

**Environmental Assessment for the
2025 Conchas Lake
Vegetation Management Plan
Environmental Assessment**

**Canadian River Basin
San Miguel County, NM**



June 2025



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ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) evaluates the potential environmental and socioeconomic impacts of the Conchas Lake Vegetation Management Plan. This EA will facilitate the decision process regarding the Proposed Action and alternatives.

SECTION 1 *INTRODUCTION* of the Proposed Action summarizes the purpose of and need for the Proposed Action, provides relevant background information, and describes the scope of the EA.

SECTION 2 *PROPOSED ACTION AND ALTERNATIVES* examines alternatives for implementing the Proposed Action and describes the recommended alternative.

SECTION 3 *AFFECTED ENVIRONMENT AND CONSEQUENCES* describes the existing environmental and socioeconomic setting and identifies the potential environmental and socioeconomic effects of implementing the Proposed Action and alternatives.

SECTION 4 *CUMULATIVE IMPACTS* describes the impact on the environment that may result from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions.

SECTION 5 *COMPLIANCE WITH ENVIRONMENTAL LAWS* provides a listing of environmental protection statutes and other environmental requirements.

SECTION 6 *IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES* identifies any irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented.

SECTION 7 *PUBLIC AND AGENCY COORDINATION* provides a listing of individuals and agencies consulted during preparation of the EA.

SECTION 8 *REFERENCES* provides bibliographical information for cited sources.

SECTION 9 *ACRONYMS/ABBREVIATIONS*

SECTION 10 *LIST OF PREPARERS AND REVIEWERS* identifies persons who prepared the document and their areas of expertise.

APPENDICES A. NEPA Coordination and Scoping

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ENVIRONMENTAL ASSESSMENT
2025 Conchas Lake Vegetation Management Plan
San Miguel County, New Mexico

SECTION 1: INTRODUCTION

The United States Army Corps of Engineers (USACE) is proposing to adopt and implement the 2025 Conchas Lake Vegetation Management Plan (Plan). The purpose of the 2025 Plan is to inform and guide Conchas Lake through an array of vegetative management options that accomplish their objectives while also conserving environmentally sensitive areas. The Plan includes recommendations for maintenance, usage, and restoration of degraded habitats that are necessary to achieve the USACE vision for the future of the Conchas Lake Project.

Adoption and implementation of the 2025 Plan (Proposed Action) would create potential impacts on the natural and human environments. This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. § 4321 et seq.), the United States Army Corps of Engineers NEPA implementing regulations (33 C.F.R. part 230), and Council on Environmental Quality's (CEQ) 2024 NEPA implementing regulations (40 C.F.R. parts 1500 – 1508). The CEQ has provided notice in the Federal Register dated February 25, 2025, to initiate eventual removal of their NEPA regulations at 40 C.F.R. Parts 1500 – 1508 from the Code of Federal Regulations (removal occurred on April 11, 2025, so any citations to 40 C.F.R. Parts 1500 – 1508 were meant as they existed prior to removal). However, the preparation of this EA began, and the draft EA was circulated for public review, prior to the CEQ's notice. As such, this EA follows the 2024 CEQ NEPA regulations that were in effect when this EA was prepared.

1.1 PROJECT LOCATION AND SETTING

The Conchas Dam and Lake Project (Project) is located within the Albuquerque District (SPA) in northeastern New Mexico on the Canadian River, just below its confluence with the Conchas River in San Miguel County, New Mexico. The project is 30 miles northwest of Tucumcari, New Mexico, and 160 miles east of Albuquerque, New Mexico. Access to Conchas Dam from Tucumcari is via State Highway 104, and from Albuquerque, via Interstate 40 east, then north on State Highway 129 and continue north on State Highway 104. Conchas Lake (Reservoir) extends in two directions: to

the southwest, up the valley of the Conchas River for approximately 11 miles, and to the northwest, along the Canadian River for approximately 14 miles. Project lands include a total area of 23,492 acres; 3,413 acres held in fee and 20,079 acres held in flowage easement.

The Canadian River and tributaries rise on the eastern slopes of the Rocky Mountains in the southern part of the Sangre de Cristo Range. The major tributaries flow easterly from the mountains across a high plateau into deep canyon sections where they unite with the Canadian River, which has a southerly flow for about 150 miles to the vicinity of Conchas Dam. All tributaries of the Canadian River are perennial. Mountain elevations range from 7,200 feet to 13,000 feet, with the plateau ranging in elevation from 6,400 feet to 8,000 feet. The area from the plateau to the dam is comprised of ridges, low hills, sandstone-capped high mesas in the northern portion, and rolling hills throughout the southern portion. The Conchas River is the only major stream in the Canadian River watershed that does not originate in the mountains.

The Conchas Project was authorized under provisions of the Emergency Relief Appropriation Act of 1935 and adopted by Congress in the Flood Control Act of 1936. Plans for the Conchas Project are detailed in House Document 308, 74th Congress, 1st Session. Construction of the Project was initiated in December 1935 and completed in September 1939. Operation and maintenance of the Project was assigned to the Corps of Engineers under provisions of the River and Harbor Act of 1938.

The dam provides 529,000 acre-feet of storage capacity and controls runoff from a 7,409 square mile drainage area. The reservoir and project lands are authorized for flood risk management, water supply, and recreation. Environmental stewardship, though not listed as a primary project purpose, is a major responsibility and inherent mission in the administration of federally owned lands. Table 1.3 in the 2022 Conchas Lake Master Plan (USACE 2022) provides information regarding existing reservoir storage capacity at Conchas Lake.

1.2 PURPOSE OF AND NEED FOR THE ACTION

The purpose of the Proposed Action is to ensure that the conservation and sustainability of the land, water, and recreational resources on Conchas Lake are in compliance with applicable environmental laws and regulations and to maintain quality lands for future public use. The 2025 Plan is intended to serve as a comprehensive vegetation management plan with an effective life of approximately 15 years.

The need for the Proposed Action is to identify and implement effective vegetation management strategies that promote the health of upland, wetland, and riparian ecosystems of the USACE-owned land at Conchas Lake.

The following factors may influence reevaluation of management practices:

- Changes in national policies or public law mandates

- Operations and maintenance budget allocations
- Facility and infrastructure improvements
- Cooperative agreements with stakeholder agencies (such as New Mexico Department of Game and Fish [NMDGF], New Mexico State Parks (NMSP), and the U.S. Fish and Wildlife Service [USFWS]) to operate and maintain public lands
- Evolving public concerns

As part of the planning process, the project delivery team evaluated public comments and formulated proposed alternatives. As a result of public coordination and a public information meeting, alternatives were developed, and this EA was initiated.

1.3 SCOPE OF THE ACTION

This EA was prepared to evaluate existing conditions and potential impacts of proposed alternatives associated with the implementation of the 2025 Plan. The alternative considerations were formulated with special attention given to management objectives and treatment and restoration methodologies.

SECTION 2: PROPOSED ACTION AND ALTERNATIVES

The project need is to identify and implement effective strategies that promote the health of upland, wetland, and riparian ecosystems of the USACE-owned land at Conchas Lake.

The objectives for Conchas Lake Vegetation Management Plan include the following:

CN VEGETATION PLAN OBJECTIVES	DESCRIPTION
OBJECTIVE – 1	Preserve the native habitat mosaic that supports the diversity and abundance of native flora and fauna.
OBJECTIVE – 2	Identify and restore disturbed and degraded areas.
OBJECTIVE – 3	Manage the establishment and spread of invasive species and abate noxious weeds and other undesirable flora.
OBJECTIVE – 4	Establish management strategies that reduce the amount of standing dead woody vegetation and provide for firebreaks to help prevent and control the spread of catastrophic wildfires.
OBJECTIVE – 5	Preserve the aesthetic and historic character of the landscaping and viewsheds of the Project Office and Adobe Bell.

In addition to the above objectives, USACE management activities are also guided by USACE-wide Environmental Operating Principles as follows:

USACE Environmental Operating Principles

- Strive to achieve environmental sustainability. An environment maintained in a healthy, diverse and sustainable condition is necessary to support life.
- Recognize the interdependence of life and the physical environment. Proactively consider environmental consequences of USACE programs and act accordingly in all appropriate circumstances.
- Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
- Continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems.
- Seek ways and means to assess and mitigate cumulative impacts on the environment; bring systems approaches to the full life cycle of our processes and work.
- Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work.
- Respect the views of individuals and groups interested in USACE activities; listen to them actively and learn from their perspective in the search to find innovative win-win solutions to the nation's problems that also protect and enhance the environment.

2.1 ALTERNATIVE 1: NO ACTION ALTERNATIVE

The No Action Alternative serves as a basis for comparison to the anticipated effects of the other action alternatives. Under the No Action Alternative, the USACE would not approve the adoption or implementation of the 2025 Plan. Without a strategic plan, invasive species treatments will continue in a non-strategic, sporadic manner, likely occurring in areas where invasive flora already dominates and where mitigating their effects is a priority. The No Action Alternative could prove to be less effective and cost-inefficient compared to having a well-structured vegetation plan. It is anticipated, that under the No Action Alternative, USACE's ability to preserve native habitats, and control noxious weeds would be diminished. The No Action Alternative, while it does not meet the purpose of, or need for, the Proposed Action, serves as a benchmark of existing conditions against which federal actions can be evaluated, and as such, the No Action Alternative is included in this EA, as prescribed by NEPA.

2.2 ALTERNATIVE 2: PROPOSED ACTION

Under the Proposed Action, the 2025 Plan would be implemented following its development, review, and coordination with the public. The keys to this alternative would be adoption of the plan to preserve the native habitat mosaic that supports the diversity and abundance of native flora and fauna, identify and restore disturbed and degraded areas, manage the establishment and spread of invasive species and abate

noxious weeds and other undesirable flora, and to preserve the aesthetic and historic character of the landscaping and viewsheds of the Project Office and Adobe Bell.

The primary invasive species occurring at the Project is saltcedar (*Tamarix spp.*). Of secondary concern are other woody invasive species Siberian Elm (*Ulmus pumila*) and Russian olive (*Elaeagnus angustifolia*). Additionally, the invasive annual tumbleweed (Russian thistle, *Salsola tragus*) heavily infests the lake shorelines and disturbed areas, and is a major management concern.

The various treatments and control methods proposed to be implemented are as follows:

Treatment Methods	Description of Treatment Methods
Manual Removal	Immature plants (about two feet tall or less) can be controlled by hand removal, hoeing, or digging. Manual removal can be used to target individual plants in relatively small areas. A shovel or hoe is more commonly used to remove layered roots from the soil.
Low Volume Basal Bark Herbicide Application	Basal bark herbicide application is a technique used to control woody plants and trees by applying herbicide directly to the bark. This method can be effective without cutting or felling plants. Saplings and regrowth can be controlled by basal bark herbicide application of herbicide with triclopyr as an active ingredient.
Cut-Stump Herbicide Application	The cut-stump methodology will be applied to large trees with thick bark. The cut-stump methodology involves a combination of cutting and herbicidal treatment to achieve "root kill." This involves cutting the trunk just above the ground with a chainsaw, handsaw, or loppers and immediately applying an amine formulation mixed with an herbicide with a triclopyr, glyphosate, or imazapyr active ingredient.
Foliar Application	The foliar methodology involves applying herbicide directly to the leaves of the plants, including seedling, sapling, or regrowth less than 3-inches in diameter and less than 6 to 8 feet tall. Equipment used for foliar application include backpack sprayers, handheld sprayers, or boom sprayers for larger areas.
Mechanical Removal	Mechanical methods for treating invasive vegetation range in scale from individual plant excavation to broad scale clearing. These methods are often applied repeatedly for optimal results. Suggested mechanical treatment options are discussed below including, excavating, mulching, grubbing, root plowing and raking.
Burn Treatment and combinations with other Alternative Methods	Burn treatment (prescribed burning) is a technique that involves the intentional use of fire under controlled conditions to manage landscapes. This methodology is effective for reducing fuel loads, controlling invasive species, promoting native plant regeneration, and maintaining healthy ecosystems. Other treatment types include a combination of control methods listed previously, and burn treatment.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION

Other alternatives to the Proposed Action were initially considered as part of the scoping process for this EA. However, none met the purpose of, and need for, the Proposed Action or the current USACE regulations and guidance. Furthermore, no other alternatives addressed public concerns. Therefore, no other alternatives are being carried forward for analysis in this EA.

SECTION 3: AFFECTED ENVIRONMENT AND CONSEQUENCES

This section of the EA describes the natural and human environments that exist at the project and the potential impacts of the No Action Alternative (Alternative 1) and Proposed Action (Alternative 2) outlined in Section 2.0 of this document. Only those issues that have the potential to be affected by these alternatives are described). Some topics are limited in scope due to the lack of direct effect from the Proposed Action on the resource, or because that particular resource is not located within the project area. For example, no body of water in the Conchas Lake watershed is designated as a Federal Wild or Scenic River, so this resource will not be discussed.

Impacts (consequences or effects) of the proposed action can be either beneficial or adverse and can be either directly related to the action or indirectly caused by the action. Direct effects are caused by the action and occur at the same time and place (40 CFR § 1508.1(i)(1)). Indirect effects are caused by the action and are later in time or further removed in distance but are still reasonably foreseeable (40 CFR § 1508.1(i)(2)). As discussed in this section, the alternatives may create temporary (less than one year), short-term (up to three years), long-term (three to ten years), or permanent effects, following implementation of the 2025 Plan.

3.1 WATER RESOURCES

Surface Water:

Conchas Lake is located on the Canadian River, just below its confluence with the Conchas River in San Miguel County in northeastern New Mexico. The lake is supplied mainly by runoff that flows in from the Canadian River and snow melt off of the adjacent mountains where the headwaters originate. The Canadian River basin upstream of Conchas Lake drains approximately 7,409 square miles. The lake's top of conservation pool capacity is 529,000 acre-ft., and covers the area of 119,259,794 square feet. Fluctuation within the conservation pool depends upon the rate of withdrawals for water supply and irrigation by the water district, as well as inflows and evaporation.

Hydrology:

An additional benefit from Conchas Lake is the utilization of water impounded to provide municipal and industrial water supplies to the community of Conchas Lake. The Bureau

of Reclamation and Arch Hurly Conservancy Districts own all rights to conservation storage between 4201 ft and 4155 ft NGVD29.

The dam has an emergency spillway on the north side of the dam that is 3,000 feet long. The dam has nine intake structures. The dam has six discharge gates/conduits that are 4 ft. by 5 ft.

Water Quality:

Surface Water Quality Bureau (SWQB) New Mexico Environment Department sets and implements standards for surface water quality to improve and maintain the quality of water in the state based on various beneficial use categories for the water body. The 2010 Water Quality Survey Summary for the Canadian River and Select Tributaries Report, pursuant to the Clean Water Act Sections 305(b) and 303(d), evaluates the quality of surface waters in New Mexico and identifies those that do not meet uses and criteria defined in the New Mexico Surface Water Quality Standards. Impaired waters are then identified, along with impairment descriptions, on the 303(d) list.

Water quality sampling in Chicorica Creek (Canadian River headwaters), Conchas River (Conchas Lake to headwaters), and Ute Creek (Ute Reservoir to headwaters) found no exceedance of applicable water quality criteria. For more information regarding water quality at Conchas Lake, please refer to Section 2.2.8 and Appendix E of the 2022 Conchas Lake Master Plan.

Wetlands:

Waters of the United States are defined within the Clean Water Act (CWA), and jurisdiction is addressed by the USACE and United States Environmental Protection Agency (USEPA). Wetlands are a subset of the waters of the United States that may be subject to regulation under Section 404 of the CWA (40 CFR 120.2(a)(4)). Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

As a result of the topography of the region for Conchas Lake, wetlands generally occur near the rivers and within areas with low topographic relief. See Table 1 for a list of acreages for various types of wetlands present at Conchas Lake and Figure 1 for a map of wetlands. Wetland classifications presented are derived from the USFWS Trust Resource List generated using the Information, Planning, and Conservation System decision support system (USFWS 2024).

Table 1: Wetland Resources

Wetland Types	Total Acres
Lacustrine Limnetic Open Water	606.67
Lacustrine Littoral Open Water	559.28
Lacustrine Open Water	29.47
Palustrine Open Water	3.42
Riverine	1.98

Note: Acreages from the USFWS website do not match exactly with the USACE digitized acreages.

