptability (Table 5.7). The No Action-Natural Recovery Alternative does not meet the Screening Criteria and is not further evaluated in this Final RP/EA and has been identified as a non-preferred alternative by the Trustees.

## SECTION 5: RESTORATION ALTERNATIVES

**Table 5.7. No Action-Natural Recovery Alternative Project Screening**

Screening Criteria	Narrative Evaluation	Ranking
Address the type of resources potentially injured by releases from the facility, or the services lost as a result of injuries.	The No Action-Natural Recovery Alternative would not compensate for interim losses.	Does not pass
Comply with applicable and relevant Tribal, federal, state, and local laws, regulations, and policies.	The No Action-Natural Recovery Alternative would not utilize settlement funds for restoration, which would not comply with CERCLA NRDA regulations.	Does not pass
Be protective (does not jeopardize) of public health and safety, cultural and environmental resources.	No actions would be implemented.	Not applicable
Be technically and administratively feasible.	No actions would be implemented.	Not applicable
Consider and not conflict with planned response actions.	The No Action-Natural Recovery Alternative would not conflict with planned response actions.	Passes
Provide a net resource benefit.	The No Action-Natural Recovery Alternative would not result in an overall improvement.	Does not pass

## SECTION 6: ENVIRONMENTAL AND SOCIOECONOMIC IMPACTS OF RESTORATION ALTERNATIVES

### 6. Environmental and Socioeconomic Impacts of Restoration Alternatives

---

As noted in Section 1, this document constitutes the Environmental Assessment (EA) for the selected restoration projects to address the potential impact of selected restoration actions on the quality of the physical, biological, and cultural environment. The Trustees integrated the CERCLA and National Environmental Policy Act (NEPA) processes in this Final RP/EA, as recommended under 40 CFR § 1500.2(c).

#### 6.1. Requirements for NEPA Analysis and Trustee Approach

Actions undertaken by federal trustees to restore natural resources or services under CERCLA and other federal laws are subject to NEPA, 42 USC § 4321 *et seq.*, and the regulations from 40 CFR §§1500 through 1508. NEPA and its implementing regulations outline the responsibilities of federal agencies when preparing environmental documentation. Federal agencies contemplating implementation of a major federal action must produce an Environmental Impact Statement (EIS) if the action is expected to have significant impacts on the quality of the human environment. When it is uncertain whether the preferred action is likely to have significant impacts, federal agencies prepare an EA to evaluate the need for an EIS. If the EA demonstrates that the preferred action will not significantly impact the quality of the human environment, the agencies issue a Finding of No Significant Impact (FONSI), which satisfies the requirements of NEPA, and no EIS is required.

This Final RP/EA complies with NEPA by: (1) describing the purpose and need for restoration (Section 2); (2) addressing public participation for this process (Section 1.3); (3) summarizing the affected environment (Section 3); (4) identifying and describing restoration alternative actions (Section 5); and (6) analyzing environmental consequences (Section 6).

After conducting the NEPA analysis, the Trustees conclude that the impacts associated with the restoration actions identified herein do not meet the threshold requiring an EIS. An EA has already been conducted for Alternatives A (see Section 6.2.1); Alternatives C, and D meet the criteria for categorical exclusions (see Section 6.2.2); and Alternative B requires an EA, which is provided below in Section 6.2.2.

#### 6.2. Analysis of Environmental Consequences

##### 6.2.1 Forest Management Through Tree Thinning on Cibola National Forest

In 2020, the United States Department of Agriculture (USDA) conducted an Environmental Assessment for the Puerco Collaborative Forest Landscape Restoration Project titled, “Puerco Collaborative Forest Landscape Restoration Project Environmental Assessment” (hereafter referred to as the “Puerco EA”) (USDA, 2019). USDA prepared the Puerco EA to evaluate restoration efforts designed to restore forest resiliency and ecosystem function to forests across the western Zuni Mountains of the Cibola National Forest. In April 2020, the Decision Notice and Finding of No Significant Impact for the Puerco Collaborative Forest Landscape Restoration Project was signed (USDA, 2020). Alternative A will be implemented within the area addressed by the Puerco EA, and the Trustees are therefore incorporating by reference all the relevant impacts analyses covered in the Puerco EA.

##### 6.2.2 Forest Management Through Tree Thinning on FWDA

Alternatives C and D meet the DOI criteria for categorical exclusions. These projects focus forest fuels management involving a mixture of mechanical and hand-thinning treatments. Specifically, these projects meet Departmental Manual 516 8.5 B.5, which indicates that categorical exclusions apply to “...fire management activities, including prevention and restoration measures, when conducted in accordance with Departmental and Service procedures” (DOI, 2020, page 4). The entities conducting Alternatives C and D will conduct these projects in accordance with DOI, USFWS, and Tribal procedures. This will include adhering to requirements under the Threatened and Endangered Species Act, the Migratory Bird

## SECTION 6: ENVIRONMENTAL AND SOCIOECONOMIC IMPACTS OF RESTORATION ALTERNATIVES

Treaty Act, and the National Historic Preservation Act (NHPA). This may include, for example, a Section 7 of the Endangered Species Act (ESA) consultation with the Navajo Natural Heritage Program, and a Section 106 of the National Historic Preservation Act 1966 consultation with the Navajo Nation Heritage and Historic Preservation Department, when applicable. Further, a Biological Resources Compliance Form from the Navajo Natural Heritage Program and a Cultural Resources Compliance Form from the Navajo Nation Heritage and Historic Preservation Department will be completed once specific project locations have been identified, if applicable. Biological and cultural surveys will also be conducted in all potential habitat prior to project implementation, and if any cultural artifacts or threatened species are found, those areas will be avoided.