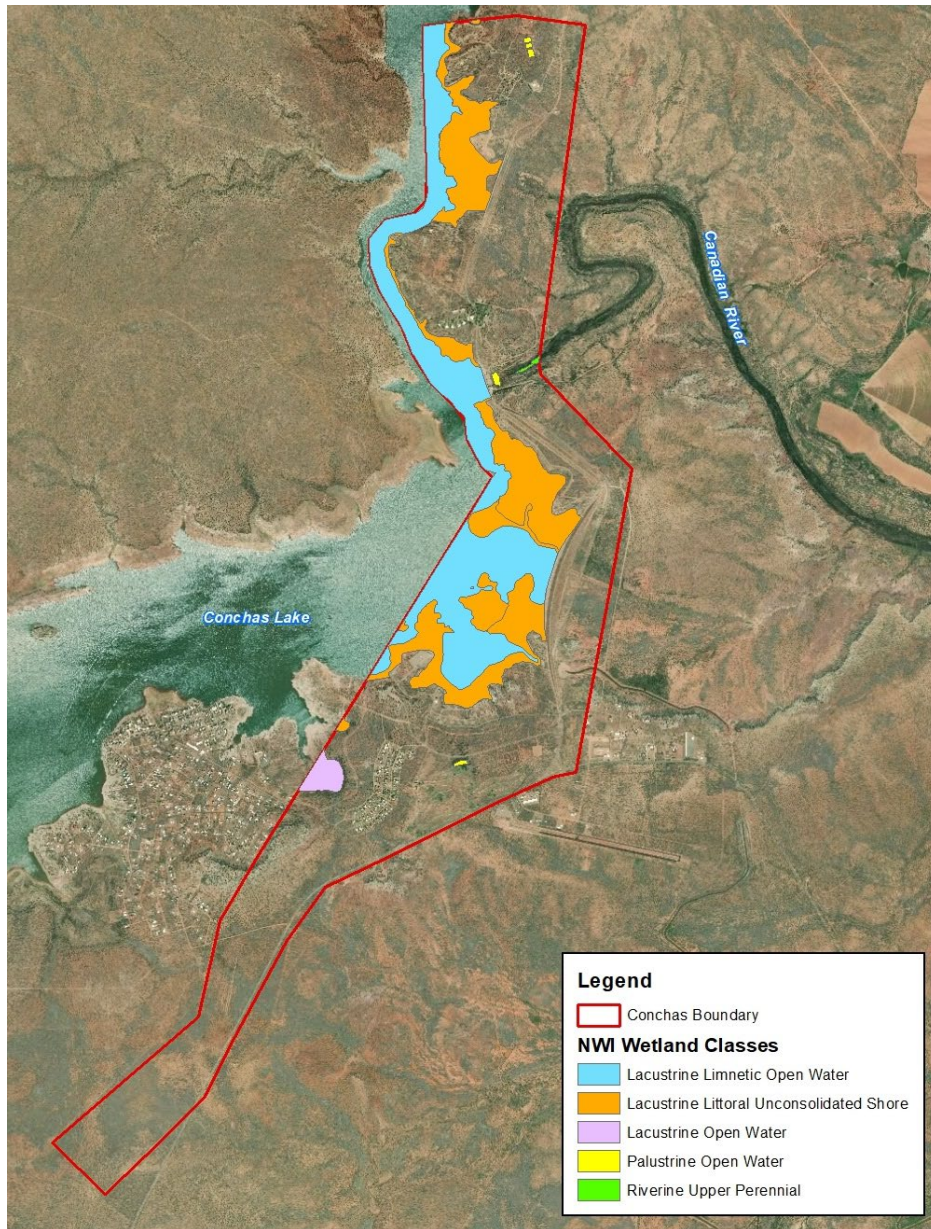


Figure 1 Map of Wetlands within USACE Conchas Lake Federal Property

3.1.1 Alternative 1: No Action Alternative

The No Action Alternative means that a Vegetation Management Plan will not be implemented. However, this does not imply that invasive species management efforts at the lake will cease. Without a strategic plan, invasive species treatments will continue in a non-strategic, sporadic manner, likely occurring in areas where invasive flora already dominates and where mitigating their effects is a priority. A No Action Alternative could prove to be less effective and cost-inefficient compared to having a well-structured

vegetation plan. There would be minor long-term adverse impacts on water resources and water quality as a result of implementing the No Action Alternative, since vegetation management of invasive species such as saltcedar, Russian olive, and Russian thistle would not occur in a strategic, consistent manner. Invasive plant species can change water use of an area by increasing or decreasing demands for water use; altering rooting zone depth as invasive species often have shallower root systems than native vegetation; and shifting the season of water use earlier in the season as is the case in displacement of perennial native species by annual invaders (Levine et al. 2002).

3.1.2 Alternative 2: Proposed Action

The Proposed Action would allow a coordinated approach to invasive species management and would have direct, short- and long-term, direct and indirect beneficial effects on wetlands and water resources. The Plan intends to utilize an adaptive management approach designed to preserve the biological diversity of native plant communities associated with wetlands through prevention, containment, and control of invasive plants. Promoting restoration and protection of wetlands through educational, preventative, and collaborative efforts would strive to reduce the introduction and proliferation of invasive vegetation at the Project and would result in long-term beneficial effects to wetlands and water resources. Wetlands have been susceptible to invasive vegetation and Project staff would work to control nonnative plant species where they occur. Particular species such as saltcedar, Russian olive, and Siberian elm that occur in or adjacent to wetlands would be treated manually or with herbicides that are specifically approved by label for use near water and wetlands.

These activities include manual and mechanical control, use of approved chemical herbicides, and restoration. Proposed invasive plant control efforts under the Preferred Alternative would have some effects on wetlands and water resources in the following ways:

Mechanical Treatments:

Manual and mechanical removal of individual invasive plants would create localized ground disturbances from hand pulling or use of hand tools for individual plants. Such localized ground disturbances could expose earth material, and the potential exists for material to run off into surface waters. Foot and equipment access away from roads and trails would be minimized and would cause some disturbance to wetlands. Impacts to wetlands and water quality would be short-term, minor, and adverse.

Chemical Treatments:

Localized use of limited approved herbicides for invasive plants within wetlands and near Project waters would leave some ingredients on the ground due to some drift effect. The Preferred Alternative could incidentally allow for such ingredients to run off into surface waters. Potential impacts would be minimized due to use of aquatic

approved herbicides below the ordinary high water mark. Impacts to wetlands and water quality would be short-term, minor, and adverse.

3.2 CLIMATE

Conchas Lake lies in a semiarid region of the southwest United States. Summer temperatures are generally hot during the day and warm at night, while winter temperatures are generally cold, including freezing temperatures and some nights below 0 degrees Celsius (C°). Sub-zero temperatures are very rare. While the mean annual temperature is about 59 degrees Fahrenheit (°F), the maximum recorded temperature was 114 °F in June 1998, and the minimum recorded temperature was -20 °F in January 1963. The growing season between killing frosts is normally from mid-April to late-October. For more detailed information, see Section 2.1.2 of the 2022 Conchas Lake Master Plan.

3.2.1 Alternative 1: No Action Alternative

The No Action Alternative does not involve any activities that would contribute to changes in existing conditions. There would be no impacts on climate as a result of implementing the No Action Alternative.

3.2.2 Alternative 2: Proposed Action

The development and implementation of the 2025 Conchas Lake Vegetation Management Plan would have no impact on the climate of the study area, nor would the 2025 Plan be affected by future changing conditions.

3.3 AIR QUALITY

Air Quality is defined by the concentration of various pollutants in the atmosphere at a given location. The Clean Air Act addresses six pollutants defining air quality, called “criteria pollutants”. Such type of emissions would be limited and temporary. For conducting routine operations and maintenance activities at Conchas Lake, USACE will comply with all Federal, state, and local laws governing air quality and will implement best management practices (BMPs) to protect air quality.

Existing operation and management of Conchas Lake is compliant with the Clean Air Act and would not change with implementation of the 2025 Plan. Because the project area does not take place in an air quality designated nonattainment or maintenance areas, a General Air Conformity Analysis and Determination is not required.

3.4 TOPOGRAPHY, GEOLOGY, AND SOILS

Topography and Geology:

Most of the rocks surrounding Conchas Lake belong to the Upper Triassic Chinle Group. The Chinle Group consist of alternating layers of red to brown to marron to gray mudstone, siltstone, and sandstone that were deposited in continental fluvial and lacustrine environments about 220 million years ago. Rocks of the Chinle Group were deposited by a river system that flowed from central Texas to central Nevada. Channel deposits of gravel and sand derived from the glaciated terrains in the Sangre de Cristo Mountains during the Pleistocene are found along the Canadian River above and below the dam (Spiegel, 1972a, b, c).

Soils:

There are five major soil types occurring within the operations and management easement of the Conchas Lake, excluding areas inundated by water and the dam footprint. The most abundant soil types in the Project easement are Conchas-Latom association and Latom-Newkirk-Rock outcrop association. These two soil types combined encompass 2,191.84 acres (72%) of Project lands. For a visual representation of where these soils can be found, please see the below Figure 2, and for a more detailed discussion, see Section 3.3 in the 2025 Plan.

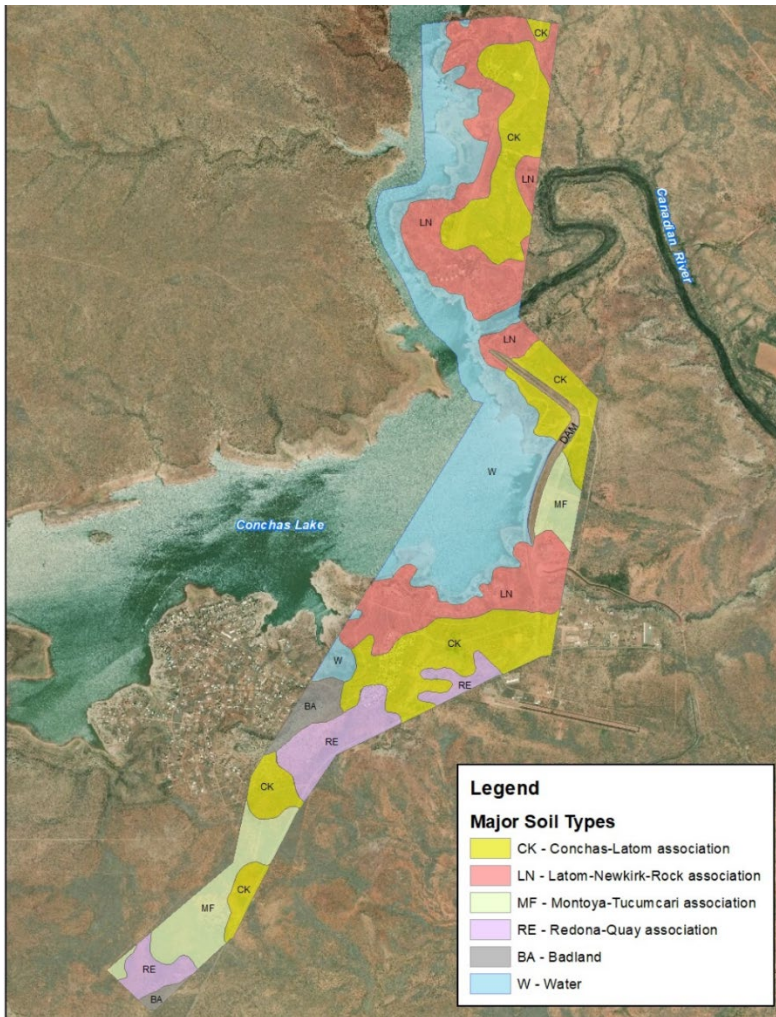


Figure 2: Map of Soils within USACE Conchas Lake O&M Easement

3.4.1 Alternative 1: No Action Alternative

While the No Action Alternative does not involve any activities that would directly contribute to changes in existing conditions of soil composition, moderate, long-term, adverse impacts are expected due to lack of effective management and control of invasive species. In particular, saltcedar infestations are likely to increase soil salinity, leading to a loss of biodiversity of soil and vegetation communities and potential changes in ecosystem function.

3.4.2 Alternative 2: Proposed Action

Short-term impacts to soils from the implementation of the preferred alternative are expected to be direct, minor, and adverse primarily due to the localized impacts of mechanical treatments and restoration activities that could produce soil erosion. These impacts would be minimized through use of BMPs for erosion and sediment control,

such as silt fences, check dam, wattles, erosion control blankets, mulch, stabilized equipment entrances/exits, or other appropriate methods. All BMPs would be inspected and maintained to ensure they remain securely in place and removed only after native vegetation is established and the risk of erosion is minimized.

Long-term soil impacts are expected to be major and beneficial, since the Proposed Action is expected to lead to improved soil structure and other benefits to soil integrity. The greatest amount of invasive plant populations are expected to be treated and native plant populations restored under this alternative, resulting in indirect benefits to the soil resource from increased soil productivity and stability, and decreased salinity of the soil. Cumulative impacts would be negligible when considered in the context of ongoing disturbances in and around the Project.

3.5 NATURAL RESOURCES

Operational civil works projects administered by USACE are required, with few exceptions, to prepare an inventory of natural resources. The basic inventory required is referred to within USACE regulations (ER and EP 1130-2-540) as a Level One Inventory. This inventory includes the following: vegetation in accordance with the National Vegetation Classification System through the sub-class level; assessment of the potential presence of special status species, including, but not limited to, federal and state listed endangered and threatened species, migratory species, and birds of conservation concern listed by the USFWS; land (soils) capability classes in accordance with Natural Resources Conservation Service (NRCS) soil surveys; and wetlands in accordance with the USFWS Classification of Wetlands and Deepwater Habitats of the United States, which are previously discussed in Section 3.2.

Fisheries and Aquatic Wildlife Resources:

Conchas Lake provides habitat for an abundance of fish and aquatic wildlife species. The lake provides a quality fishery, as well as quality aquatic habitat on public land associated with the project. Common sport fish species present in Conchas Lake include largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), white crappie (*Pomoxis annularis*), channel catfish (*Ictalurus punctatus*), and walleye (*Sander viterus*). Other aquatic organisms include Boreal Chorus Frog (*Pseudacris maculata*), Bullfrog (*Lithobates catesbeianus*), Plains Leopard Frog (*Lithobates blairi*), New Mexico Spadefoot (*Spea bombifrons*), Smooth softshell turtle (*Trionyx muticus*), Sonoran mud turtle (*Kinosternon sonoriense*) and Tiger salamander (*Ambystoma tigrinum*).

Terrestrial Wildlife Resources:

Conchas Lake provides habitat for an abundance of terrestrial wildlife species, including game and non-game species, resident and migratory waterfowl, resident and migratory songbirds, reptiles, and insects. The area offers a mixture of geologic features, riparian forest, grasslands, springs, and river habitats, which support elk (*Cervus canadensis*),

mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), and foxes (gray fox (*Urocyon cinereoargenteus*), red fox (*Vulpes vulpes*), and swift fox (*Vulpes velox*)). Please refer to Section 2.2.3 of the 2022 Conchas Lake Master Plan for more detailed information.

3.5.1 Alternative 1: No Action Alternative

There would be minor long-term adverse impacts on wildlife as a result of implementing the No Action Alternative, given that vegetation management of invasive species such as saltcedar, Russian olive, and Russian thistle would not occur in a strategic, consistent manner, leading to the degradation of habitat and forage.

3.5.2 Alternative 2: Proposed Action

Under the Proposed Action, it is anticipated that wildlife will experience some form of disturbance during invasive species removal efforts. Organisms would be displaced from inside of the salt cedar stand and would most likely relocate to adjacent vegetated areas that would not be affected. Since the area would be treated over multiple growing seasons, this would allow wildlife to use the areas not being worked in during the opposite season.

The disturbance would force some avian species, which use saltcedar vegetation, into adjacent habitats. This disturbance would occur outside the migratory and breeding seasons, thereby avoiding impacts to nesting migratory bird species.

Small mammal population monitoring in restored riparian areas where disturbance also occurred indicates that these populations quickly recolonize disturbed areas, responding to early herbaceous plant community establishment resulting from local precipitation events (Taylor, 1999). Early successional vegetation germinating after local precipitation events would favor a larger ground-feeding guild of birds in the disturbed area. Animals that have migrated to other areas adjacent to the salt cedar would also return once vegetation resprouts.

Therefore, it is estimated that the long-term benefits to wildlife would outweigh the initial impacts of the Proposed Action. The short-term effects of the Proposed Action will cause significant changes in vegetative habitat, by potentially harming native vegetation during mechanical and manual removal as well as herbicide drift that could affect non-target species. However, natural and planned revegetation of the area will provide improved future habitat, enhance native vegetation growth, and mitigate for the effects in the long-term.

3.6 THREATENED AND ENDANGERED SPECIES

The Endangered Species Act was enacted to provide a program for the preservation of endangered and threatened species and to provide protection for the ecosystems upon which these species depend for their survival. All federal agencies are required to implement protective measures for designated species and to use their authorities to

further the purposes of the Endangered Species Act. The Secretary of the Interior and the Secretary of Commerce (marine species) are responsible for the identification of threatened or endangered species and development of any potential recovery plan.

USFWS is the primary agency responsible for implementing the Endangered Species Act and is responsible for birds and other terrestrial and freshwater species. USFWS responsibilities under the Endangered Species Act include (1) the identification of threatened and endangered species; (2) the identification of critical habitats for listed species; (3) implementation of research on, and recovery efforts for, these species; and (4) consultation with other federal agencies concerning measures to avoid harm to listed species.

An endangered species is a species officially recognized by USFWS as being in danger of extinction throughout all or a significant portion of its range. A threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. USFWS also identifies species that are candidates for listing as a result of identified threats to their continued existence. The Candidate designation includes those species for which USFWS has sufficient information to support proposals to list as endangered or threatened under the Endangered Species Act; however, proposed rules have not yet been issued because such actions are precluded at present by other listing activity. Proposed species are those candidate species that are found to warrant listing as either threatened or endangered. Although not afforded protection by the Endangered Species Act, candidate and proposed species may be protected under other federal or state laws. Species may be considered eligible for listing as endangered or threatened when any of the five following criteria occur: (1) current/imminent destruction, modification, or curtailment of their habitat or range; (2) overuse of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; and (5) other natural or human-induced factors affecting their continued existence.

There are three federally listed or proposed threatened and endangered species that could occur within USACE Conchas Lake federal fee-owned property as identified in the USFWS Information, Planning, and Conservation (IPaC) Report Official Species List (USFWS, 2025). A list of these species is presented in Table 2. A listed endangered plant, Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) only occurs in the Sangre de Cristo Mountains and is not included in this table. No Critical Habitat has yet to be designated within or near Conchas Lake. The species identified as threatened, endangered or candidate species by New Mexico Department of Game and Fish (NMDGF) that are not federally listed are discussed below (3.6.1 State-Listed Plant and Animal Species). The USFWS (2025) IPaC and NM Environmental Review Tool (NMDGF 2025) reports are provided in Appendix A.

Table 2: Federal and State Listed Endangered and Threatened Species with Potential to Occur at Conchas Lake.

Common Name	Scientific name	Federal Status*	State Status*
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T	
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E	E
Yellow billed Cuckoo**	<i>Coccyzus americanus</i>	Western population (T) range does not include Conchas Lake	SGCN
Monarch Butterfly	<i>Danaus plexippus</i>	Proposed Threatened	
Bald Eagle	<i>Haliaeetus leucocephalus</i>	BGEPA & MBTA	T
Golden Eagle	<i>Aquila chrysaetos</i>	BGEPA & MBTA	
Peregrine Falcon	<i>Falco peregrinus</i>	MBTA	T
Grey Vireo	<i>Vireo vicinior</i>	MBTA	T
Least shrew	<i>Cryptotis parva</i>		T
Plainbelly water snake	<i>Nerodia erythrogaster</i>		E
Western ribbon snake	<i>Thamnophis proximus</i>		T

* E – Endangered, T – Threatened, P – Proposed, C – Candidate, MBTA – Migratory Bird Treaty Act, BGEPA – Bald & Golden Eagle Protection Act, SGCN – Species of Greatest Conservation Concern.

**Yellow-billed cuckoos in the Conchas Lake area are the Eastern population. Source: USFWS 2025 and NMDGF 2025

The Mexican Spotted Owl (*Strix occidentalis lucida*) is an ashy-chestnut brown color with white and brown spots on their abdomen, back and head. They have dark eyes, brown tails marked with thin white bands. They lack ear tufts. Spotted owls are residents of old-growth or mature forests with high canopy closure and uneven age structure or complex, multi-storied levels. Canyons with riparian or conifer communities are also important habitats for the owl. Spotted owls are also found in canyon habitat dominated by vertical-walled rocky cliffs, where rock walls with caves, ledges, and other areas provide protected nest and roost sites. Critical habitat for the species is scattered throughout New Mexico, Arizona, Utah, and Colorado. The main threat for this species is stand-replacing wildland fire. Due to this species' dependence on mature forest or canyon habitats, the likelihood of occurrence within USACE Conchas Lake federal fee-owned property is highly unlikely.

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is a light-colored bird usually a little less than 6 inches in length. Its body is brownish-olive to light gray-green. Its throat is whitish, the breast is pale olive, and belly yellowish. It lacks the light-colored wingbars that many flycatchers have. It is best identified by its vocalizations. Call is a liquid, sharply whistled whit. Or a dry sprrit; song is a sneezy whit-pew or fitz-bew. The species breeds in relatively dense riparian tree and shrub communities while wintering in brushy savanna edges, second growth, shrubby clearings and pastures, and woodlands near water. The species is listed as endangered due to the destruction and modification of riparian habitats. This species is unlikely to occur on federally fee-owned property at Conchas Lake due to lack of suitable habitat.

The Yellow-billed cuckoo (*Coccyzus americanus*) is a riparian obligate species and is migratory, wintering in South America. The cuckoo requires dense riparian vegetation for nesting, and the species' decline is primarily the result of riparian habitat loss and degradation. The Western Distinct Population Segment of the Yellow-billed Cuckoo was federally listed as threatened in 2014; critical habitat was designated that year and subsequently revised. Detailed information about the cuckoo is available on the USFWS species page: <https://ecos.fws.gov/ecp/species/3911> However, cuckoos that occur in the area around Conchas Lake would belong to the Eastern population; see <https://www.bison-m.org/SpeciesBooklet.aspx?SpeciesID=040251>.

Adult monarch butterflies (*Danaus plexippus*) are conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic. During the breeding season, monarchs lay their eggs on their milkweed host plants (*Asclepias* species), and larvae emerge after two to five days. Larvae develop over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks.

In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 3,000 km and last for over two months. Overwintering adults enter into a state of suspended reproduction and live six to nine months. In early spring (February-March), surviving monarchs mate at the overwintering sites before dispersing. Their offspring begin the migration back north. Monarchs are widespread and could potentially occur at Conchas Lake.

The federally and endangered spikedace (*Meda fulgida*) and loach minnow (*Tiaroga cobitis*, synonym *Rhinichthys cobitis*) were listed by the New Mexico Environmental Review Tool as potentially occurring within 1 mile of the project area. However, these two fish occur only in streams in the Gila River drainage; therefore, they are not discussed here.

3.6.1 State-Listed Plant and Animal Species

Two State agencies have primary responsibility for the protection of animal and plant species in New Mexico. The New Mexico Department of Game and Fish (NMDGF), under the authority of the New Mexico Wildlife Conservation Act, maintains a list of animal species whose prospects of survival or recruitment in New Mexico are in jeopardy. The New Mexico Energy, Minerals, and Natural Resources Department maintains a list of state-endangered plant species protected under state law (see Section 75-6-1 NMSA 1978) and regulation (see NMFRCD Rule No. 91-1).

Within the Conchas Lake federal fee-owned property, there are three bird species listed that might occur: the Bald Eagle (*Haliaeetus leucocephalus*), American Peregrine Falcon (*Falco peregrinus anatum*), and the Baird's Sparrow (*Ammodramus bairdii*).

The Bald Eagle was removed from the federal endangered species list in 2007 but was listed by New Mexico in 1976 and remains in need of conservation action in the state, primarily due to small breeding populations. In New Mexico, nests are placed in large cottonwoods or ponderosa pines in the vicinity of water. This species is unlikely to nest in the project area but may use this area for foraging.

The American Peregrine Falcon breeds in New Mexico and supports migrating pairs that breed outside the state. Breeding pairs breed locally in mountains and river canyons of western New Mexico east to the Sangre de Cristo, Sandia/Manzano and Sacramento mountains. The species is a rare winter visitor in lowlands statewide. Peregrine Falcons pass through the state on migration from March-May and July-November. This species would be a rare sight at Conchas Lake.

The Gray Vireo is strongly associated with pinon-juniper and scrub-oak habitat across its breeding range in the southwestern United States and northern Mexico. In New Mexico, Gray Vireo are locally distributed across the western two-thirds of the state. Gray Vireo arrive in New Mexico from mid to late- April, and generally depart by mid-August. This species may travel through the Conchas Lake lands but is not expected to breed or nest in this area.

The Least Shrew (*Cryptotis parva*) is a small (10 cm long) shrew that is widely distributed from the eastern U.S. west to Colorado and New Mexico and from southeastern Ontario, Canada to the southernmost U.S. In New Mexico, they are found primarily in mesic areas with dense grass cover. Habitats for the shrew include freshwater emergent marsh, wet meadows and playas as well as ephemeral marches. Least shrews are not currently known to occur in San Miguel County. For detailed information see: <https://www.bison-m.org/SpeciesBooklet.aspx?SpeciesID=050705>.

The Plainbelly Watersnake, also known as Yellow-bellied Watersnake, is an aquatic snake, swimming and diving with ease, and seeking its prey in water. The Plainbelly watersnake is very rare and listed as endangered by the State of New Mexico. In New Mexico, it is confined to areas of permanent water including ponds, streams, and rivers.

This snake often hides under rocks or other objects during the day and becomes active at night. The young tend to occupy areas of shallower water than the adults, including in inlets of small streams. It is not known to occur in San Miguel County. For additional information see: <https://www.bison-m.org/SpeciesBooklet.aspx?SpeciesID=030400>.

The Arid Land Ribbonsnake ranges from the southern Great Lakes region to the tropics but is known from only two areas in New Mexico and is listed as endangered by the State. Favored habitats in New Mexico center on streams, ponds, marshes, and even some stock tanks. Vegetation in preferred habitat areas consists of riparian and emergent aquatic types, including willows, cattails, and bulrushes. The species forages in the water and on the adjacent land. It is not known to occur in San Miguel County. For information see: <https://www.bison-m.org/SpeciesBooklet.aspx?SpeciesID=030385>.

3.6.2 Alternative 1: No Action Alternative

Because there is low probability for Federal and State threatened and endangered species to occur at Conchas Lake there would be no major, long-term adverse effects expected under the No Action Alternative. However, minor, long-term adverse effects would be expected since vegetation management of invasive species such as tamarisk, Russian olive, and Russian thistle would not occur in a strategic, consistent manner, leading to the degradation of potential habitat and forage for threatened and endangered species.

3.6.3 Alternative 2: Proposed Action

Under the Proposed Action, implementation of a vegetation management program at Conchas Lake would help maintain and restore potential habitat for threatened and endangered species. Since USACE plans to implement BMPs under the Migratory Bird Treaty Act, short-term impacts from invasive species control would be avoided. Additionally, invasive species control work in sensitive areas would be primarily manual, individual plant treatments rather than mechanical. Long-term, major beneficial effects would be expected because the natural and planned revegetation of the invasive species treatment areas will provide future habitat for threatened and endangered species and species of conservation need.

3.7 INVASIVE SPECIES

Please refer to section 3.4.5 of the Plan for existing information on invasive species within the USACE fee owned boundary at Conchas Lake.

3.7.1 Alternative 1: No Action Alternative

Under the No Action Alternative, moderate to major, long-term adverse effects would be expected since vegetation management of invasive species such as tamarisk, Russian

olive, and Russian thistle would not occur in a strategic, consistent manner, resulting in the degradation of native habitat over time.

3.7.2 Alternative 2: Proposed Action

Under the Proposed Action, implementation of a strategic vegetation management program at Conchas Lake would reduce invasive species and restore native habitats. Therefore, long-term, major beneficial effects would be expected as a result of implementing the Proposed Action.

3.8 CULTURAL, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES

Cultural Resources at Conchas Lake:

As with most Corps lakes, Conchas Lake contains a large number of significant archaeological resources representing thousands of years of human occupation. In addition to archaeology, however, some of the most significant historic properties at Conchas include Corps facilities themselves. The Conchas Dam Historic District is listed on the National Register of Historic Places (NRHP), and other elements of the built environment (such as Conchas Lodge) are historically significant as well. As a Federal agency, numerous laws, regulations, and policies govern Corps management of cultural resources and historic properties. Compliance with Section 106 of the National Historic Preservation Act (NHPA) in conducting routine operations and maintenance undertakings at Conchas Lake (as well as other facilities in New Mexico and Colorado) is currently governed by a programmatic agreement (PA) between the Albuquerque District, the State Historic Preservation Officers (SHPOs) of New Mexico and Colorado, and the Tribal Historic Preservation Officer (THPO) of Santa Ana Pueblo.

Archaeological Background:

With the exception of areas that were inundated at the time of survey, all Corps fee land at Conchas Lake has been subjected to intensive archaeological survey in recent years, most recently a survey of the South Side Campground (Turnbow and Cribbin 2008), and a recent survey of 1,899 acres (Brown 2015). A total of 65 archaeological sites have been identified on Corps fee land. These include both prehistoric sites dating over the span of several thousand years, and post-contact and historic sites including sites associated with the construction of Conchas Dam itself. In addition, numerous archaeological sites are located on Corps easement lands. All of these sites have the potential to be impacted by Corps actions, and those impacts must be considered in any Corps undertaking.

Culture History:

Conchas Dam is located at the confluence of the Canadian and Conchas Rivers and prehistoric and historic peoples have used these easterly flowing rivers as routes between the Rio Grande and the Plains for thousands of years. In general, the

archaeological chronology can be divided into four major time periods: Paleoindian, Archaic, Ceramic, and Historic. A summary of the archaeological and cultural history of the area may be found in the Plan.

Built Environment and Historic Properties:

In addition to the 65 archaeological sites on Corps fee land and numerous sites within easements, Conchas Lake contains and manages a number of significant historic properties, including some constructed by the Corps itself: namely, the Conchas Dam Historic District (including the Dam itself, as well as the administration area and Adobe Belle housing units) and the Conchas Lodge. In addition, key historic properties located outside of fee land but within Corps easements include two historic cemeteries.

The Conchas Dam Historic District: Birthplace of the Albuquerque District

Conchas Dam was one of a number of Depression-era New Deal projects completed in New Mexico and was the birthplace of what became the Albuquerque District of the Army Corps of Engineers. Supported by Governor Clyde Tingley, the project started in 1935 under Roosevelt's Emergency Relief Appropriation Act of 1935. Captain Hans Kramer of the Corps, relying on 90% of his employees coming from relief roles, most without construction skills, was in charge of all facets of the project. Construction was completed in 1939.

Together, the dam, including all associated earthworks and other components, and the administration area, including the administration building and the Adobe Belle housing units, form the Conchas Dam Historic District. This district was listed on the State Register of Cultural Properties on April 7, 2000 (HPD No. 1791) and on the National Register of Historic Places on May 22, 2005 (NMHPD 2006; Schelberg and Stone 2005; Schelberg and Everhart 2000). A preservation and maintenance plan for the Conchas Project Office/Administration Building and the associated residence housing was prepared for the Corps by Van Citters (2001). The District is eligible for National Register listing based on its association with the numerous programs of the New Deal, as well as for its significant and distinctive engineering, construction methods, and architecture. In addition, the high artistic value of two paintings by Odon Hullenkremer, funded by the WPA Federal Art Project and housed in the administration building, contribute to the District's eligibility and significance.

3.8.1 Alternative 1: No Action Alternative

There would be no major adverse impacts on cultural resources as a result of implementing the No Action Alternative, as there would be no changes to the existing management of cultural resources which is compliant with Section 106 of the NHPA. However, lack of strategic and consistent removal of invasive species could lead to long-term negative moderate or major impacts to the historic landscape as a result of implementing the No Action Alternative.

3.8.2 Alternative 2: Proposed Action

The Proposed Action would result in **no adverse effect** to historic properties at Conchas Lake. All individual Corps undertakings at Conchas Lake are subject to compliance with Section 106 of the NHPA; Section 106 compliance for routine undertakings at Conchas is currently governed by a PA as noted above. The Plan considers the presence or absence of historic properties in each of the management units described in detail, including maps with polygons showing the current extent of proposed treatments. The majority of these areas considered in detail do not intersect with known boundaries of archaeological sites or other historic properties, and the Plan includes restrictions on proposed methods in locations where cultural resources concerns may exist, including Environmentally Sensitive Areas. Given these considerations, and stipulating that management activities would follow these restrictions and best practices, the Corps determines that this Plan would result in **no adverse effect** to historic properties. The Corps consulted with Tribes who have interests in the area, and did not receive any Tribal concerns regarding the 2025 Plan. The New Mexico State Historic Preservation Officer concurred with this determination on 27 November 2024 (HPD Log # 123954). Copies of Section 106 consultation letters are found in Appendix A.

3.9 SOCIOECONOMICS

The zone of interest for this socioeconomic analysis includes the counties of San Miguel, Mora, and Harding. This northeastern New Mexico-county region, where the most impacts would be expected, has been utilized as the basis in summarizing the population characteristics of Conchas Lake. The population, education level, employment rates, income, and household characteristics of the area are discussed in detail in Section 2.4 of the 2022 Conchas Lake Master Plan.

Existing Environment

Consideration of socioeconomic concerns for the Conchas Vegetation Management Plan is based on U.S. Census, environmental and demographic data. The counties surrounding Conchas Lake (San Miguel, Mora, Guadalupe, Quay and Harding Counties) are all facing challenges from changing conditions and existing realities. In addition to having a high percentage of households with income less than or equal to twice the federal poverty level, these counties are at risk of agriculture loss and wildfire, experience high rates of diabetes and/or heart conditions, face challenges with legacy pollution, have high costs and time spent on transportation, and high costs of energy relative to household income.

3.9.1 Alternative 1: No Action Alternative

Under the No Action Alternative, USACE would continue to manage Conchas Lake natural resources as set forth in the 2022 Conchas Lake Master Plan. There would be no major adverse long-term impacts on socioeconomic resources. In addition to

camping in campgrounds, many visitors purchase goods such as groceries, fuel, and camping supplies locally, eat in local restaurants, stay in local/regional hotels and resorts, and shop in local retail establishments. These activities would continue to bring revenues to local companies, provide jobs for local residents, and generate local and state tax revenues. There would be no disproportionately high or adverse impacts on low-income populations or children with the implementation of the No Action Alternative.

3.9.2 Alternative 2: Proposed Action

Under the Proposed Action, USACE would continue to manage Conchas Lake natural resources as set forth in the 2022 Conchas Lake Master Plan. There would be no major adverse long-term impacts on socioeconomic resources. In addition to camping in campgrounds, many visitors purchase goods such as groceries, fuel, and camping supplies locally, eat in local restaurants, stay in local/regional hotels and resorts, and shop in local retail establishments. These activities would continue to bring revenues to local companies, provide jobs for local residents, and generate local and state tax revenues. There would be no disproportionately high or adverse impacts on low-income populations or children with the implementation of the Proposed Action.