### 6.2.3 Zuni Bluehead Sucker Conservation

In 2015, the National Oceanographic and Atmospheric Administration (NOAA) Restoration Center (RC) developed the “Programmatic Environmental Impact Statement for habitat restoration activities implemented throughout the coastal United States” (hereafter referred to as the “RC PEIS”) (NOAA, 2017). NOAA RC developed the PEIS to evaluate restoration activities funded or implemented through its existing programs. The Record of Decision for the RC PEIS was signed July 20, 2015. In compliance with NEPA, the USFWS documented their adoption of the RC PEIS with a Record of Decision, signed August 20, 2019 (84 Fed. Reg. 45515). The RC PEIS (Sections 2.2 and 4.5) includes an evaluation of typical impacts for a suite of restoration activities that are inclusive of the project type included in Alternative B of this RP/EA.

To avoid duplication of effort and to streamline the NEPA analysis in this RP/EA, the Trustees are using the RC PEIS and incorporating by reference all of the relevant impacts analyses covered in the RC PEIS. For the benefit of the reader, these impacts are briefly summarized below. However, the full analysis is incorporated by reference.

According to the RC PEIS (Section 4.5.3), the impacts of conservation transactions, such as the Zuni bluehead sucker conservation project, include the following:

*Conservation transactions would cause indirect, long-term, moderate to major beneficial impacts to geology and soils, water, living coastal and marine resources and essential fish habitat, threatened and endangered species, cultural and historic resources, and socioeconomics. These impacts would result from new management of land and water resources and would prevent development or other degrading activities from taking place on the project site; acquisition and water rights projects would be limited to those that would improve the environment and/or enhance human use values (e.g., recreation) following completion.*

Alternative B, Zuni Bluehead Sucker Habitat Conservation, falls within the range and scope of the potential environmental consequences analyzed in the RC PEIS and does not have significant adverse impacts.

Under NEPA, federal agencies are required to consider the cumulative effects of their proposed actions within the affected environment. The Trustees expect that there will be a long-term, moderate to major positive cumulative effect on the biological and physical health resulting from the Zuni Bluehead Sucker Conservation project. The project will provide ecological benefits, including preserving habitat for a fish species that is a New Mexico endangered species and important culturally to the Zuni Tribe, as well for as other biological resources present in the area. The project will benefit water resources, by preserving surface water and groundwater quantity and quality. The project will also provide cultural benefits, by helping to protect a species that is of cultural importance to the Zuni Tribe.



## 7. Conclusions

---

The Trustees have completed an evaluation of the restoration alternatives presented in this Final RP/EA, consistent with CERCLA and the DOI NRDA regulations, and selected Alternatives A–D as the preferred alternatives because they best meet the Trustees’ goals and Evaluation Criteria. Among the preferred alternatives, Tier 1 projects have priority for funding. If funding remains after completing the Tier 1 projects, the Trustees will consider funding the Tier 2 projects up to the funding allocation amount. Alternative E and the No Action-Natural Recovery Alternative were non-preferred and will not be implemented.

The Trustees select to expend the \$1,137,150 to implement the following preferred Tier 1 projects:

- Navajo Nation Forest Restoration and Fuelwood Production in the Cibola National Forest
- Zuni Tribe Bluehead Sucker Habitat Restoration

In addition, the Trustees will support implementation of the Tier 2 projects to the extent that funding remains available after the implementation of the Tier 1 projects:

- Navajo Nation Forest Restoration and Fuelwood Production on FWDA Parcel 1
- Zuni Tribe Forest Restoration and Fuelwood Production on FWDA Parcel 1

The Trustees evaluated and identified the following non-preferred alternatives:

- Riparian and Upland Restoration on the Rio Puerco
- No Action-Natural Recovery

## References

---

- Argonne National Laboratory. 1990. Master Environmental Plan: Fort Wingate Depot Activity, Gallup, New Mexico. December.
- Biota Information System of New Mexico (BISON-M). 2023. BISON-M home page. Available: <http://www.bison-m.org>. Accessed May 18, 2023.
- Department of Energy. 2019. Draft Supplemental Environmental Assessment for the Wildfire Hazard Reduction and Forest Health Improvement Program at Los Alamos National Laboratory, Los Alamos, New Mexico. April 19.
- Department of the Interior. 2020. Departmental Manual 516 8.5. July 30. Available: <https://www.doi.gov/sites/doi.gov/files/elips/documents/516-dm-8.pdf>. Accessed June 1, 2023.
- ERM Program Management Company. 1997. Final Remedial Investigation/Feasibility Study Report & RCRA Corrective Action Program Document. Prepared for U.S. Army Corps of Engineers, Fort Worth District, Fort Worth. ERM Program Management Company, Exton, PA.
- FWDA. 2023. FWDA Update. Available: <https://www.ftwingate.org/>. Accessed June 2, 2023.
- Kaufmann, M.R., D. Binkley, P.Z. Fule, M. Johnson, S.L. Stephens, and T.W. Swetnam. 2007. “Defining old growth for fire-adapted forests of the Western United States.” *Ecology and Society* 12 (2):18.
- National Weather Service. n.d. (a). Fall Freeze Table: Albuquerque, NM. Available: <https://www.weather.gov/abq/fallfreezetable>. Accessed May 26, 2023.
- National Weather Service. n.d. (b). Spring Freeze Table: Albuquerque, NM. Available: <https://www.weather.gov/abq/springfreezetable>. Accessed May 26, 2023.
- NatureServe Explorer. 2023. Western North American Piñon – Juniper Woodland & Scrub. Available: [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.860343/Pinus\\_monophylla\\_-\\_Pinus\\_edulis\\_-\\_Juniperus\\_spp\\_Woodland\\_Scrub\\_Division](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.860343/Pinus_monophylla_-_Pinus_edulis_-_Juniperus_spp_Woodland_Scrub_Division). Accessed June 2, 2023.
- New Mexico Department of Game and Fish (NMDGF). 2004. Zuni Bluehead Sucker (*Catostomus discobolus yarrowi*) Recovery Plan. Available: <https://www.wildlife.state.nm.us/download/conservation/species/fish/management-recovery-plans/Zuni-Bluehead-Sucker-Recovery-Plan.pdf>. Accessed May 22, 2023.
- New Mexico Rare Plant Technical Council. 2023. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. Available: <https://nmrareplants.unm.edu>. Accessed May 18, 2023.
- New Mexico State University. 2011. New Mexico Range Plants. Available: [https://pubs.nmsu.edu/circulars/CR374\\_LG.pdf](https://pubs.nmsu.edu/circulars/CR374_LG.pdf). Accessed June 2, 2023.
- NOAA. 2017. Restoration Center Programmatic Environmental Impact Statement. Available: <https://www.fisheries.noaa.gov/resource/document/restoration-center-programmatic-environmental-impact-statement>. Accessed May 23, 2023.
- NOAA NCEI. 2021. U.S. Climate Normals Quick Access. National Oceanic and Atmospheric Administration National Centers for Environmental Information. Available: <https://www.ncei.noaa.gov/access/us-climate-normals/>. Accessed January 26, 2022.
- Schenk, E.R., F. O’Donnell, A.E. Springer, and L.E. Stevens. 2020. “The impacts of tree stand thinning on groundwater recharge in aridland forests.” *Ecological Engineering* 145 (2020): 105701.
- Smith, D.M., B.C. Larson, M.J. Kelty, and P.M.S. Ashton. *The practice of silviculture: applied forest ecology*. No. Ed. 9. John Wiley and Sons, Inc., 1997.