3.10 AESTHETIC RESOURCES

Conchas Lake is known for its geological history at the dam and its secluded coves and sandy beaches, as well as the excellent fishing, boating, biking, and camping opportunities. Conchas Lake proper and surrounding federal lands also offer public, open space value and scenic water vistas that are unique in the region.

3.10.1 Alternative 1: No Action Alternative

Under the No Action Alternative, moderate to major, long-term adverse effects would be expected since vegetation management of invasive species such as tamarisk, Russian olive, and Russian thistle would not occur in a strategic, consistent manner. Over time, native vegetation would be replaced by invasive species, resulting in the alteration of the scenic beauty and aesthetics of the area.

3.10.2 Alternative 2: Proposed Action

Under the Proposed Action, implementation of a strategic vegetation management program at Conchas Lake would reduce invasive species and restore native habitats, preserving and enhancing native habitats and the scenic beauty and aesthetics of the area. Therefore, Long-term, major beneficial effects would be expected as a result of implementing the Proposed Action.

3.11 HAZARDOUS MATERIALS AND SOLID WASTE

The USACE ER 1165-2-132, Hazardous, Toxic and Radioactive Waste (HTRW) Guidance for Civil Works Projects, provides guidance for the consideration of issues

associated with HTRW which may be located within project boundaries or adjacent properties. This regulation outlines procedures to facilitate early identification and appropriate consideration of HTRW concerns in the reconnaissance, feasibility, preconstruction engineering and design, operations, maintenance, repair, replacement, and rehabilitation phases of a project. Specific goals include identification of level of detail for HTRW investigations and reporting for each phase of the project, promotion of early detection and response by the appropriate responsible parties, determination of viable options to avoid HTRW problems, and the establishment of a procedure for resolution of concerns, issues, or problems. This section describes existing conditions within the Project area with regard to potential environmental contamination and the sources of releases to the environment. Contaminants could enter the lake environment via air or water pathways or through improper herbicide application. While no marinas occur at Conchas Lake, there are numerous public campgrounds and recreational areas that could contribute small amounts of hazardous materials and waste to the watershed. USACE and area law enforcement officials work cooperatively to apprehend those responsible for illegal trash dumping.

3.11.1 Alternative 1: No Action Alternative

The no action alternative means that no new invasive species management efforts will be implemented beyond current protocols already in place for vegetation management at Conchas Lake. No invasive plant treatment or restoration activities would occur beyond what is currently practiced. As a result, no major adverse impacts on HTRW would be anticipated as a result of implementing the No Action Alternative. By maintaining the status quo, no significant new sources of HTRW are anticipated. The existing management protocols will continue to be followed, which are designed to minimize environmental impact. However, this approach could lead to continued, uncoordinated use of hazardous materials. The uncoordinated use of hazardous materials over time could potentially increase the risk of contamination. This includes the possibility of chemical runoff into water bodies, soil contamination, and adverse effects on local ecosystems and wildlife.

3.11.2 Alternative 2: Proposed Action

Under the Proposed Action, implementation of the 2025 Plan would be compatible with Conchas Lake hazardous and toxic waste and solid waste management practices. Therefore, no major, adverse, long-term impacts due to hazardous, toxic, radioactive, or solid wastes would occur as a result of implementing the 2025 Plan. The 2025 Plan would require incorporating strategic manual and mechanical treatments (e.g. excavating, mulching, grubbing, and root plowing and raking) and herbicide applications. Good housekeeping practices would be followed to keep project areas free of debris, litter, and waste materials, including using covered containers for waste disposal and storing construction materials, chemicals, and waste in designated areas with secondary containment to prevent spills and leaks.

Mechanical treatments would implement the following BMPs to minimize impacts from hazardous materials such as petroleum products. Equipment used for mechanical treatments would be provided with spill response kits and all personnel would be trained in their use. If a spill occurs, the Conchas Lake Project spill prevention plan would be followed. Any equipment in disrepair shall be removed from the site immediately. All fueling of the equipment, storage of fuel, oils and lubricants, or maintenance work would be performed at the maintenance yard.

Under the proposed action, herbicide application would be used for the treatment of species that are not effectively treated with manual and mechanical methods or for large dense populations of invasive plants. Approved herbicides would be applied that minimize effects to wildlife, soil, and water, as well as minimizing risks for those applying the herbicide and the general public. Areas below the Ordinary High Water Mark (OHWM; 4196.69 NGVD29) are considered Waters of the United States (WOTUS) and subject to the requirements of the National Pollution Discharge Elimination System (NPDES) Pesticide General Permit (PGP). The 4196.69 contour will be included on all project area maps to delineate areas within and outside WOTUS. Only herbicides approved for use near water will be applied within 50 feet of the shoreline, whereas other herbicides not approved for use near water will be applied to areas above 50 feet of the OHWM. Staff would adhere to product label guidelines that have been developed to ensure human safety and minimal environmental impact. This proposed action alternative would have potentially short-term adverse hazardous and toxic impacts due to the application of herbicides. However, treatment with the appropriate herbicide at the appropriate time and place would reduce the need for future herbicide application and would, in the long-term, have beneficial impacts.

3.12 SUMMARY OF CONSEQUENCES AND BENEFITS

Table 3 provides a tabular summary of the consequences and benefits for the No Action and Proposed Action alternatives for each of the 15 assessed resource categories.

Table 3: Summary of Consequences and Benefits

Summary of Consequences & Benefits Alternative Item Assessed	No Action		Proposed Action	
	Short-term	Long-term	Short-term	Long-term
Water Resources	No effect	Adverse	Adverse	Beneficial
Wetlands/water quality	No effect	No effect	Adverse	Beneficial
Air Quality	No effect	No effect	No effect	No effect
Topography, geology, and soils	No effect	Adverse	Adverse	Beneficial
Natural resources	No effect	Adverse	Adverse	Beneficial
Threatened and endangered species	No effect	Adverse	Adverse	Beneficial
Invasive species	Adverse	Adverse	Beneficial	Beneficial
Cultural, historical, and archaeological resources	No effect	No effect	No effect	No effect
Socioeconomics	No effect	No effect	No effect	No effect
Aesthetic resources	No effect	Adverse	No effect	Beneficial
Hazardous materials and solid waste	No effect	No effect	Adverse	Beneficial

SECTION 4: CUMULATIVE IMPACTS

The most severe environmental degradation may not result from the direct effects of any particular action, but from the combination of effects of multiple, independent actions over time, as defined in the prior 40 CFR 1508.1(i)(3) (CEQ Regulations). A cumulative effect is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.

By Memorandum dated June 24, 2005, from the Chairman of the CEQ to the Heads of Federal Agencies, entitled "Guidance on the Consideration of Past Actions in Cumulative Effects Analysis", CEQ made clear its interpretation that "...generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions..." and that the "...CEQ regulations do not require agencies to

catalogue or exhaustively list and analyze all individual past actions.” This cumulative impacts analysis as outlined in prior CEQ regulations summarizes expected environmental impacts from the combined impacts of past, current, and reasonably foreseeable future activities affecting any part of the human or natural environments impacted by the Proposed Action.

4.1 Past Impacts within the zone of interest.

The Conchas Dam project was approved by the U.S Congress April 8, 1935 under the Emergency Relief Appropriation Act of 1935 and in the Flood Control Act of 1936 and amended by the River and Harbor Act of 1938. Public Law 738, 74th U.S. Congress, dated June 22, 1936 (Flood Control Act of 1936), authorized the execution of the project to be located near the South Canadian River in New Mexico for the purpose of flood control, irrigation, and water supply. Legislation relating to the development of the reservoir and land areas under the jurisdiction of the Department of the Army is contained in Public Law 504, 76th U.S. Congress (H.R. 8500) approved May 01, 1940, Section 4 of the Flood Control Act of 1944 approved December 22, 1944 (Pub. L. 78–534, 58 Stat. 887, Chap. 665), as amended by Section 207 of the Flood Control Act of 1962 (PL 87-874, H.R.13273), as further amended by the Federal Water Project Recreation Act of 1965 (16 U.S.C 460(L)(12)- 460(L)(21); P.L.89-72; July 9, 1965; 79 Stat. 213; as amended by P.L. 93-251; March 7, 1974; 88 Stat. 33; as amended by P.L. 94-576; October 21, 1976; 90 Stat. 2728). Construction of Conchas Lake Dam was completed in 1939.

4.2 CURRENT AND REASONABLY FORESEEABLE PROJECTS WITHIN AND NEAR THE ZONE OF INTEREST

Future management of the 20,078.5 acres of Flowage Easement Lands at Conchas Lake includes routine inspection of these areas to ensure that the Government’s rights specified in the easement deeds are protected. In almost all cases, the Government acquired the right to prevent placement of fill material or habitable structures on the easement area. Placement of any structure that may interfere with the USACE flood risk management and water conservation missions may also be prohibited.

Regional and county mobility plans call for general roadway improvements of some existing roadways within the surrounding vicinity of USACE lands. No local road expansion or construction projects are planned or anticipated to take place within the zone of interest during the planning horizon of the 2025 Plan.

4.3 ANALYSIS OF CUMULATIVE IMPACTS

Impacts on each resource were analyzed according to how other actions and projects within the zone of interest might be affected by the No Action Alternative and Proposed Action. Impacts can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. For the purpose of this analysis, the intensity of impacts will be classified as negligible, minor, moderate, or major. Cumulative adverse

impacts on resources would not be expected when added to the impacts of activities associated with the Proposed Action or No Action Alternative. A summary of the anticipated cumulative impacts on each resource is presented below.

4.3.1 Water Resources

Impacts associated with the Proposed Action would have direct, short- and long-term, direct and indirect beneficial effects on wetlands and water resources. The Plan intends to utilize an adaptive approach designed to preserve the biological diversity of native plant communities associated with wetlands through prevention, containment, and control of invasive plants. Promoting restoration and protection of wetlands through educational, preventative, and collaborative efforts would strive to reduce the introduction and proliferation of invasive vegetation at the Project and would result in long-term beneficial effects to wetlands and water resources. Wetlands have been susceptible to invasive vegetation and Project staff would work to control nonnative plant species where they occur. Particular species such as saltcedar, Russian olive, and Russian thistle that occur in wetlands would be treated manually or with approved herbicides that are specifically prescribed by label near water and wetlands. The cumulative impacts on water quality from the Proposed Action at Conchas Lake are anticipated to be negligible when combined with past and proposed actions in the area.

4.3.2 Climate

The implementation the 2025 Plan, when combined with other existing and proposed projects in the region, would result in no cumulative impacts on the climate.

4.3.3 Air Quality

For the area surrounding Conchas Lake, activities associated with the Proposed Action that could add to air emissions are likely few and minor in nature. In addition, **existing operation** and management of Conchas Lake is compliant with the Clean Air Act and would not change with implementation of the 2025 Plan. Therefore, implementation of the 2025 Plan will not contribute to major cumulative impacts to air quality within the region.

4.3.4 Topography, Geology, and Soils

A major impact would occur if the action increases or promotes long-term erosion, if the soils are inappropriate for the proposed construction and would create a risk to life or property, or if there would be a substantial reduction in agricultural production or loss of Prime Farmland soils. Cumulative adverse impacts on topography, geology, and soils within the area surrounding Conchas Lake, when combined with past and proposed actions in the region, are anticipated to be negligible on the long-term basis.

4.3.5 Natural Resources

The significance threshold for natural resources would include a substantial reduction in ecological processes, communities, or populations that would threaten the long-term viability of a species or result in the substantial loss of a sensitive community that could not be offset or otherwise compensated. Implementation of the 2025 Plan includes objectives that would favor protection and restoration of valuable natural resources, and will have beneficial cumulative impacts. No identified objectives of the 2025 Plan would threaten the viability of natural resources. Therefore, there would be long-term beneficial impacts to natural resources resulting from the implementation of the 2025 Conchas Lake Vegetation Management Plan, when combined with past and proposed actions in the area.

4.3.6 Threatened and Endangered Species

The Proposed Action and No Action Alternative would not adversely impact threatened, endangered and special status species within the area, as they will be coordinated with the appropriate resource agencies. Should federally listed species change in the future (e.g., delisting of the Mexican Spotted Owl or other species or listing of new species), associated requirements will be reflected in revised land management practices in coordination with the USFWS. The USACE would continue cooperative management plans with the USFWS and the state to preserve, enhance, and protect critical wildlife habitat resources.

Implementation of the 2025 Plan will also allow for future land management practices that would maintain and enhance habitats for these species. Therefore, there would be minor long-term beneficial impacts on threatened and endangered species resulting from the implementation of the 2025 Plan when combined with past and proposed actions in the area.

4.3.7 Invasive Species

Invasive species control has and will continue to be conducted on various areas across the project lands. Implementing the 2025 Plan will help reduce the introduction and distribution of invasive species, ensuring that proposed actions in the region will not contribute to the overall cumulative impacts related to invasive species. The main goal of the 2025 Plan is the treatment and control of invasive species at Conchas Lake. Therefore, there would be major long-term beneficial impacts on reducing and preventing invasive species within the area surrounding Conchas Lake.

4.3.8 Cultural, Historical, and Archaeological Resources

The Proposed Action would not adversely affect cultural resources or historic properties. Therefore, this action, when combined with other existing and proposed projects in the region, would not result in major cumulative impacts on cultural resources or historic properties.

4.3.9 Socioeconomics

The Proposed Action would not result in the displacement of persons (minority, low-income, children, or otherwise) or decrease numbers of people recreating at Conchas Lake as a result of implementing the revised land classifications. The creation of jobs, increase of visitor spending, and relative decrease of usage fees results in a positive impact to the local economy. Therefore, the effects of the Proposed Action on socioeconomics and the protection of children, when combined with other ongoing and proposed projects in the Conchas Lake area, are anticipated to have negligible long-term beneficial impacts.

4.3.10 Aesthetic Resources

Conchas Lake proper and surrounding federal lands offer public, open space values and scenic water vistas. Natural Resources Management Objectives for the lake will continue to minimize activities which disturb the scenic beauty and aesthetics of the lake. Therefore, the Proposed Action would result in minor long-term beneficial impacts to the aesthetic resources of Conchas Lake.

4.3.11 Hazardous Materials and Solid Waste

Under the Proposed Action, implementating the 2025 Plan would be compatible with Conchas Lake hazardous and toxic waste and solid waste management practices. Therefore, when combined with other ongoing and proposed projects in Conchas Lake, there would be no major long-term adverse impacts on hazardous materials and solid waste.

SECTION 5: COMPLIANCE WITH ENVIRONMENTAL LAWS

This EA has been prepared to satisfy the requirements of all applicable environmental laws and regulations, and has been prepared in accordance with the CEQ's implementing regulations for NEPA, 40 CFR Parts 1500 – 1508 (preparation of this EA began prior to the removal of CEQ's 2024 NEPA regulations, as previously noted), and the USACE ER 200-2-2, *Environmental Quality: Procedures for Implementing NEPA*. The development of the 2025 Plan is consistent with the USACE's Environmental Operating Principles. The following is a list of applicable environmental laws and regulations that were considered in the planning of this project and the status of compliance with each:

Fish and Wildlife Coordination Act, as amended: The USACE initiated public involvement and agency scoping activities in 2024 to solicit input on the Plan development process and identify significant issues related to the Proposed Action. Information provided by USFWS and state organizations on fish and wildlife resources has been utilized in the development of the 2025 Plan.

Endangered Species Act of 1973, as amended: Current lists of threatened and endangered species were compiled for the development of the 2025 Plan. There would be no adverse long-term impacts on threatened or endangered species resulting from the implementation of the 2025 Plan. However, minor long-term beneficial impacts, such as habitat protection, could occur as a result of implementing the 2025 Plan.

Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds): Sections 3a and 3e of EO 13186 directs federal agencies to evaluate the impacts of their actions on migratory birds, with emphasis on species of concern, and inform the USFWS of potential negative impacts on migratory birds. Implementation of the 2025 Plan will not result in adverse impacts on migratory birds or their habitat. Beneficial impacts could occur through protection of habitat as a result of the 2025 Plan.

Migratory Bird Treaty Act: The Migratory Bird Treaty Act of 1918 extends federal protection to migratory bird species. The nonregulated “take” of migratory birds is prohibited under this Act in a manner similar to the prohibition of “take” of threatened and endangered species under the Endangered Species Act. The timing of resource management activities would be coordinated to avoid impacts on migratory and nesting birds.

Clean Water Act (CWA), as amended: The Proposed Action is in compliance with all state and federal CWA regulations and requirements, and water quality is regularly monitored by the USACE and New Mexico Environment Department Water Quality Control. A state water quality certification pursuant to Section 401 of the CWA is not required for implementing the 2025 Plan. There will be no change in management of the reservoir that would impact water quality.

National Historic Preservation Act (NHPA) of 1966, as amended: Compliance with the NHPA of 1966, as amended, requires identification of all properties in the project area listed in, or eligible for listing in, the NRHP. All previous surveys and site salvages were coordinated with the New Mexico State Historic Preservation Officer. Known sites are mapped and avoided by maintenance activities. Areas that have not undergone cultural resources surveys or evaluations will need surveys prior to any earthmoving or other potentially impacting activities.

Clean Air Act, as amended: The US EPA established nationwide air quality standards to protect public health and welfare. Existing operation and management of the reservoir is compliant with the Clean Air Act and will not change with the 2025 Plan.

Farmland Protection Policy Act (FPPA): The FPPA’s purpose is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. Prime Farmland is present within and adjacent to Conchas Lake. The 2025 Plan would not impact Prime Farmland present on Conchas Lake.

Executive Order 11990, Protection of Wetlands: EO 11990 requires federal agencies to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in executing federal projects. The 2025 Plan complies with EO 11990.

Executive Order 11988, Floodplain Management: This EO directs federal agencies to evaluate the potential impacts of proposed actions in floodplains. The operation and management of the existing project complies with EO 11988.

CEQ Memorandum dated August 11, 1980, Prime or Unique Farmlands: Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. The Proposed Action would not impact Prime Farmland present on Conchas Lake project lands.

SECTION 6: Irretrievable and Irreversible Commitment of Resources

NEPA requires that federal agencies identify “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented” (42 U.S.C. § 4321 et seq.). An irreversible commitment of resources occurs when the primary or secondary impacts of an action result in the loss of future options for a resource. Usually, this is when the action affects the use of a nonrenewable resource or it affects a renewable resource that takes a long time to renew. An irretrievable commitment of resources is typically associated with the loss of productivity or use of a natural resource (e.g., loss of production or harvest). No irreversible or irretrievable impacts on natural resources, wildlife species or habitat is anticipated from implementing the 2025 Plan.

SECTION 7: PUBLIC AND AGENCY COORDINATION

In accordance with 40 CFR §§ 1501.7, 1503, and 1506.6, the USACE initiated public involvement and agency scoping activities to solicit input on the 2025 Plan development process, as well as identify significant issues related to the Proposed Action. The USACE began its public involvement process with a 30 day public scoping and comment period from 14 February 2024 through 15 March 2024. The public involvement process provided an avenue for public and agency stakeholders to ask questions and provide comments. The information provided introduced the public to the goals and objectives of the proposed 2025 Vegetation Management Plan and began a 30-day public comment period. A second public involvement opportunity occurred from January 31, 2025 to March 1, 2025 with a 30-day public review period of the Draft Plan and EA. The USACE, Albuquerque District, placed advertisements on the USACE webpage, social media, and print publications prior to these meetings. The EA was coordinated with agencies having legislative and administrative responsibilities for environmental protection. See Appendix A. for a list of comments received during the 30-day public scoping and Draft EA comment periods.

SECTION 8: REFERENCES

Federal Emergency Management Agency (FEMA). 2004. Federal Guidelines for Dam Safety. <https://www.fema.gov/media-library-data/20130726-1502-20490-5785/fema-93.pdf>

Levine, J. M., Kennedy, T., & Naeem, S. (2002). Neighborhood scale effects of species diversity on biological invasions and their relationship to community patterns. *Biodiversity and ecosystem functioning: synthesis and perspectives*. Oxford University Press, Oxford, 114-124.

New Mexico Department of Game and Fish (NMDGF). 2025. Environmental Review Tool. <https://nmert.org/>.

Spiegel, Z., 1972a, Problems of the Triassic stratigraphy in the Canadian River basin, Quay, San Miguel, and Guadalupe Counties, New Mexico; in Kelley, V. C., and Trauger, F. D. (eds.), East-central New Mexico: New Mexico Geological Society, Socorro, Guidebook 23, pp. 79–83.

Spiegel, Z., 1972b, Cenozoic geology of the Canadian River valley, New Mexico; in Kelley, V. C., and Trauger, F. D. (eds.), East-central New Mexico: New Mexico Geological Society, Socorro, Guidebook 23, pp. 118–119.

Spiegel, Z., 1972c, Engineering problems at dam and reservoir sites in east-central New Mexico; in Kelley, V. C., and Trauger, F. D. (eds.), East-central New Mexico: New Mexico Geological Society, Socorro, Guidebook 23, pp. 184–186.

Taylor, John P. 1999. Final Environmental Assessment: Conversion of saltcedar monocultures and mixed saltcedar/native bosque to native riparian bosque, wetland, and agricultural habitats. Bosque del Apache NWR, Socorro County, New Mexico.

US Army Corps of Engineers (USACE). 2022. Environmental Assessment for the 2022 Conchas Lake Master Plan, Canadian River Basin, San Miguel County, NM. USACE Albuquerque District, Albuquerque, NM.

US Census. 2020. Poverty Thresholds, 2017. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>

USFWS. 2025. IPaC for Information and Planning Conservation, USFWS Trust Resources. Internet URL: <https://ecos.fws.gov/ipac/>

SECTION 9: ACRONYMS/ABBREVIATIONS

%	Percent
°	Degrees
BMP	Best Management Practice
CAP	Climate Action Plan
CCC	Civilian Conservation Corps
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	CO ₂ -equivalent
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EP	Engineer Pamphlet
ER	Engineer Regulation
ESA	Environmentally Sensitive Area
F	Fahrenheit
FONSI	Finding of No Significant Impact
HDR	High Density Recreation
HPMP	Historic Properties Management Plan
IFR	Inactive/Future Recreation
IPaC	Information Planning and Consultation

LEED	Leadership in Energy & Environmental Design
MRML-IFR	Future/Inactive Recreation
MRML	Multiple Resource Management Lands
MRML-LDR	Low Density Recreation
MRML-WM	Wildlife Management
MRML-VM	Vegetative Management
msl	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMDGF	New Mexico Department of Game and Fish
NMHPD	New Mexico Historic Preservation Division
NMSP	New Mexico State Parks
NO	Nitrogen Oxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	Ozone
PA	Programmatic Agreement
PO	Project Operations
REC	Recreational Areas
ROD	Record of Decision
RPEC	Regional Planning and Environmental Center
SGCN	Species of Greatest Conservation Need

SO ₂	Sulfur Dioxide
SWQB	Surface Water Quality Board
THPO	Tribal Historic Preservation Officer
U.S.	United States
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WM	Wildlife Management
VM	Vegetation Management

SECTION 10: LIST OF PREPARERS AND REVIEWERS

Andrew Wastell – Biologist, Operations Division

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Dana Price – Biologist, Planning Branch

Martina Suazo – Biologist, Project Manager

Jonathan Van Hoose – Archaeologist

Stephanie Jentsch - Biologist, Planning Branch - Reviewer

Joseph Turner – Office of Counsel - Reviewer

Trevor Stevens – Office of Counsel - Reviewer

Appendix A. NEPA Coordination and Scoping

Comments received during 30-day public scoping and comment period from 14 February 2024 through 15 March 2024.

Commenter	Comment	Response
NM State Parks (Scoping comments 3/15/24)	Development of Vegetation Management Plan will likely coincide with upcoming Conchas Lake State Park planning efforts, so we would like to coordinate State Parks Division's plans with the plans being developed by USACE, and we will be available to provide input as the Vegetation Management Plan is developed. Clarification during discussion: Conchas State Park Planning effort will have an internal kickoff in July 2024, with stakeholder involvement in fall.	USACE will include the State Park in our vegetation management plan development. USACE will coordinate with NMSP regarding NEPA. NMSP has been invited to be a cooperating agency.
NM State Parks (Scoping comments 3/15/24)	It is important that any vegetation management activities (application of herbicides, cutting, etc.) are communicated to State Parks Division in advance, for safety of park operations and potential impacts during high visitation times. State Parks Division would like to participate in the scheduling of vegetation management activities to avoid conflicts during high visitation seasons and during planned State Parks activities.	USACE will communicate with the State Park on any vegetation management activities on fee lands that have the potential to impact visitation. The Vegetation Management Plan is not intended to change anything in the NMSP lease; we apologize for any confusion caused by not stating this in the scoping letter. USACE encourages the State Park to plan vegetation management activities during times that will not have major impacts to visitation,

		however, the State Park is responsible for these activities per the lease agreement. While the vegetation plan will apply to the entire fee area, this is similar to the Master Plan; USACE will not carry out vegetation management on the state park nor will this obligate NMSP to carry out actions. If there's heavy equipment moving around in areas with visitation or road closures for longer than a couple hours we would communicate directly and in advance.
NM State Parks (Scoping comments 3/15/24)	(North management area map): what resource is considered environmentally sensitive in the mapped area labeled as "Environmentally Sensitive Area?"	The area was designated as Environmentally sensitive due to the presence of cultural resources
NM State Parks (Scoping comments 3/15/24)	The historic Scout camp in the area does not seem to currently be classified as an historic cultural resource. NMSP stated that the ARMS (cultural resource) database didn't have information on the Scout camp. Camp itself apparently wasn't recorded as a historic resource? Archival research completed, can compile.	The Boy Scout Camp area is within an area designated as Environmentally Sensitive. USACE is not planning to do anything that would affect the camp. USACE Archaeologist will coordinate with NMSP Archaeologist who will send archival research related to the camp.
NM State Parks (Scoping	Recreation Areas: The area labeled "Low Density Recreation" south of Cove Recreation area sees high recreation use at certain seasons.	The Land Classifications were determined concurrently with the CN State Park and through

comments 3/15/24)	Please clarify the reasoning for the “low density recreation” label. This is a popular area for shoreline camping.	the master planning process and public review. The “High Density REC” classification is meant for areas which were approved for development of Rec features /facilities. The “Low Density Rec” classification was given to the area south of Cove Rec area because there are no future plans or approvals to develop the area.
NM State Parks (Scoping comments 3/15/24)	What recreation density is Central Recreation Area considered? In discussion, NMSP stated that not having shoreline camping would severely restrict camping opportunities.	The Central Recreation Area is classified as High Density Recreation in the Master Plan. Density of use areas is more about level of development- construction of facilities. USACE doesn’t allow camping in undesignated areas. This has been identified as a problem at all of our lakes. The vegetation plan won’t address shoreline camping; this is a larger question for Real Estate office to be addressed separately.
NM State Parks (Scoping comments 3/15/24)	We are curious what impact these [land use] classifications might have on our visitation management.	Conchas Lake State Park was included in the 2021 Master Plan update process and concurred with all land classifications within the Master Plan. There were also 2 public comment periods during the process.

		The Vegetation Plan will not change land use classifications from the Master Plan.
NM State Parks (Scoping comments 3/15/24)	Section (a) Invasive Species Management: Bullet 3 of this action states, "Herbicide treatments following an approved pesticide management plan." We have a question about whether the word "pesticide" here should be "herbicide" instead.	Concur, will use "herbicide" as it is more specific.
NM State Parks (Scoping comments 3/15/24)	Section (c) Recreation Areas: Regarding the maintenance, pruning, and removal of hazard trees in recreation areas, we would like more information about which agency will be responsible for this management action, and we would like clarification about the expectations for State Parks Division on these points.	The lessee is responsible for all maintenance and management activities within the lease area, in accordance with the lease agreement.
NM State Parks (Scoping comments 3/15/24)	Section (e) Restoring disturbed or degraded areas by planting native vegetation: We propose that a Management Action be added to the plan to include monitoring the status of seeded/planted areas for plant mortality/successful plant establishment for a period of years into the future and responding with additional restoration work as needed to ensure successful restoration.	Concur, will add monitoring of any restored areas. USACE will coordinate with Robert (Bob) Stokes for information on NMSP suggested monitoring methods/protocols.
NM State Parks (Scoping comments 3/15/24)	Regarding the irrigation of new plantings. The State Park currently produces water at the north part of the park. An irrigation system that is connected to the State Park water production system could be useful for State Parks so that we could run	The Corps does not anticipate irrigating except for trees planted to replace trees that die in/around the Admin, Adobe Bell, and Southside Campground. We have an adequate irrigation system

	more water through the system at strategic times. We are interested in partnering with USACE for a mutually beneficial irrigation system. State Parks would like to know more about the intended amount of water, the expected source of water, and details about the planned water delivery system for irrigating the restoration projects, particularly near the north recreation area.	in these areas. Restored areas of native grassland/shrubland would primarily be seeded and would not be irrigated.] - USACE has no constraint on use of water, but we are not looking to expand where we have irrigation. We have irrigation at the Admin building, Captain Kramer day use area, and Adobe Bell. Other areas would be watered with watering truck until established only. - The NMSP irrigation system is just in the northern area of the State Park. It would be difficult to extend it to serve areas outside the Park.
Arch Hurley Conservancy District c/o Franklin McCasland 2/23/2024	Requests that name is kept on the project mailing list (no other comments)	Will keep Arch Hurley Conservancy District on mailing list.
Jack Marchetti, New Mexico Department of Game and Fish 2/23/2024	The New Mexico Department of Game and Fish (Department) has reviewed your 14 February 2024 request for comments on the Conchas Lake Vegetation Management Plan. Department staff entered your project into the New Mexico Environmental Review Tool (NMERT), and the NMERT auto-generated a project report which is attached here for your review.	Noted. We will review the report generated by NMERT and follow guidelines for Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems and whenever possible, avoid conducting tree removal activities during the

	Please note that the project report recommends that all tree removal activities be avoided during the migratory breeding bird season (April – September). Because your vegetation management project occurs in riparian areas, the Department recommends following its guidelines for Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems. Thank you for the opportunity to review your project. Please contact me with any questions.	migratory bird nesting season (April-September).
Jack Marchetti, New Mexico Department of Game and Fish 2/23/2024	Comment form: Avoid tree removal during the migratory breeding bird season (April-September). Conduct breeding bird and nest surveys in the area if work must take place during the breeding season. Conduct burrowing owl and prairie dog surveys prior to ground disturbing work.	Noted: Whenever possible, we will conduct tree removal activities outside of the migratory breeding bird season (April-September). If work must occur during the breeding season, we will require breeding bird and nest surveys be conducted by a qualified biologist. Similarly, we will require a qualified biologist to conduct burrowing owl and prairie dog surveys prior to ground disturbing work.
Jack Marchetti, New Mexico Department of Game and Fish 2/23/2024	Comment form: Pile burns should not occur in riparian habitats due to their lack of fire resiliency.	Noted: We will not conduct pile burns in riparian habitats.
Sami Naibauer Botanist/Ecologist	I would like to provide comments and examples of management actions and stipulations the Taos	Thank you for comments and examples of management actions used

Taos Field Office, Bureau of Land Management. 3/15/2024	Field Office regularly uses and provides to contractors during large projects. Attached are some (but not all) actions and stipulations for weed/invasive species, Special status and T+E species, and seed mix/re-vegetation that you may or not find useful to include in your EA.	by the BLM. We will take these into consideration while developing the plan. USACE has incorporated these comments into the Veg Plan
Sami Naibauer Taos Field Office, Bureau of Land Management. 3/15/2024	Invasive Species Management and Restoration with Native Vegetation- See example stipulations attached. Attached Stipulation: • Remove dirt, plant, and foreign material from vehicles and equipment before mobilizing to work site. Prevent introduction of noxious weeds and non-native plant species into the work site. Follow applicable Federal land management agency requirements and state requirements. Maintain cleaning and inspection records. • Do not import into the project limits rock, sand, gravel, earth, subsoil, or other natural materials from a Contractor-selected non-commercial materials source that have not been certified free of noxious weeds. Materials imported into the project limits which do not include a noxious weed free certification may be rejected and ordered by the CO to be removed from the project limits. The CO has the discretion of requesting inspection of certified materials by a third party and rejecting the use of the source if noxious weeds or seeds thereof are found to be present. • Conform to the Federal Seed Act, the Federal Noxious Weed Act,	Noted: We will consider and incorporate these stipulations as BMPs within the plan.

	and applicable State and local seed and noxious weed laws Special Status species and T+E species – Attached stipulation: • If vegetation clearing (for instance, trimming, clearing, or grubbing) must occur between May 1 and October 31, conduct a preconstruction botanical survey for milkweed and monarch butterfly larvae/eggs if necessary. If observed, determine appropriate avoidance strategies. • Migratory Birds ○ If vegetation clearing (for instance, trimming, clearing, or grubbing) or blasting activities must occur between April 1 and August 31, a qualified biologist will complete preconstruction searches for active migratory bird nests in all suitable habitats that will be disturbed by clearing or blasting activities. ○ If active bird nests are identified within the project area, a qualified biologist will determine the appropriate avoidance strategy, subject to approval by the Contracting Officer, and determine whether a no-work buffer is required. If necessary, no work shall occur until the young have fledged or the nest is no longer active. Seeding stipulations: • All seed shall be noxious weed free. Executive Order No.13112 on Invasive Species states that Federal Agencies shall not authorize, fund, or carry out actions that are likely to cause or promote the introduction or spread	
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	of invasive species in the US. Prior to acceptance of a seed order, test all seed for noxious weed content. This test will include both the New Mexico Noxious Seed list and the New Mexico Noxious Weed List. Any listed noxious weeds from any state found will result in the seed lot being rejected. • The seed shall be delivered in individual lots, in up to 50 lb sacks in this way if one species contains noxious weeds we don't have to reject the total shipment. • The following stipulations will also include the New Mexico Noxious Weed list along with the New Mexico Noxious Seed List. • The seed lab results shall show no more than 0.5 percent by weight of other weed seeds; and the seed lot shall contain no noxious, prohibited, or restricted weed seeds according to State seed laws in the respective State(s). • The seed procured for use on public land will meet the Federal Seed Act criteria. Seed may contain up to 2.0 percent of "other crop seed" by weight which includes the seed of other agronomic crops and native plants; however, a lower percent of other crop seed is recommended. • Disturbed areas will be seeded with an approved seed mix. Seed mixes will incorporate pollinator-friendly host plants to help promote	
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	the establishment of host plant and nectar sources for pollinator species Comment on herbicide near water: BLM TFO does not allow herbicide application near/in waterways. Aquatic approved herbicides generally bind to soils and can bio-accumulate in soils/vegetation/wildlife over time.	Saltcedar occurs near the lake shore, making it difficult to avoid herbicide use near water. All herbicide used near water would be labeled for aquatic use and application would follow an approved Pesticide Management Plan to ensure appropriate quantities and method of application to minimize accumulation in soils over time.
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Comments received during the 30-day EA Public Review and comment period from 31 January 2025 through 1 March 2025.