## REFERENCES

- Southwest Parks and Monuments Association. 1990. A checklist of the fauna of El Malpais National Monument and National Conservation Area. Southwest Parks and Monuments Association.
- Sundance Consulting. 2017. Final Fort Wingate Depot Activity Groundwater Monitoring Northern Area Background Well Installation Letter Work Plan. September 18.
- Western Regional Climate Center (WRCC). 2016. Comparative Tables: Comparison of Wind, Evaporation, & Amount of Sky Cover Information by State for The Western U.S. Available: [https://wrcc.dri.edu/Climate/comp\\_tables.php](https://wrcc.dri.edu/Climate/comp_tables.php). Accessed May 26, 2023.
- Western Regional Climate Center (WRCC). n.d. Climate of New Mexico. Available: [https://wrcc.dri.edu/Climate/narrative\\_nm.php](https://wrcc.dri.edu/Climate/narrative_nm.php). Accessed May 26, 2023.
- United States Census, 2022. Available: <https://www.census.gov/quickfacts/mckinleycountynewmexico>. Accessed June 1, 2023.
- United States Department of Agriculture. 2019. Puerco Collaborative Forest Landscape Restoration Project Environmental Assessment: Mount Taylor Ranger District, Cibola National Forest and National Grasslands; Cibola and McKinley Counties, New Mexico. December.
- United States Department of Agriculture. 2020. Decision Notice and Finding of No Significant Impact for the Puerco Collaborative Forest Landscape Restoration Project. Cibola National Forest, Mount Taylor Ranger District; Cibola and McKinley Counties, New Mexico. April.
- United States Fish and Wildlife Service (USFWS). 2023. Environmental Conservation Online System (ECOS). Available: <https://ecos.fws.gov/ecp/>. Accessed May 18, 2023.
- United States Forest Service. 2011. Final Environmental Impact Statement South Shore Fuel Reduction and Healthy Forest Restoration. August.
- United States Forest Service. 2014. Environmental Assessment Elkhorn Project. March.
- USA Facts. 2022. Available: <https://usafacts.org/data/topics/people-society/population-and-demographics/our-changing-population/state/new-mexico/county/mckinley-county/>. Accessed June 1, 2023.

Appendix A: Consent Decree

---

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO

THE STATE OF NEW MEXICO,	§	
THE NAVAJO NATION,	§	
and THE ZUNI TRIBE,	§	Case No. <u>1:22-cv-00225 KK/JFR</u>
	§	
Plaintiffs,	§	
	§	
v.	§	
	§	
THE UNITED STATES AND THE UNITED	§	
STATES ARMY	§	
	§	
Defendants	§	
	§	

**CONSENT DECREE**

This Consent Decree is made and entered into by and among (i) the United States of America (“United States”), on behalf of the United States Department of the Army (“Army”), (ii) the State of New Mexico (“State”), acting through the New Mexico Natural Resources Trustee and the New Mexico Office of Natural Resources Trustee (jointly “ONRT”), and the New Mexico Attorney General and the New Mexico Attorney General’s Office (jointly “AGO”), (iii) the Zuni Tribe, and (iv) the Navajo Nation.

WHEREAS, the site that is the subject of this Consent Decree is the closed Fort Wingate Depot Activity (“the Depot”), located in McKinley County, New Mexico, whose former mission was to receive, store, maintain, and ship materials, primarily explosives and military munitions, and to dispose of obsolete or deteriorated explosives and military munitions;

WHEREAS, the active mission of the Depot ceased and the installation closed in January 1993;



WHEREAS, the Depot currently occupies approximately 24 square miles, and is almost entirely surrounded by federally-owned or administered lands, including both national forest and tribal lands;

WHEREAS, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), as amended, 42 U.S.C. §§ 9601-9675, environmental remediation of the Depot began in 1980;

WHEREAS, in 1996, the New Mexico Environment Department became the lead regulatory agency at the Depot pursuant to the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901 et seq., as amended, and remediation activities are currently being performed under RCRA Permit No. NM6213820974 issued by the New Mexico Environment Department;

WHEREAS, after land parcels within the Depot that are not designated to remain under U.S. Army control have met all applicable environmental requirements, such parcels have been or will be transferred to the Department of the Interior-Bureau of Indian Affairs, in trust for the benefit of either the Zuni Tribe or the Navajo Nation;

WHEREAS, ONRT, the Navajo Nation, the Zuni Tribe, and the Army have worked cooperatively to evaluate potential injuries to all Natural Resources caused by known activities at the Depot, as well as the Natural Resource Damages potentially associated with such injuries;

WHEREAS, pursuant to Executive Order 12580 and the National Contingency Plan, 40 C.F.R. Part 300, the President has designated certain federal officials, including the Secretary of Defense, to act as federal trustees for natural resources within their trusteeship;