Commenter	Comment	Response
NM State Parks (EA review comments 02/28/25)	Regarding the scoping comment about monitoring of restored areas, please coordinate with Design & Development Bureau Chief, in addition to Program Support Bureau Chief, for cooperation on monitoring methods/protocols.	USACE will coordinate with NMSP regarding monitoring of restored areas. NMSP has been invited to be a cooperating agency.
NM State Parks (EA review comments 02/28/25)	State Parks supports and recommends the development of a Fire Management Plan with well-defined firebreaks, pile burn areas, and controlled burn procedures as a component of the project to safeguard the natural and cultural resources at Conchas Lake.	USACE discussed developing a fire management plan as part of this effort; however, it would require more complex and lengthy planning. Therefore, fire management will be addressed later as a related but separate effort.
NM State Parks (EA review comments 02/28/25)	Regarding coordination and communication with State Parks on page 22 (of the Vegetation Management Plan). NM State Parks would like to clarify the phrasing of the sentence, “USACE will ensure the safe <i>application of herbicides within park areas</i> while minimizing risks to visitors through effective coordination and communication with New Mexico State Parks.” (emphasis ours). Our understanding is that USACE will not apply herbicides or perform any of the treatment methods within the State Park management area, and that this sentence should be rephrased to: “application of herbicides near park areas.”	This has been corrected in the final vegetation Management Plan.

NM State Parks (EA review comments 02/28/25)	Foliar Application mentions the use of boom sprayers for larger areas, we would like to request notification at least 48 hours in advance of herbicide application. This will allow us time to contact everyone who might be impacted before the spraying operations happen if we need to notify visitors in the area.	USACE will notify and coordinate with NMSP regarding herbicide application using boom sprayers for larger areas. NMSP has been invited to be a cooperating agency.
NM Dept of Game & Fish (EA review comments 02/24/25)	Under the Treatment Methods Section: • Recommend buffers around aquatic habitats, native riparian vegetation, and habitats for sensitive species to minimize potential for herbicide drift into these sites. • When buffers cannot be implemented or habitats for listed species are present, use mechanical control or individual plant treatments	Noted: USACE will consider implementation of buffer zones around key habitats and incorporate other methods (i.e. mechanical control) to mitigate the potential for herbicide drift.
NMDGF, cont.	• Apply herbicides directly to target plants, rather than broadly to large areas, whenever possible to avoid harming nearby non-target or native vegetation.	Concur
NMDGF, cont.	• Avoid herbicide spraying on days when wind speeds are high (> 10 mph) and on days when rain is expected within 48 hours.	Concur
NMDGF, cont.	• Apply herbicides no later than two months before normal spring runoff and high-water tables are anticipated in the project area and wait until streamflow is back below normal bank full stage to consider applying herbicides in the late summer or fall.	Concur
NMDGF, cont.	• Avoid applying herbicides to and removing vegetation that is being used by birds for nesting. When	Concur

	nesting birds may be present in target vegetation in the project area, herbicides should be applied outside of the breeding bird season (April – September).	
NMDGF, cont.	• Use the lowest concentration possible that will still allow for the achievement of the desired result.	Concur
NMDGF, cont.	• To avoid habitat loss resulting from applying herbicide to large areas, apply herbicides in a mosaic pattern, alternating treated and non-treated sites between years.	Concur
NMDGF, cont.	• The Department recommends not using herbicides that contain the following chemicals that are slightly to highly toxic to wildlife including birds, fish, and pollinators: 2,4-D, dichlobenil, dichlorprop, fluazifop, glyphosate, oxyfluorfen, propyzamide, quizalofop, sulfometuron, and triclopyr	Noted: USACE will evaluate herbicides that contain the chemicals listed and will consider alternative herbicide mixes
NM Dept of Game & Fish (EA review comments 02/24/25)	Under Terrestrial Wildlife Section: Consider rewording “migratory waterfowl” to “resident and migratory waterfowl” and removing “wading birds” as it is redundant.	Concur
NM State Parks (EA review comments 02/24/25)	If possible, the Department would like to see the following state-listed species added to Table 2. These species were previously made available to the U.S. Army Corps of Engineers via a New Mexico Environmental Review Tool-generated list for project NMERT-4097. Species that are federally listed are marked with an *: bald eagle (<i>Haliaeetus leucocephalus</i>), gray vireo (<i>Vireo vicinior</i>), peregrine falcon (<i>Falco peregrinus</i>), plainbelly water snake (<i>Nerodia erythrogaster</i>), western ribbon snake (<i>Thamnophis proximus</i>), and	These species have been added to the Final EA

	yellow-billed cuckoo* (<i>Coccyzus americanus</i>). The Department does not see the need to include the Holy Ghost Ipomopsis (<i>Ipomopsis sancti-spiritus</i>) in Table 2 as it is endemic to the Sangre de Cristo Mountains, outside of the proposed project area.	
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AFFIDAVIT OF PUBLICATION

Counties of San Miguel and Mora
State of New Mexico } ss.

The Las Vegas Optic

106 Bridge Street, Las Vegas, NM 87701
505-425-6796

Leota Brigida Harriman, being first duly sworn, on oath states that she is the publisher of the Las Vegas Optic, a weekly newspaper of general paid and general circulation in San Miguel and Mora Counties, New Mexico, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of the provisions of Chapter 167, session Laws of 1937, and that payment therefor has been made and assessed as court costs. The notice of which a copy as published is hereto attached and hereby made a part hereof was published in said newspaper for 1 consecutive issues on the following date(s):

PUBLICATION DATE(S):

January 31, 2025

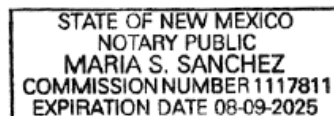
PUBLICATION FEE: \$98.63

Account Number: 49100

State of New Mexico, County of San Miguel, signed and sworn to before me on this 31st day of January, 2025 by
Leota Brigida Harriman, Publisher.



Maria Sanchez, Notary Public



**Draft Environmental
Assessment, Con-
chas Lake
Vegetation Manage-
ment Plan**

The U.S. Army Corps of Engineers, Albuquerque District (USACE), has prepared a draft Environmental Assessment (DEA) for the Conchas Lake Project Vegetation Management Plan in San Miguel County, New Mexico. The DEA evaluates alternatives to ensure that the conservation and management of the land, water, and recreational resources on Conchas Lake Project lands follow applicable environmental laws and regulations.

The proposed action would implement the Conchas Vegetation Management Plan, that would identify and execute effective strategies that promote the health of upland, wetland, and riparian ecosystems, over the course of each growing season. Strategies include: (1) preserve native habitat mosaics, (2) identify and restore disturbed and degraded areas, (3) manage invasive and non-native flora, (4) reduce standing dead woody vegetation and (5) preserve the aesthetic and historic character of the surround landscape.

A hard copy of the draft "Environmental Assessment for the Conchas Lake Vegetation Management Plan, San Miguel County, New Mexico" can be sent upon request, and is

at the USACE Albuquerque District website, (under "FONSI/Environmental Assessment") at: <https://www.spa.usace.army.mil/Missions/Environmental/Environmental-Compliance-Documents/>

USACE is soliciting comments from members of the public and concerned agencies in compliance with the National Environmental Policy Act. The DEA will be available for public review from January 31, 2025, to March 1, 2025. Written comments may be emailed to: Conchas-Vegetation-Plan@usace.army.mil

Or mailed to:
U.S. Army Corps of Engineers, Albuquerque District

Environmental Resources Section
Attn: CESPA-PM-LE (Ms. Dana Price)
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

USACE would appreciate receiving comments no later than March 1, 2025, so that comments can be addressed, and revisions made to the DEA in a timely manner. Hard copies of the DEA are also available for review at:

- Las Vegas Carnegie Public Library
500 National Ave, Las Vegas, NM. 87701
 - Tucumcari Public Library
602 S 2nd St, Tucumcari, NM. 88401
- PUB: Las Vegas Optic,
Jan 31, 2025

#256625

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Melanie A. Kenderdine
Cabinet Secretary Designate

Ben Shelton
Acting Deputy Secretary

Toby Velasquez, Director
State Parks Division



February 28, 2025

U.S. Army Corps of Engineers, Albuquerque District
Attn: Ms. Dana Price
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435

Re: Conchas Lake, Draft Environmental Assessment and Vegetation Management Plan

Dear Ms. Dana Price,

Thank you for the opportunity to submit comments during the public review period for the Draft Environmental Assessment (DEA) for the Conchas Lake Vegetation Management Plan. New Mexico State Parks (State Parks), a division of the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), has reviewed the DEA and supports Alternative 2: Proposed Action to develop, adopt, and implement the 2024 Conchas Lake Vegetation Management Plan. We also received and have reviewed a draft of the Vegetation Management Plan dated December 2024. We would like to submit the following comments:

Draft Environmental Assessment Comments:

Regarding the scoping comment about monitoring of restored areas, please coordinate with Ryan Darr, Design & Development Bureau Chief, in addition to Robert Stokes, Program Support Bureau Chief, for cooperation on monitoring methods/protocols.

Draft Vegetation Management Plan Comments:

In section 3.5 Fire Management, State Parks supports and recommends the development of a Fire Management Plan with well-defined firebreaks, pile burn areas, and controlled burn procedures as a component of the project to safeguard the natural and cultural resources at Conchas Lake.

Thank you for including the paragraph regarding coordination and communication with State Parks on page 22. We would like to clarify the phrasing of the sentence, "USACE will ensure the safe application of herbicides within park areas while minimizing risks to visitors through effective coordination and communication with New Mexico State Parks." (emphasis ours). Our understanding is that USACE will not apply herbicides or perform any of the treatment methods within the State Park management area, and that this sentence should be rephrased to:

New Mexico State Parks is a division of the [Energy, Minerals and Natural Resources Department](#). Our mission is to protect and enhance natural and cultural resources, provide first-class recreational and education facilities and opportunities, and promote public safety to benefit and enrich the lives of visitors.

1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3355 • emnrd.nm.gov/spd

February 28, 2025
Page 2

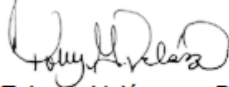
"application of herbicides near park areas." Would you please confirm if our understanding is correct, and if so, revise this sentence?

Secondly, because 4.4.4 Foliar Application mentions the use of boom sprayers for larger areas, we would like to request notification at least 48 hours in advance of herbicide application. This will allow us time to contact everyone who might be impacted before the spraying operations happen if we need to notify visitors in the area.

We support and appreciate the remainder of the coordination and communication methods listed.

Thank you for your work on this planning effort and we look forward to contributing to the vegetation management plan. Please feel free to contact me if you would like any clarification on the comments above.

Respectfully,

A handwritten signature in black ink, appearing to read "Toby G. Velásquez".

Toby G. Velásquez, Director
State Parks Division
toby.velasquez@emnrd.nm.gov

GOVERNOR
Michelle Lujan Grisham



DIRECTOR AND SECRETARY
TO THE COMMISSION
Michael B. Sloane

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

One Wildlife Way, Santa Fe, NM 87507
Tel: (505) 476-8000 | Fax: (505) 476-8180
For information call: (888) 248-6866

<https://wildlife.dgf.nm.gov>

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Silver City

24 February 2025

Dana M. Price
Environmental Resource Section
U.S. Army Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, NM 87109

RE: Draft Environmental Assessment (DEA), Conchas Lake Vegetation Management Plan; NMERT 4189

Dear Ms. Price,

The New Mexico Department of Game and Fish (Department) has reviewed the DEA for the Conchas Lake Vegetation Management Plan (Plan). The Department appreciates the opportunity to review this DEA. We encourage continuing the U.S. Army Corps of Engineers' partnership with the Department and the willingness to incorporate our recommendations to strengthen measures taken to benefit New Mexico wildlife and their habitats as outlined below.

Although the Department has a few comments and recommendations regarding the DEA, we are in full support of "Alternative 2: Proposed Action". The Department's comments are organized sequentially by page number within the DEA.

Comments

Page 6: Treatment Methods

Regarding the herbicide application using both low-volume basal bark and cut-stump techniques, the Department has the following recommendations to mitigate impacts on wildlife from spot or ground herbicide application techniques:

- To mitigate the potential for herbicide drift into sensitive aquatic and native riparian habitats, the Department recommends applying a minimum buffer of 20 ft (for spot applications) or 100ft (if using ground application; [USFWS 2007](#)) around all aquatic habitats and native riparian vegetation in the proposed treatment area.
- To mitigate the potential for herbicide drift into sensitive habitats for federally or state-listed species, the Department recommends applying a minimum buffer of 10 ft (for spot applications) or 90 ft (if using ground application) around all known terrestrial habitats for federally or state-listed species. Buffer distances are larger for insect pollinators of federally or state-listed plants (2,640 ft for small pollinators, 10,560 ft for large pollinators such as bumble bees) ([USFWS 2007](#)).

- Use mechanical weed removal techniques or individual plant treatments when buffers cannot be implemented, and federally or state-listed species habitats are present.
- Apply herbicides directly to target plants, rather than broadly to large areas, whenever possible to avoid harming nearby non-target or native vegetation.
- Avoid herbicide spraying on days when wind speeds are high (> 10 mph) and on days when rain is expected within 48 hours.
- Apply herbicides no later than two months before normal spring runoff and high-water tables are anticipated in the project area and wait until streamflow is back below normal bank full stage to consider applying herbicides in the late summer or fall.
- Use the lowest concentration possible that will still allow for the achievement of the desired result.
- Avoid applying herbicides to and removing vegetation that is being used by birds for nesting. When nesting birds may be present in target vegetation in the project area, herbicides should be applied outside of the breeding bird season (April – September).
- In areas dominated by undesired or non-native plants, habitat loss may occur if a herbicide is applied to the entire area, resulting in a total loss of vegetation. To avoid this, apply herbicides in a mosaic pattern, alternating treated and non-treated sites between years.
- The Department recommends not using herbicides that contain the following chemicals that are slightly to highly toxic to wildlife including birds, fish, and pollinators: 2,4-D, dichlobenil, dichlorprop, fluazifop, glyphosate, oxyfluorfen, propyzamide, quizalofop, sulfometuron, and triclopyr ([Michael 2002](#)).

Page 16 Terrestrial Wildlife Resources:

Consider rewording “migratory waterfowl” to “resident and migratory waterfowl” and removing “wading birds” as it is redundant.

Page 19 Table 2: Federally Listed Endangered and Threatened Species with Potential to Occur at Conchas Lake

If possible, the Department would like to see the following state-listed species added to Table 2. These species were previously made available to the U.S. Army Corps of Engineers via a New Mexico Environmental Review Tool-generated list for project NMERT-4097. Species that are federally listed are marked with an *: bald eagle (*Haliaeetus leucocephalus*), gray vireo (*Vireo vicinior*), peregrine falcon (*Falco peregrinus*), plainbelly water snake (*Nerodia erythrogaster*), western ribbon snake (*Thamnophis proximus*), and yellow-billed cuckoo* (*Coccyzus americanus*). The Department does not see the need to include the Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) in Table 2 as it is endemic to the Sangre de Cristo Mountains, outside of the proposed project area.

Thank you for the opportunity to review and submit comments regarding this project. Please contact Erin Salano, Terrestrial Habitat Specialist, at erin.salano@dof.nm.gov or (505) 321-5485 with any questions.

Sincerely,

Virginia Seamster Digitally signed by Virginia Seamster
Date: 2025.02.24 14:39:32 -07'00'

Virginia Seamster, Ph.D.
Assistant Chief, Ecological and Environmental Planning Section
cc: USFWS NMES Field Office



United States Department of the Interior

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



In Reply Refer To:
Project Code: 2024-0136949
Project Name: Conchas vegetation management plan

05/09/2025 17:46:20 UTC

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

To Whom It May Concern:

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

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

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

The purpose of the ESA is to provide a means whereby threatened and endangered species and

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

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

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

Candidate Species and Other Sensitive Species

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

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

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

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

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

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

WETLANDS AND FLOODPLAINS

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

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

MIGRATORY BIRDS

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

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>. We also recommend review of the Birds of Conservation Concern list (<https://www.fws.gov/media/birds-conservation-concern-2021>) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

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

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

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

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

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
(505) 346-2525

PROJECT SUMMARY

Project Code: 2024-0136949

Project Name: Conchas vegetation management plan

Project Type: Levee / Dike - Vegetation Management

Project Description: Planning for land/vegetation management: invasive species removal, native species revegetation

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.3845775,-104.18902651879208,14z>



Counties: San Miguel County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

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

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

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8196	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

INSECTS

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

FLOWERING PLANTS

NAME	STATUS
Holy Ghost Ipomopsis <i>Ipomopsis sancti-spiritus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8231	Endangered

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Dana Price
Address: 4101 Jefferson Plaza NE
City: Albuquerque
State: NM
Zip: 87109
Email: dana.m.price@usace.army.mil
Phone: 5053423378



PROJECT INFORMATION

Project Title: Conchas Lake USACE Vegetation Management Plan
Project Type: WEED AND INVASIVE PLANT CONTROL
Latitude/Longitude (DMS): 35.396969 / -104.193365
County(s): SAN MIGUEL
Project Description: Implement vegetation management strategies on USACE Project lands at Conchas Lake to: (1) preserve native habitat mosaics, (2) identification and restoration of disturbed and degraded areas, (3) management of invasive and non-native flora, (4) reduction of standing dead woody vegetation and (5) preservation of the aesthetic and historic character of the surround landscape.

REQUESTOR INFORMATION

Project Organization:
Contact Name: Dana Price
Email Address: dana.m.price@usace.army.mil
Organization: U.S. Army Corps of Engineers
Address: 4101 Jefferson Plaza NE, Albuquerque NM 87109
Phone: 505-342-3378

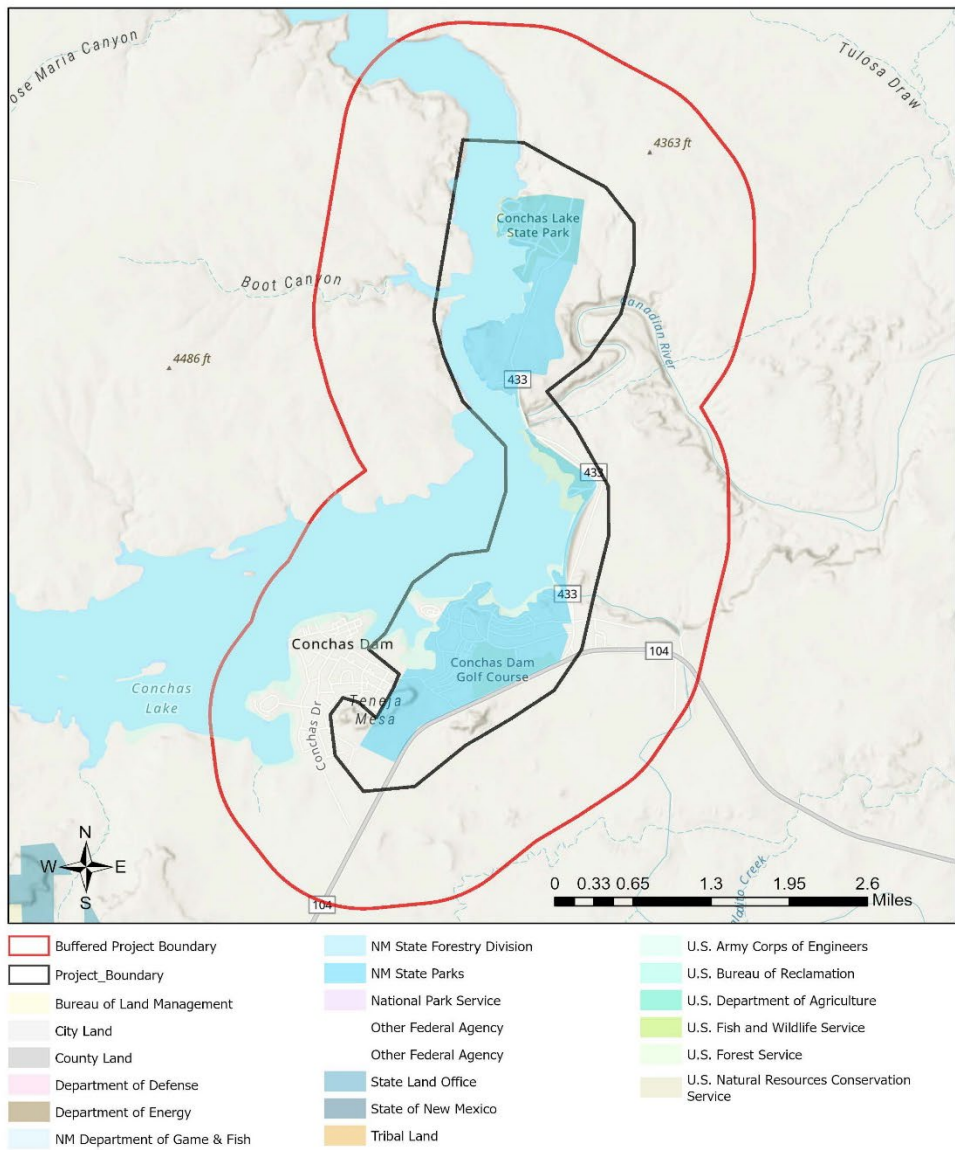
OVERALL STATUS

This report contains an initial list of recommendations regarding potential impacts to wildlife or wildlife habitats from the proposed project; see the Project Recommendations section below for further details. Your project proposal is being forwarded to a New Mexico Department of Game and Fish (Department) biologist for review to determine whether there are any additional recommendations regarding the proposed actions. A Department biologist will be in touch within 30 days if there are further recommendations regarding this project proposal.

About this report:

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their [Information for Planning and Consultation tool](#).
- This report contains information on wildlife species protected under the ESA and the [Wildlife Conservation Act \(WCA\)](#), [Species of Greatest Conservation Need \(SGCN\)](#), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the [State Wildlife Action Plan \(SWAP\) for New Mexico](#); all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The [New Mexico Crucial Habitat Assessment Tool](#), the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

Conchas Lake USACE Vegetation Management Plan



Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Boreal Chorus Frog	Pseudacris maculata			SGCN			
Plains Leopard Frog	Lithobates blairi			SGCN			BLM WATCH
Northern Leopard Frog	Lithobates pipiens			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Fared Grebe	Podiceps nigricollis			SGCN			
Clark's Grebe	Aechmophorus clarkii			SGCN			
Bald Eagle	Haliaeetus leucocephalus		T	SGCN	Sensitive Species		BLM SENSITIVE
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Mountain Plover	Charadrius montanus			SGCN	Sensitive Species		BLM WATCH
Long-Billed Curlew	Numenius americanus			SGCN			BLM WATCH
Yellow-Billed Cuckoo	Coccyzus americanus	LT		SGCN			
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Common Nighthawk	Chordeiles minor			SGCN			
Lewis's Woodpecker	Melanerpes lewis			SGCN		USFS R3 SCC	BLM WATCH
Williamson's Sapsucker	Sphyrapicus thyroideus			SGCN			
Olive-Sided Flycatcher	Contopus cooperi			SGCN			
Bank Swallow	Riparia riparia			SGCN			
Pinyon Jay	Gymnorhinus cyanocephalus			SGCN		USFS R3 SCC	BLM SENSITIVE
Clark's Nutcracker	Nucifraga columbiana			SGCN			
Juniper Titmouse	Baeolophus ridgwayi			SGCN		USFS R3 SCC	BLM WATCH
Pygmy Nuthatch	Sitta pygmaea			SGCN			
Western Bluebird	Sialia mexicana			SGCN			
Mountain Bluebird	Sialia currucoides			SGCN			
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Gray Vireo	Vireo vicinior		T	SGCN	Sensitive Species	USFS R3 SCC	BLM WATCH
Virginia's Warbler	Leiothlypis virginiae			SGCN			BLM SENSITIVE
Thick-billed Longspur	Rhynchophanes mccownii			SGCN			BLM SENSITIVE
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Cassin's Finch	Haemorhous cassinii			SGCN			BLM WATCH
Evening Grosbeak	Coccothraustes vespertinus			SGCN			
Spikedace	Meda fulgida	LE	E	SGCN			
Loach Minnow	Rhinichthys cobitis	LE	E	SGCN			
Least Shrew	Cryptotis parva		T	SGCN			BLM WATCH
Pale Townsend's Big-Eared Bat	Corynorhinus townsendii pallescens			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Mule Deer	Odocoileus hemionus			SERI			
Pronghorn	Antilocapra americana			SERI			
Plainbelly Water Snake	Nerodia erythrogaster		E	SGCN			
Western Ribbon Snake	Thamnophis proximus		T	SGCN	Sensitive Species		
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN			

Common Name hyperlink takes you to species account in [bison-m.org](https://www.bison-m.org/); Scientific Name hyperlink takes you to information in [NatureServe Explorer](https://www.natureserve.org/explorer/); ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this [website](#); WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Project Recommendations

Your proposed project activities may require a custom review for assessment of potential effects to wildlife. See the "OVERALL STATUS" section above to determine the likelihood that your project will be reviewed further based on its location. A Department biologist will confirm whether any additional conservation measures are needed. You should expect to receive any additional project recommendations within 30 days of your project submission. If the "OVERALL STATUS" section indicates that no further consultation with the Department is required based on its location, then you will only receive additional project feedback from the Department if a biologist deems it necessary.

For projects involving the use of herbicide application, the Department has the following recommendations to mitigate impacts to wildlife:

- To mitigate the potential for herbicide drift into sensitive aquatic and native riparian habitats, the Department recommends applying a minimum buffer of 20 ft (for spot applications), 100ft (if using ground application), 350 ft (if using low-altitude aerial spraying), or 1,320 ft (if using high-altitude aerial spraying; [USFWS 2007](#)) around all aquatic habitats and native riparian vegetation in the proposed treatment area.
- To mitigate the potential for herbicide drift into sensitive habitats for federally or state-listed species, the Department recommends applying a minimum buffer of 10 ft (for spot applications), 90 ft (if using ground application), 300 ft (if using low-altitude aerial spraying), or 1,320 ft (if using high-altitude aerial spraying) around all known terrestrial habitats for federally or state-listed species. Buffer distances are larger for insect pollinators of federally or state-listed plants (2,640 ft for small pollinators, 10,560 ft for large pollinators such as bumble bees) ([USFWS 2007](#)).
- Use mechanical weed removal techniques or individual plant treatments when buffers cannot be implemented and federally or state-listed species habitats are present.
- Apply herbicides directly to target plants, rather than broadly to large areas, whenever possible to avoid harming nearby non-target or native vegetation.
- Avoid herbicide spraying on days when wind speeds are high (> 10 mph) and on days when rain is expected within 48 hours.
- Apply herbicides no later than two months before normal spring runoff and high-water tables are anticipated in the project area and wait until streamflow is back below normal bank full stage to consider applying herbicides in the late summer or fall.
- Use the lowest concentration possible that will still allow for achievement of the desired result.
- Avoid applying herbicides to and removing vegetation that is being used by birds for nesting. When nesting birds may be present in target vegetation in the project area, herbicides should be applied outside of the breeding bird season (April – September).
- In areas dominated by undesired or non-native plants, habitat loss may occur if herbicide is applied to the entire area, resulting in a total loss of vegetation. To avoid this, apply herbicides in a mosaic pattern, alternating treated and non-treated sites between years.
- The Department recommends not using herbicides that contain the following chemicals that have been found to be slightly to highly toxic to wildlife including birds, fish, and pollinators: 2,4-D, dichlobenil, dichlorprop, fluazifop, glyphosate, oxyfluorfen, propyzamide, quizalofop, sulfometuron, and triclopyr ([Michael 2002](#)).

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's [Burrowing Owl Survey Protocol](#). Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. The Department can provide recommendations regarding suitability of potential translocation areas and procedures.

The proposed project occurs within or near a riparian area. Because riparian areas are important wildlife habitats, the project footprint should avoid removing any riparian vegetation or creating ground disturbance either directly within or affecting the riparian area, unless the project is intended to restore riparian habitat through non-native plant removal and replanting with native species. If your project involves removal of non-native riparian trees or planting of native riparian vegetation, please refer to the Department's habitat handbook guideline for [Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems](#). The [New Mexico Riparian Habitat Map \(NMRipMap\)](#) may also provide useful information on local riparian habitat composition and structure.

Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The [New Mexico Endangered Plant Program](#), under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.

Cultural Resources Correspondence (NHPA Section 106):

SHPO Letter:



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

November 1, 2024

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

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

Dear Ms. Ensey:

Pursuant to 36 CFR 800, the US Army Corps of Engineers, Albuquerque District (Corps), is seeking your concurrence on a determination of **no adverse effect to historic properties** for the development and implementation of a new vegetation management plan (Plan) for Corps fee land at the Conchas Lake Project in San Miguel County, New Mexico. The Project is located at the confluence of the Conchas River with the South Canadian River in east-central New Mexico, and is about 25 miles north of Newkirk, and 31 miles northwest of Tucumcari, New Mexico (Enclosure 1).

The purpose of the Plan is to ensure that the conservation and sustainability of the land, water, and recreational resources on Conchas Lake are in compliance with applicable environmental laws and regulations and to maintain quality lands for future public use. The 2024 Plan is intended to serve as a comprehensive vegetation management plan with an effective life of approximately 15 years. The need for the Plan is to identify and implement effective vegetation management strategies that promote the health of upland, wetland, and riparian ecosystems of the USACE-owned land at Conchas Lake.

The draft Plan includes the following kinds of methods for removing and managing vegetation at Conchas Lake:

1) Manual vegetation removal; 2) Low Volume Basal Bark Herbicide Application; 3) Cut-Stump Herbicide Application; 4) Foliar Application; 5) Mechanical Removal; and 6) Burn Treatment and other Alternative Treatment Methodology. In addition, post-treatment activities would include reseeding and replanting native vegetation.

Currently, compliance with Section 106 of the NHPA for routine operations and maintenance activities is governed by an existing programmatic agreement (PA)

executed on 12 December 2019, and which is currently in the process of being amended in consultation with your office. The Corps determines that any vegetation work conducted within surveyed areas and outside of documented eligible or undetermined historic properties boundaries would result in no historic properties affected (per Stipulation VI.F.) Properties determined not eligible through prior consultation are not considered historic properties under NHPA.

Conchas Lake contains a large number of significant archaeological resources representing thousands of years of human occupation. With the exception of areas that were inundated at the time of survey (shoreline areas below 4,172 ft in elevation), all Corps fee land at Conchas Lake has been subjected to intensive archaeological survey in recent years, most recently a survey of the South Campground (Turnbow and Cribbin 2008), and a recent survey of 1,899 acres (Brown 2015). A total of 65 archaeological sites have been identified on Corps fee land. These include both prehistoric sites dating over the span of several thousand years, and post-contact and historic sites including sites associated with the construction of Conchas Dam itself. The following table presents a list of all documented sites on Corps fee land, along with eligibility status. An overall map showing the location of specifically evaluated vegetation management areas in shown in Enclosure 2, and a map showing these areas in relation to documented sites is shown in Enclosure 3. In all, these resources include one listed resource (the Conchas Dam Historic District).

LA Number or Name	Eligibility	Eligibility Consultation HPD Log Number
29428	Undetermined	112130
29429	Undetermined	112130
29430	NA (combined with other site)	112130
29431	Not Eligible	112130
29432	Eligible	112130
29433	Eligible	112130
29435	Undetermined	112130
29436	Eligible	112130
29437	Eligible	112130
29438	Eligible	112130
29439	Eligible	112130
129125	Not Eligible	112130
155812	Eligible	112130
155813	NA (combined with other site)	112130
157833	Not Eligible	93101
157834	Not Eligible	93101
157846	Not Eligible	93101
157847	Not Eligible	93101
157848	Not Eligible	93101
157849	Eligible	93101
157850	Undetermined	93101
178731	Not Eligible	112130
178732	Not Eligible	112130

LA Number or Name	Eligibility	Eligibility Consultation HPD Log Number
178733	Eligible	112130
178734	Eligible	112130
178735	Eligible	112130
178736	Undetermined	112130
178737	Undetermined	112130
178738	Not Eligible	112130
178739	Undetermined	112130
178740	Not Eligible	112130
178741	Not Eligible	112130
178742	Undetermined	112130
178743	Undetermined	112130
178744	Not Eligible	112130
178745	Eligible	112130
178746	Not Eligible	112130
178747	Eligible	112130
178748	Undetermined	112130
178749	Not Eligible	112130
178750	Eligible	112130
178751	Undetermined	112130
178752	Not Eligible	112130
178753	Not Eligible	112130
178754	Eligible	112130
178755	Not Eligible	112130
178756	Not Eligible	112130
178757	Not Eligible	112130
178758	Eligible	112130
178759	Eligible	112130
178760	Undetermined	112130
178761	Not Eligible	112130
178762	Eligible	112130
178763	Not Eligible	112130
178764	Not Eligible	112130
179689	Not Eligible	112130
179690	Not Eligible	112130
179691	Eligible	112130
179692	Eligible	112130
179693	Undetermined	112130
179694	Undetermined	112130
179695	Eligible	112130
179696	Eligible	112130
179697	Eligible	112130
179698	Undetermined	112130
199700	Not Eligible	117481
Conchas Dam Historic District (NR # 05000454)	Listed	
Conchas Lodge (HCPI 41387, 42254, 42255)	Eligible	084466, 102059, 104242, 105107

General Provisions: Within areas containing archaeological sites with eligible determinations or for which eligibility has not yet been determined, the Corps determines that invasive vegetation work is likely to have no adverse effect to historic properties as long as the work adheres to the following restrictions:

- Hand cutting and/or removal only within archaeological or cultural site boundaries, including hand-carrying of removed vegetation away from site. Site presence and boundaries will be determined by a qualified archaeologist following any stipulations or guidelines present in the PA, including the determination of whether updated survey is required
- No islands of vegetation should be left behind that may indicate the location or presence of an archaeological site to the public
- Any staging of equipment and/or pile burning of removed vegetation must occur well outside of site boundaries
- No ground disturbance (including tilling) within site boundaries for reseeding purposes

The Plan would be used both by Corps personnel and by outgrantees (such as New Mexico State Parks), with determinations regarding the location of eligible historic properties made by a qualified USACE archaeologist. The Corps will provide outgrantees with appropriate maps showing where any cultural resources avoidance areas may be located, and/or what areas may need to use particular methods to avoid adverse effects to historic properties per the restrictions noted above.