WHEREAS, the State, acting through ONRT and the AGO, is authorized to seek Natural Resource Damages pursuant to, among other authorities, the New Mexico Natural Resources Trustee Act (“NMNRTA”), N.M. Stat. Ann. Section 75-7-1 through -5 (1978);

WHEREAS, ONRT has been delegated authority to act as State Trustee for Natural Resources impacted by the release of hazardous substances at or from the Depot;

WHEREAS, pursuant to CERCLA Section 107(f), 42 U.S.C. § 9607(f), and the National Contingency Plan, 40 C.F.R. Part 300, the Zuni Tribe and the Navajo Nation have the authority to act as Tribal Trustees for Natural Resources impacted by the release of hazardous substances at or from the Depot and to seek Natural Resource Damages;

WHEREAS, the State, the Zuni Tribe, and the Navajo Nation (collectively, “the Plaintiffs”), have filed a Complaint asserting a claim against the United States under CERCLA for alleged damages for injury to, destruction of, or loss of natural resources belonging to, managed by, or controlled by the Plaintiffs, resulting from the releases of hazardous substances at or from the Depot, including the costs of assessing such injury, destruction, or loss;

WHEREAS, this Consent Decree resolves all claims by the Plaintiffs against the United States for Covered Matters as defined in this Consent Decree; and

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm’s length, fully resolves the Covered Matters, will expedite the restoration of allegedly injured natural resources, and will avoid prolonged and complicated litigation between the Parties. The Court finds that this Consent Decree is fair, reasonable, lawful and in the public interest.

THEREFORE, it is ORDERED, ADJUDGED, and DECREED as follows:

## **I. JURISDICTION**

1. The Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. § 9613. The Court also has personal jurisdiction over the Parties. Solely for the purposes of this Consent Decree and the underlying Complaint, the Parties waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. The Parties shall not challenge this Court's jurisdiction to enter or enforce this Consent Decree.

## **II. PARTIES BOUND**

2. This Consent Decree binds the United States, the State, the Zuni Tribe, and the Navajo Nation. There are no third-party beneficiaries of this Consent Decree.

## **III. DEFINITIONS**

3. Unless otherwise expressly provided herein, terms used in this Consent Decree that are defined in CERCLA, or in regulations promulgated under CERCLA, shall have the meaning assigned to them therein. When terms listed below are used in this Consent Decree, the following definitions apply:

(a) "AGO" means the New Mexico Attorney General, the New Mexico Attorney General's Office and any successor officers, departments or agencies.

(b) "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

(c) "Consent Decree" shall mean this Consent Decree.

(d) "Consensus" shall mean that all Trustees agree with or do not object to a proposed recommendation or action.

(e) “Covered Matters” shall mean Natural Resources Damages for any injury to any Natural Resource resulting in whole or in part from any known release or threatened release of any hazardous substance, pollutant or contaminant at or from the Depot, provided that such release or threatened release occurred or commenced prior to the Effective Date of this Consent Decree.

(f) “Day” shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

(g) “Depot” shall mean the Fort Wingate Depot Activity, a federal facility located in McKinley County, New Mexico, as described more specifically in the Complaint.

(h) “Effective Date” shall mean the effective date of this Consent Decree as provided by Paragraph 18.

(i) “Escrow Account” shall mean the escrow account as defined in Paragraph 8 of this Consent Decree, which shall be used and managed in accordance with that Paragraph.

(j) “Future Costs” shall mean the costs that the State and the Tribal Trustees will incur after the entry of the Consent Decree in connection with planning, implementing, monitoring, and completing the restoration activity or activities funded through this Consent Decree.

(k) “Natural Resources” shall have the meaning provided in CERCLA § 101(16), 42 U.S.C. § 9601(16).

(l) “Natural Resource Damages” shall mean any damages recoverable by the State and the Tribal Trustees on behalf of the public for injury to, destruction of, loss or impairment of Natural Resources as set forth in CERCLA Section 107(a)(4)(C), 42 U.S.C.

§ 9607(a)(4)(C), as a result of hazardous substance releases at or from the Depot, including but not limited to: (i) the costs of assessing such injury, destruction, loss of use, or impairment; (ii) the costs of restoration, rehabilitation, or replacement of injured or lost Natural Resources or of acquisition of equivalent resources; (iii) the costs of identifying, planning, implementing, and monitoring such restoration, rehabilitation, replacement or acquisition activities; (iv) compensation for injury, destruction, loss of use, or impairment of Natural Resources; and (v) each of the categories of recoverable damages described in 43 C.F.R. § 11.15 and/or the NMNRTA. For purposes of this Consent Decree, Natural Resources Damages shall include Future Costs and Past Costs as defined in this Consent Decree.

(m) “Past Costs” shall mean all costs incurred by the State and Tribal Trustees prior to entry of the Consent Decree in identifying and quantifying injuries to Natural Resources, and Natural Resource Damages potentially associated with such injuries, as a result of hazardous substance releases at or from the Depot.

(n) “ONRT” means the New Mexico Natural Resources Trustee, the New Mexico Office of Natural Resources Trustee and any successor officers, departments, or agencies.

(o) “Parties” shall mean the United States, the State, the Zuni Tribe, and the Navajo Nation.

(p) “Plaintiffs” shall mean the State, the Zuni Tribe, and the Navajo Nation.



(q) “Relevant Administrative Record” shall include any documents maintained in the Army’s Public Information Repository for the Depot<sup>1</sup> as well as any Trustee Administrative Record pertaining to the Depot.

(r) “Restoration Plan” shall mean a Restoration Plan as provided in 43 C.F.R. § 11.93 which will describe how the payments for Future Costs will be used to address natural resources, specifically what restoration, rehabilitation, replacement, or acquisition of the equivalent resources will occur.

(s) “Restoration Project” shall mean any restoration, rehabilitation, replacement, and/or acquisition of equivalent resources planned or implemented by the Trustees pursuant to this Consent Decree and the Restoration Plan.

(t) “State” shall mean the State of New Mexico and its agencies, subdivisions, departments, instrumentalities, and their officers, employees, and agents, including ONRT and the AGO.

(u) “State and Tribal Trustees” shall mean, collectively, ONRT, the Zuni Tribe, and the Navajo Nation.

(v) Trustee Administrative Record shall mean any publicly available records pertaining to the Depot that are compiled or maintained by or on behalf of a Trustee pursuant to CERCLA or its implementing regulations, RCRA or its implementing regulations, or any other

---

<sup>1</sup> This Repository includes publicly available documents archived in accordance with: (1) Section 113(k) of CERCLA, 42 U.S.C. § 9613(k), and 40 C.F.R. 300.800; (2) records management requirements found in DoDM 4715.20 Encl. 3, Sec. 7; (3) applicable RCRA permit requirements to compile and maintain a publicly available record; and (4) other federal or state requirements to collect and retain information pertaining to the Depot. Such documents may be accessed in person by public visitors to the Repository or through [www.ftwingate.org](http://www.ftwingate.org)

applicable records retention requirement under federal, state or tribal law, including but not limited to the laws of the Navajo Nation and the Zuni Tribe.

(w) “Trustees” shall mean, collectively, ONRT, the Zuni Tribe, the Navajo Nation, and the Army. When used in the singular, “Trustee” shall mean any of those entities.

(x) “United States” shall mean the United States of America, including all of its departments, agencies, and instrumentalities, and their officers, employees, and agents.

#### **IV. STATEMENT OF PURPOSE**

4. The mutual objectives of the Parties in entering into this Consent Decree are to:

(i) restore, replace, or acquire the equivalent of the Natural Resources injured, destroyed, or lost as a result of hazardous substances released at or from the Depot; (ii) reimburse Past Costs incurred by the State and Tribal Trustees prior to the Effective Date of this Consent Decree; (iii) resolve the United States’ liability for Natural Resource Damages as provided herein; and (iv) avoid potentially costly and time-consuming litigation.

#### **V. PAYMENT BY THE UNITED STATES**

5. As soon as reasonably practicable after the Effective Date of this Consent Decree, the United States, on behalf of the Army, shall pay the sum of \$103,210.00 to the State to reimburse the State’s Past Costs. Payment to the State shall be in the form of an electronic funds transfer per instructions that the State shall provide to the United States no later than 30 days following the Effective Date.

6. As soon as reasonably practicable after the Effective Date of this Consent Decree, the United States, on behalf of the Army, shall pay the sum of \$37,567.00 to the Zuni Tribe to reimburse the Zuni Tribe’s Past Costs. Payment to the Zuni Tribe shall be in the form of an

electronic funds transfer per instructions that the Zuni Tribe shall provide to the United States no later than 30 days following the Effective Date.

7. As soon as reasonably practicable after the Effective Date of this Consent Decree, the United States, on behalf of the Army, shall pay the sum of \$19,993.84 to the Navajo Nation to reimburse the Navajo Nation's Past Costs. Payment to the Navajo Nation shall be in the form of an electronic funds transfer per instructions that the Navajo Nation shall provide to the United States no later than 30 days following the Effective Date.

8. As soon as reasonably practicable after the Effective Date of this Consent Decree, the United States, on behalf of the Army, shall pay the sum of \$1,290,299.00 in settlement of Plaintiffs' claims for Future Costs. Payment shall be in the form of an electronic funds transfer into an Escrow Account identified in Attachment A. The use of the funds provided by the United States pursuant to this Paragraph shall be subject to the following conditions:

(a) All funds disbursed from the Escrow Account shall be used to pay for the Future Costs of natural resource restoration activities sponsored by the State and Tribal Trustees in accordance with this Consent Decree and applicable law. All such funds shall be used to plan and implement projects to restore, rehabilitate, replace and/or acquire the equivalent of injured Natural Resources as a result of the release of hazardous substances at or from the Depot, including but not limited to any administrative costs and expenses necessary for and incidental to restoration, rehabilitation, replacement, and/or acquisition of equivalent resources planning, and any restoration, rehabilitation, replacement, and/or acquisition of equivalent resources undertaken. The funds disbursed from the Escrow Account shall not be used for any other purposes.

(b) The following sums shall be disbursed from the Escrow Account to reimburse the following Trustees for the costs and expenses of their anticipated future Restoration Project planning activities: to ONRT, \$ 92,987.00 (of which the State presently anticipates that it will spend approximately \$ 56,987.00 to retain the services of a consultant to assist with these activities); to Zuni Tribe, \$16,000.00; and to Navajo Nation, \$44,162.00. The Army shall not receive any reimbursement of costs or expenses from the Escrow Account.

(c) Unless the Trustees otherwise agree in writing by Consensus, and consistent with the limitations in Paragraph 8(a) above, the remaining funds in the Escrow Account shall be allocated to Restoration Projects design and implementation as follows: for upland/lowland damages (including groundwater), \$1,020,150.00; for cultural services damages, \$117,000.00.

(d) Any interest earned on the Escrow Account shall be allocated to Restoration Projects design and implementation in the same proportion as the funds subject to Subparagraph 8(c).

(e) Unless the Trustees otherwise agree in writing by Consensus, funds subject to Subparagraphs 8(c) and (d) shall not be disbursed prior to the Trustees' approval of the Restoration Plan and the completion of any public notice and comment period applicable to that plan.

(f) Any Restoration Projects performed with funds disbursed from the Escrow Account pursuant to this Consent Decree shall not be performed on land within the jurisdiction of the Army.

(g) Any amount disbursed to the State under subparagraph 8(b) that is determined to be in excess of necessary consultant service fees shall be allocated to Restoration

Projects design and implementation in the same proportion as the funds subject to Subparagraph 8(c).

9. If any payment by the United States required pursuant to Paragraph 5, 6, 7 or 8 above is not made in full within 120 days after the Effective Date of this Consent Decree, then interest on the unpaid balance of such payment shall be paid, and shall begin to accrue commencing on the 121st day after the Effective Date and continuing to accrue through the date payment is made in full. Interest shall accrue at the same rate as is specified for interest on investments of the Hazardous Substances Superfund established under subchapter A of Chapter 98 of Title 26 of the U.S. Code.

10. Payment by the United States is subject to the availability of funds appropriated for such purpose. No provision of this Consent Decree shall be interpreted as or constitute a commitment or requirement that the United States obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §§ 1341-42 and 1511-19, or any other provision of law.

#### **VI. RELEASE AND COVENANT NOT TO SUE**

11. Effective upon the date of completion of the payments by the United States that are required by Paragraphs 5, 6, 7 and 8 above, the Plaintiffs hereby release, discharge, and covenant not to sue or take administrative action against the United States (including the Department of the Army and any other department, agency or instrumentality of the United States), or any past or present official, officer, director, employee, agent or contractor of the United States (or any past or present official, officer, director, employee, agent or subcontractor of such contractor), pursuant to CERCLA or any other federal, state, or tribal statutory or common law, including but not limited to the laws of the Navajo Nation and Zuni Tribe, for Covered Matters.

12. Notwithstanding any other provision of this Consent Decree, each of the Plaintiffs reserves the right to initiate a new action against the United States seeking recovery of Natural Resources Damages, based on: (i) conditions with respect to the Depot, unknown to the Plaintiff as of the date of lodging of this Consent Decree, that result in releases of hazardous substances that cause or contribute to injury to, destruction of, or loss of Natural Resources (“Unknown Conditions”); or (ii) information received by the Plaintiff after the date of lodging of this Consent Decree which indicates that there is injury to, destruction of, or loss of Natural Resources of a type that was unknown to the Plaintiff as of the date of lodging of this Consent Decree (“New Information”). For purposes of this Paragraph 12, the information and conditions known to a Plaintiff shall include any information or conditions listed in or identified in any records or documents relating to the Depot that were publicly available as of the date of lodging of this Consent Decree, or that were in the possession or under the control of that Plaintiff prior to that date. Publicly available records include, but are not limited to, Relevant Administrative Records.

13. The United States reserves any and all defenses or counterclaims it may have with respect to the claims reserved in Paragraph 12, except that the United States shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting or other defense based upon any contention that the claims reserved in Paragraph 12 were or should have been brought in the instant case; provided, however, that nothing in this Paragraph 13 affects the enforceability of the covenants by Plaintiffs that are set forth in Paragraph 11.



## VII. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

14. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Depot against any person not a Party hereto.

15. The Parties agree, and by entering this Consent Decree this Court finds, that the United States is entitled, as of the Effective Date of this Consent Decree, to protection from contribution actions or claims for the matters addressed in this Consent Decree, as provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2). The “matters addressed” in this Consent Decree are the Covered Matters defined in Paragraph 3(e) above.

16. The Parties agree that upon the entry of this Consent Decree, the United States has “resolved its liability” for Covered Matters within the meaning of CERCLA § 113(f)(2) and (3), 42 U.S.C. § 9613(f)(2) and (3).

17. Nothing in this Consent Decree shall be construed to be a waiver of the sovereign immunity of any Party.

18. Nothing in the Consent Decree is intended or should be construed to alter: (a) any right to withdraw and use water, (b) any ownership of water, (c) the legal standards that govern any right to withdraw, use, or own water, (d) the adjudication of any such rights, or (e) any other authority to manage or control water.

## VIII. NOTICES AND SUBMISSIONS

19. All notices and written communications pertaining to this Consent Decree shall be sent to the Parties at the addresses specified in this Paragraph. If any identified address includes an email address, then a courtesy copy shall be sent by email to the indicated email address.

As to the United States:

Chief, Environmental Defense Section  
United States Department of Justice  
P.O. Box 7611  
Washington, DC 20044  
Email: [brian.lynk@usdoj.gov](mailto:brian.lynk@usdoj.gov)  
(Communications shall refer to “DJ# 90-11-6-19098”)

United States Army Legal Services Agency  
Environmental Law Division  
Attn: Chief, Litigation Branch  
9275 Gunston Road  
Fort Belvoir, VA 22060  
Email: [jennifer.l.meadows.mil@army.mil](mailto:jennifer.l.meadows.mil@army.mil)

As to the State of New Mexico:

Maggie Hart Stebbins  
Trustee  
Office of Natural Resources Trustee  
121 Tijeras Avenue, NE, Suite 1000  
Albuquerque, New Mexico 87102

Bill Grantham  
Assistant Attorney General  
New Mexico Office of the Attorney General  
201 3<sup>rd</sup> Street NW, Suite 300  
Albuquerque, New Mexico 87102

As to the Zuni Tribe:

Governor Val R. Panteah, Sr.  
Tribal Administrator, Zuni Tribe  
P.O. Box 339  
Zuni, NM 87327

David C. Mielke  
Sonosky, Chambers, Sachse, Mielke & Brownell, LLP  
500 Marquette Avenue, NW, Suite 660  
Albuquerque, NM 87102

As to the Navajo Nation:

Jason John, Director  
Navajo Department of Water Resources  
PO Box 678, Fort Defiance, AZ 86504

Dr. Rudy Shebala  
Director,  
Division of Natural Resources  
PO Box 9000  
Window Rock, Arizona 86515

Veronica Blackhat  
Assistant Attorney General  
Navajo Nation Department of Justice  
P.O. Box 2010  
Window Rock, AZ 86515

#### **IX. DISPUTE RESOLUTION**

20. In the event of any dispute regarding the Consent Decree arising after its final approval by the Court, the Parties shall attempt to resolve such dispute through negotiation, mediation, non-binding arbitration or any other form of alternative dispute resolution as may be agreed to by the Parties at the time the dispute arises.

21. In the event that the Parties fail to resolve a dispute pursuant to the preceding Paragraph within sixty (60) days or such longer period as the Parties may agree upon, any Party may seek to enforce such rights and remedies as may be available to such Party, including but not limited to petitioning the Court to interpret or enforce any term of this Consent Decree.

#### **X. EFFECTIVE DATE AND RETENTION OF JURISDICTION**

22. The Effective Date of this Consent Decree shall be the date upon which it is entered by the Court as an order and final judgment.

23. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Parties for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction and relief as may be necessary or appropriate to construe, modify, implement, terminate, reinstate or enforce compliance with the terms of this Consent Decree or for any further relief as the interest of justice may require.

#### **XI. INTEGRATION**

24. This Consent Decree constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement of claims embodied herein. The Parties acknowledge that there are no representations, agreements or understandings between the Parties relating to the settlement between them other than those expressly contained in this Consent Decree.

#### **XII. INADMISSIBILITY AND PRIVILEGE**

25. Other than in a proceeding to enforce the terms of this Consent Decree, nothing in this Consent Decree shall be admissible as evidence to prove liability for or invalidity of any claim or defense in this matter or the amount of any such claim. No Party is making any admission of fact or law by entering into this Consent Decree.

26. Nothing in this Consent Decree, nor any actions taken in accordance with this Consent Decree, shall be construed as a waiver of the attorney-client privilege, work-product immunity or any other privilege or immunity that has been or may be asserted in this or any other matter.

### **XIII. MODIFICATION**

27. This Consent Decree shall not be modified or amended except by mutual written consent of the Parties and Order of the Court.

28. The provisions of this Consent Decree are not severable. The Parties' consent hereto is conditioned upon entry of the Consent Decree in its entirety without modification, addition, or deletion except as agreed to by the Parties.

### **XIV. SIGNATURES AND COUNTERPARTS**

29. Each undersigned representative of a signatory to this Consent Decree certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such signatory to this document. This Consent Decree may be executed in multiple counterparts, each one of which shall be deemed an original, but all of which constitute one and the same Consent Decree.

### **XVIII. FINAL JUDGMENT**

30. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the Parties. The Court finds that there is no reason for delay and therefore enters this judgment as a final judgment under Rules 54 and 58 of the Federal Rules of Civil Procedure.

SO ORDERED this 9th day of August, 2022.

  
\_\_\_\_\_  
Honorable Kirtan Khalsa  
United States Magistrate Judge  
Presiding by Consent

THE UNDERSIGNED PARTIES enter into this Consent Decree in State of New Mexico et al. v. The United States:

**FOR THE UNITED STATES OF AMERICA:**

Todd Kim  
Assistant Attorney General  
Environment and Natural Resources  
Division

Date: February 25, 2022

By: *Brian H. Lynk*  
Brian H. Lynk  
Trial Attorney  
Environmental Defense Section  
United States Department of Justice



THE UNDERSIGNED PARTIES enter into this Consent Decree in State of New Mexico et al. v. The United States:

**FOR THE STATE OF NEW MEXICO:**

Date: \_\_\_\_\_

**William  
Grantham**

Digitally signed by William  
Grantham  
Date: 2022.03.01 14:33:36  
-07'00'

---

William Grantham  
Assistant Attorney General  
New Mexico Office of the Attorney  
General  
201 Third St. NW, Suite 300  
Albuquerque, NM 87102  
Telephone: (505) 717-3520  
E-Mail: [wgrantham@nmag.gov](mailto:wgrantham@nmag.gov)

Date: \_\_\_\_\_

**Maggie.HartStebbins**

Digitally signed by  
Maggie.HartStebbins  
Date: 2022.02.23 08:55:42 -07'00'

---

Maggie Hart Stebbins  
Trustee  
New Mexico Office of Natural  
Resources Trustee  
121 Tijeras Avenue, NE Suite 1000  
Albuquerque, NM 87102

THE UNDERSIGNED PARTIES enter into this Consent Decree in State of New Mexico et al. v.  
The United States:

**FOR THE NAVAJO NATION**

Date: 3/9/2022

Doreen N. McPaul  
Doreen N. McPaul  
Attorney General  
Navajo Nation Department of Justice  
P.O. Box 2010  
Window Rock, AZ 86515  
Email dmcpaul@nndoj.org  
Phone 928-871-6343  
Fax 928-871-6177

Date: 03-07-2022

Jonathan Nez  
The Honorable Jonathan Nez  
President

THE UNDERSIGNED PARTIES enter into this Consent Decree in State of New Mexico et al. v. The United States:

**FOR THE ZUNI TRIBE**

Date: 3/22/2022



David C. Mielke  
Sonosky, Chambers, Sachse,  
Mielke & Brownell, LLP  
500 Marquette Avenue, NW,  
Suite 660  
Albuquerque, NM 87102  
Phone (505) 247-0147  
Email dmielke@abqsonosky.com

Date: 03/18/2022



The Honorable Val R. Panteah, Sr.  
Governor, Zuni Tribe

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

---

THE STATE OF NEW MEXICO,	§	
THE NAVAJO NATION,	§	
and THE ZUNI TRIBE,	§	Case No. <u>1:22-cv-00225</u>
	§	
Plaintiffs,	§	
	§	
v.	§	
	§	
THE UNITED STATES AND THE UNITED	§	
STATES ARMY	§	
	§	
Defendants	§	
	§	

---

**ATTACHMENT A  
TO CONSENT DECREE**

In accordance with Paragraphs 3(i) and 8 of the Consent Decree, “Escrow Account” as used in the Consent Decree means an interest bearing court registry account of the United States District Court for the District of New Mexico (“Court”), established pursuant to an order of the Court. Payment to the Court registry account shall be made in the manner specified by the clerk of the Court, subject to Paragraphs 8, 9 and 10 of the Consent Decree. Payments from the Court registry account shall be made in accordance with Paragraph 8.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

STATE OF NEW MEXICO, *et al.*,

Plaintiffs,

v.

Civ. No. 22-225 KK/JFR

UNITED STATES OF AMERICA, *et al.*,

Defendants.

**ORDER**

Pursuant to the Consent Decree entered in this matter on August 9, 2022, the Court hereby ORDERS the United States of America, as soon as reasonably practicable, to deposit \$1,290,299.00 into the Court's Registry to be held in an interest-bearing escrow account pursuant to Administrative Order 16-MC-00004-50, for disbursement only in accordance with Paragraph 8 of the Consent Decree.

IT IS SO ORDERED.



---

KIRTAN KHALSA  
UNITED STATES MAGISTRATE JUDGE  
Presiding by Consent

## Appendix B: Public Comments

---

This section summarizes the public comments received on the Draft RP/EA and responses to those comments. The public comment period on the Draft RP/EA commenced on December 15, 2023, and ended on January 19, 2024.

Four written comments were received during the public comment period from the Bureau of Indian Affairs (BIA), Navajo Region.

### **Comment 1 from the BIA, Navajo Region Branch of Environmental Compliance:**

“The Environmental Assessment does not indicate Section 7 of the Endangered Species Act consultation with the Navajo Natural Heritage Program and Section 106 of the National Historic Preservation Act 1966 consultation with the Navajo Nation Heritage and Historic Preservation Department.

The BIA recommends the EA have a Biological Resources Compliance Form from the Navajo Natural Heritage Program and a Cultural Resources Compliance Form from the Navajo Nation Heritage and Historic Preservation Department be included in the EA.”

### ***Response to Comment 1:***

Section 6.2.2 of the Draft RP/EA indicates that projects will be implemented in accordance with DOI and USFWS procedures, and that biological and cultural surveys will be conducted in all potential habitat prior to project implementation. This was taken into consideration when developing project costs. The Draft RP/EA has been updated to specify that Tribal procedures will also be followed. It has been further updated to specify that a Section 7 of the Endangered Species Act (ESA) consultation with the Navajo Natural Heritage Program, and a Section 106 of the National Historic Preservation Act 1966 consultation with the Navajo Nation Heritage and Historic Preservation Department will be conducted, when applicable. Further, that a Biological Resources Compliance Form from the Navajo Natural Heritage Program and a Cultural Resources Compliance Form from the Navajo Nation Heritage and Historic Preservation Department will be completed, if relevant, once the specific project locations have been identified. The following revisions were made in the Final RP/EA as a result of this comment.

### ***Revision in response to Comment 1:***

#### ***Section 6.2.2, pages 27-28***

The entities conducting Alternatives C and D will conduct these projects in accordance with DOI, ~~and~~ USFWS, ~~and Tribal~~ procedures. This ~~would~~will include adhering to requirements under the Threatened and Endangered Species Act, ~~and~~ the Migratory Bird Treaty Act, ~~and the National Historic Preservation Act (NHPA). This may include, for example, a Section 7 of the Endangered Species Act (ESA) consultation with the Navajo Natural Heritage Program, and a Section 106 of the National Historic Preservation Act 1966 consultation with the Navajo Nation Heritage and Historic Preservation Department, when applicable. Further, a Biological Resources Compliance Form from the Navajo Natural Heritage Program and a Cultural Resources Compliance Form from the Navajo Nation Heritage and Historic Preservation Department will be completed once specific project locations have been identified, if applicable.~~ Biological and cultural surveys will ~~also~~ be conducted in all potential habitat prior to project implementation, and if any cultural artifacts or threatened species are found, those areas will ~~also~~ be avoided.



**Comment 2 from the BIA, Navajo Region Branch of Natural Resources:**

“Navajo and Zuni tribes to work collaboratively on the Zuni Bluehead Sucker conservation project as upland disturbance is an important preservation action.”

***Response to Comment 2:***

The Zuni Bluehead Sucker restoration project will be implemented by the Zuni Tribe. Collaboration with co-Trustees will take place as appropriate. No changes were made in the Final RP/EA as a result of this comment.

**Comment 3 from the BIA, Navajo Region Branch of Forestry:**

“The BIA, Branch of Forestry has reviewed the draft document and has no comments or concerns.”

***Response to Comment 3:*** None required.

**Comment 4 from the BIA, Navajo Region Branch of Real Estate Services:**

“The BIA, Branch of Real Estate Services has reviewed the draft document and has no comments or concerns.”

***Response to Comment 4:*** None required.



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Navajo Regional Office

P.O. Box 1060

Gallup, New Mexico 87305

January 19, 2024

Sara Gerlitz Peck  
Office of Natural Resources Trustee  
121 Tijeras Avenue NE, Suite 1000  
Albuquerque, New Mexico 87102

Dear Ms. Peck:

This email is to submit Bureau of Indian Affairs (BIA) , Navajo Region comments for the following: Draft Restoration Plan/Environmental Assessment (Draft RP/EA) presents restoration alternatives evaluated by the Trustees and the preferred alternatives proposed by the Trustees to restore injured natural resources and lost services resulting from released hazardous substances at the Fort Wingate Depot Activity (FWDA) Site, McKinley County, New Mexico.

Comments:

## **Branch of Environmental Quality Act Compliance Review:**

The Environmental Assessment does not indicate Section 7 of the Endangered Species Act consultation with the Navajo Natural Heritage Program and Section 106 of the National Historic Preservation Act 1966 consultation with the Navajo Nation Heritage and Historic Preservation Department.

The BIA recommends the EA have a Biological Resources Compliance Form from the Navajo Natural Heritage Program and a Cultural Resources Compliance Form from the Navajo Nation Heritage and Historic Preservation Department be included in the EA.

## **Branch of Natural Resources:**

Navajo and Zuni tribes to work collaboratively on the Zuni Bluehead Sucker conservation project as upland disturbance is an important preservation action.

## **Branch of Forestry:**

The BIA, Branch of Forestry has reviewed the draft document and has no comments or concerns.

## **Branch of Real Estate Services:**

The BIA, Branch of Real Estate Services has reviewed the draft document and has no comments or concerns.

If you should have any questions, contact Leonard Notah, NEPA Coordinator at (505) 863-8287 or by email at [leonard.notah@bia.gov](mailto:leonard.notah@bia.gov).

Sincerely,

Deborah Shirley  
Acting Regional Director