Specific Planned Work Areas:

The Plan itself includes evaluation of several specific problem areas known to require vegetation management intervention, but also allows for additional work in other areas as conditions change over time. Polygons showing the areas specifically analyzed for vegetation management work are shown in Enclosure 2. These polygons are considered the areas of potential effect (APE) for vegetation work in those areas.

Dam Stilling Basin: This location is immediately downstream of the dam, and straddles the river on both sides of the bank. The area within these polygons does not intersect any eligible property (Enclosure 4). However, this is immediately adjacent to the Conchas Dam Historic District and other resources, so work must be restricted to the areas within these polygons without extending further uphill on either bank without further compliance work.

Work in this area would not adversely affect any eligible property.

South Skirt Dam: This area is located immediately adjacent to the south skirt dam, a portion of the Conchas Dam Historic District (Enclosure 5). It contains no historic properties beyond the Dam itself, and is in an area heavily reworked during dam construction.

Cannon Cove: This area is located just west of the town of Big Mesa (Enclosure 6). The analyzed vegetation areas are divided here into four sub-areas;



Big Mesa: This area is located near Highway 104, near the southeast boundary of Corps fee land (Enclosure 7). No historic properties are near this location.

Boat Ramp (or Launch) Peninsula: The Boat Launch Peninsula is located just north of the Ranger Station Cove and serves as the primary boat ramp for the Corps (Enclosure 8). No historic properties are located within the surveyed portion of this area. All but the northern tip of the peninsula has been surveyed for cultural resources; however, the northern portion of the peninsula was underwater at the time of survey and only recently is beginning to become accessible. This portion of the peninsula lies below 4,172 feet in elevation.

While this northern portion has not been directly surveyed, the Corps believes that the likelihood of any historic properties within this area is low for the following reasons. Due to its inundation for decades, and its many years within the lake wave zone, this area is likely to have experienced both significant disturbance due to wave action and significant deposition of lake sediment over the original land surface (see Enclosure 9 for historic aerial photographic comparison). A recent study of the nearby Conchas Beach cleanup area (NMCRIS 148963, included here in our South Campground Shore area), extended into these elevations. That study placed a number of auger holes throughout these elevations at the beach, and found that recently deposited lake sediment extended at least a meter in depth, which was the maximum depth augered. It is our opinion that these conditions are likely in the northern portion of the Boat Launch Peninsula as well. As such, we determine that any work in this area would result in no historic properties affected.

Ranger Station Cove: This area is located just south of and adjacent to the South Campground (Enclosure 8). No eligible historic properties are within the APE for this immediate area.



Conchas Lodge Area: Conchas Lodge is located south of the Boat Launch Peninsula and sits on a bluff overlooking the lake (Enclosure 8), and the Lodge is an eligible historic property. Vegetation work in this area would not impinge directly on any element of the Lodge complex. In addition, as the purpose of the project is to manage and remove invasive species while encouraging native species growth, any viewshed effects in this location would have no adverse effect on the Lodge.

South Campground Shore: This area is located between the Boat Ramp Peninsula and the Irrigation Headworks, at the southern end of the lake (Enclosure 10). No eligible historic properties are within the APE for this immediate area. [REDACTED]

Irrigation Headworks: The mapped vegetation areas here are located immediately upstream of the Irrigation Headworks, which are part of the District (Enclosure 10). They do not intersect any documented resource. [REDACTED]

In order to avoid damage to LA 179691, the Corps plans to follow the restricted methods described above in this letter, including hand cutting and carrying of vegetation and no ground disturbance during reseeding. The Corps determines that following these practices will result in no adverse effect to LA 179691.

Conchas Dam Historic District Viewshed considerations: Viewsheds are relevant to the historic significance of the Conchas Dam Historic District. While some of the foreseen vegetation work will occur within the viewshed of the District, there will be no direct impacts to the District; further, any effort to control invasive vegetation and enhance native species would be consonant with the historic viewshed and would not adversely affect the District. Vegetation management on portions of the Dam itself is already covered under the routine operations and maintenance PA.

The Corps therefore determines that implementation of the Plan would result in **no adverse effect to historic properties** provided that the conditions and restrictions described above apply. To summarize:

General conditions:

- All Corps fee land has been surveyed for cultural resources, except for some areas below 4,172 feet in elevation. The Plan may be implemented in all surveyed areas above this elevation, but unsurveyed areas below this elevation will need evaluation by a qualified archaeologist before implementation
- In areas outside of the boundaries of eligible historic properties, any of the vegetation management techniques contained within the Plan may be implemented without any effect to historic properties
- In areas within eligible archaeological sites, using the restricted methods described above would result in no adverse effect to those properties
- All staging of equipment and pile burning locations will occur outside of boundaries of historic properties
- Any additional procedures or exemptions contained within the PA may also be applied in furtherance of the Plan

Specific analyzed areas:

- Only [REDACTED] Work within this area would result in no adverse effect to LA 179691 as long as it follows the restricted methods described above
- All other analyzed areas do not intersect historic properties boundaries and would have no effects on those properties
- Work within these areas would have no adverse effect, direct or indirect, on the Conchas Dam Historic District

We seek your concurrence with these determinations.

If you have any questions or require additional information concerning the Conchas Vegetation Management Plan, please contact Jonathan Van Hoose at (505) 342-3687 or by email at jonathan.e.vanhoose@usace.army.mil; me at (505) 342-3661 or by email at danielle.a.galloway@usace.army.mil. You may also provide comments to the above address.

Sincerely,

Danielle Galloway

Danielle Galloway
Chief, Environmental Resources Section

I CONCUR

MICHELLE ENSEY
NEW MEXICO STATE HISTORIC
PRESERVATION OFFICER

Date

Enclosures

SHPO Concurrence:

Section 106 Consultation letters were sent to the following Tribes with interests in the Conchas Lake area:

- Apache Tribe of Oklahoma
- Comanche Nation of Oklahoma
- Jicarilla Apache Nation
- Kewa Pueblo
- Kiowa Tribe
- Mescalero Apache Tribe
- Navajo Nation
- Pueblo de Cochiti
- Pueblo of Isleta
- Pueblo of Jemez
- Pueblo of Tesuque
- Pueblo of Zuni
- The Hopi Tribe
- Wichita and Affiliated Tribes

A sample letter sent to Tribes is presented below:



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

November 1, 2024

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

Honorable Durell Cooper
Chairman, Apache Tribe of Oklahoma
Post Office Box 1220
Anadarko, Oklahoma 73005

Dear Chairman Cooper:

Pursuant to 36 CFR 800, the US Army Corps of Engineers, Albuquerque District (Corps), is seeking your comment on our determination of **no adverse effect to historic properties** for the development and implementation of a new vegetation management plan (Plan) for Corps fee land at the Conchas Lake Project in San Miguel County, New Mexico. The Project is located at the confluence of the Conchas River with the South Canadian River in east-central New Mexico, and is about 25 miles north of Newkirk, and 31 miles northwest of Tucumcari, New Mexico (Enclosure 1).

The purpose of the Plan is to ensure that the conservation and sustainability of the land, water, and recreational resources on Conchas Lake are in compliance with applicable environmental laws and regulations and to maintain quality lands for future public use. The 2024 Plan is intended to serve as a comprehensive vegetation management plan with an effective life of approximately 15 years. The need for the Plan is to identify and implement effective vegetation management strategies that promote the health of upland, wetland, and riparian ecosystems of the USACE-owned land at Conchas Lake.

The draft Plan includes the following kinds of methods for removing and managing vegetation at Conchas Lake:

1) Manual vegetation removal; 2) Low Volume Basal Bark Herbicide Application; 3) Cut-Stump Herbicide Application; 4) Foliar Application; 5) Mechanical Removal; and 6) Burn Treatment and other Alternative Treatment Methodology. In addition, post-treatment activities would include reseeding and replanting native vegetation.

Conchas Lake contains a large number of significant archaeological resources representing thousands of years of human occupation. With the exception of areas that were inundated at the time of survey (shoreline areas below 4,172 ft in elevation), all Corps fee land at Conchas Lake has been subjected to intensive archaeological survey in recent years, most recently a survey of the South Campground (Turnbow and Cribbin 2008), and a recent survey of 1,899 acres (Brown 2015). A total of 65 archaeological

sites have been identified on Corps fee land. These include both prehistoric sites dating over the span of several thousand years, and post-contact and historic sites including sites associated with the construction of Conchas Dam itself. The following table presents a list of all documented sites on Corps fee land, along with eligibility status. An overall map showing the location of specifically evaluated vegetation management areas is shown in Enclosure 2, and a map showing these areas in relation to documented sites is shown in Enclosure 3. In all, these resources include one listed resource (the Conchas Dam Historic District, comprising the Dam and administration areas).

LA Number or Name	Eligibility	Eligibility Consultation HPD Log Number
29428	Undetermined	112130
29429	Undetermined	112130
29430	NA (combined with other site)	112130
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178734	Eligible	112130
178735	Eligible	112130
178736	Undetermined	112130
178737	Undetermined	112130
178738	Not Eligible	112130
178739	Undetermined	112130
178740	Not Eligible	112130
178741	Not Eligible	112130
178742	Undetermined	112130
178743	Undetermined	112130
178744	Not Eligible	112130
178745	Eligible	112130

LA Number or Name	Eligibility	Eligibility Consultation HPD Log Number
178746	Not Eligible	112130
178747	Eligible	112130
178748	Undetermined	112130
178749	Not Eligible	112130
178750	Eligible	112130
178751	Undetermined	112130
178752	Not Eligible	112130
178753	Not Eligible	112130
178754	Eligible	112130
178755	Not Eligible	112130
178756	Not Eligible	112130
178757	Not Eligible	112130
178758	Eligible	112130
178759	Eligible	112130
178760	Undetermined	112130
178761	Not Eligible	112130
178762	Eligible	112130
178763	Not Eligible	112130
178764	Not Eligible	112130
179689	Not Eligible	112130
179690	Not Eligible	112130
179691	Eligible	112130
179692	Eligible	112130
179693	Undetermined	112130
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- No islands of vegetation should be left behind that may indicate the location or presence of an archaeological site to the public
- Any staging of equipment and/or pile burning of removed vegetation must occur well outside of site boundaries
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The Plan would be used both by Corps personnel and by outgrantees (such as New Mexico State Parks), with determinations regarding the location of eligible historic properties made by a qualified USACE archaeologist. The Corps will provide outgrantees with appropriate maps showing where any cultural resources avoidance areas may be located, and/or what areas may need to use particular methods to avoid adverse effects to historic properties per the restrictions noted above.

Specific Planned Work Areas:

The Plan itself includes evaluation of several specific problem areas known to require vegetation management intervention, but also allows for additional work in other areas as conditions change over time. Polygons showing the areas specifically analyzed for vegetation management work are shown in Enclosure 2. These polygons are considered the areas of potential effect (APE) for vegetation work in those areas.

Dam Stilling Basin: This location is immediately downstream of the dam, and straddles the river on both sides of the bank. The area within these polygons does not intersect any eligible property (Enclosure 4). However, this is immediately adjacent to the Conchas Dam Historic District and other resources, so work must be restricted to the areas within these polygons [REDACTED]

[REDACTED] Work in this area would not adversely affect any eligible property.

South Skirt Dam: This area is located immediately adjacent to the south skirt dam, a portion of the Conchas Dam Historic District (Enclosure 5). It contains no historic properties beyond the Dam itself, and is in an area heavily reworked during dam construction.

Cannon Cove: This area is located just west of the town of Big Mesa (Enclosure 6). The analyzed vegetation areas are divided here into four sub-areas; [REDACTED]

Big Mesa: This area is located near Highway 104, near the southeast boundary of Corps fee land (Enclosure 7). No historic properties are near this location.

Boat Ramp (or Launch) Peninsula: The Boat Launch Peninsula is located just north of the Ranger Station Cove and serves as the primary boat ramp for the Corps (Enclosure 8). No historic properties are located within the surveyed portion of this area. All but the northern tip of the peninsula has been surveyed for cultural resources; however, the northern portion of the peninsula was underwater at the time of survey and only recently is beginning to become accessible. This portion of the peninsula lies below 4,172 feet in elevation.

While this northern portion has not been directly surveyed, the Corps believes that the likelihood of any historic properties within this area is low for the following reasons. Due to its inundation for decades, and its many years within the lake wave zone, this area is likely to have experienced both significant disturbance due to wave action and significant deposition of lake sediment over the original land surface (see Enclosure 9 for historic aerial photographic comparison). A recent study of the nearby Conchas Beach cleanup area (NMCRI 148963, included here in our South Campground Shore area), extended into these elevations. That study placed a number of auger holes throughout these elevations at the beach, and found that recently deposited lake sediment extended at least a meter in depth, which was the maximum depth augered. It is our opinion that these conditions are likely in the northern portion of the Boat Launch Peninsula as well. As such, we determine that any work in this area would result in no historic properties affected.

Ranger Station Cove: This area is located just south of and adjacent to the South Campground (Enclosure 8). [REDACTED]

Conchas Lodge Area: Conchas Lodge is a New Deal-era structure located south of the Boat Launch Peninsula and sits on a bluff overlooking the lake (Enclosure 8), and the Lodge is an eligible historic property. Vegetation work in this area would not impinge directly on any element of the Lodge complex. In addition, as the purpose of the project is to manage and remove invasive species while encouraging native species growth, any viewshed effects in this location would have no adverse effect on the Lodge.

South Campground Shore: This area is located between the Boat Ramp Peninsula and the Irrigation Headworks, at the southern end of the lake (Enclosure 10). No eligible historic properties are within the APE for this immediate area. [REDACTED]

Irrigation Headworks: The mapped vegetation areas here are located immediately upstream of the Irrigation Headworks, which are part of the District (Enclosure 10). They do not intersect any documented resource. [REDACTED]

█

[REDACTED]

In order to avoid damage to LA 179691, the Corps plans to follow the restricted methods described above in this letter, including hand cutting and carrying of vegetation and no ground disturbance during reseeding. The Corps determines that following these practices will result in no adverse effect to LA 179691.

Conchas Dam Historic District Viewshed considerations: Viewsheds are relevant to the historic significance of the Conchas Dam Historic District. While some of the foreseen vegetation work will occur within the viewshed of the District, there will be no direct impacts to the District; further, any effort to control invasive vegetation and enhance native species would be consonant with the historic viewshed and would not adversely affect the District. Vegetation management on portions of the Dam itself is already covered under the routine operations and maintenance PA.

The Corps therefore determines that implementation of the Plan would result in **no adverse effect to historic properties** provided that the conditions and restrictions described above apply. To summarize:

General conditions:

- All Corps fee land has been surveyed for cultural resources, except for some areas below 4,172 feet in elevation. The Plan may be implemented in all surveyed areas above this elevation, but unsurveyed areas below this elevation will need evaluation by a qualified archaeologist before implementation
- In areas outside of the boundaries of eligible historic properties, any of the vegetation management techniques contained within the Plan may be implemented without any effect to historic properties
- In areas within eligible archaeological sites, using the restricted methods described above would result in no adverse effect to those properties
- All staging of equipment and pile burning locations will occur outside of boundaries of historic properties
- Any additional procedures or exemptions contained within the PA may also be applied in furtherance of the Plan

Specific analyzed areas:

- Only [REDACTED] work within this area would result in no adverse effect to LA 179691 as long as it follows the restricted methods described above
- All other analyzed areas do not intersect historic properties boundaries and would have no effects on those properties
- Work within these areas would have no adverse effect, direct or indirect, on the Conchas Dam Historic District

The Corps is seeking input from tribes regarding the proposed Plan and asking if further consultation is wanted for this project. The purpose of this scoping letter is to provide you with the opportunity to submit concerns or comments regarding potential effects. Specifically, any concerns you may have regarding the environment such as natural, biological, or cultural resources; wildlife, vegetation, and special status species; air, water, or sound quality; aesthetics; health and safety; Traditional Cultural Properties; or Indian Trust Assets that may occur within or adjacent to the project area.

If you have any questions or require additional information concerning the Conchas Vegetation Management Plan, please contact Jonathan Van Hoose at (505) 342-3687 or by email at jonathan.e.vanhoose@usace.army.mil; me at (505) 342-3661 or by email at danielle.a.galloway@usace.army.mil. You may also provide comments to the above address.

Sincerely,

A handwritten signature in cursive script that reads "Danielle Galloway".

Danielle Galloway
Chief, Environmental Resources Section

Enclosures

SHPO Concurrence (pages 1 and 7 of signed letter):



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

November 1, 2024

HPD Log #123954
Received 11/1/2024

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

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

Dear Ms. Ensey:

Pursuant to 36 CFR 800, the US Army Corps of Engineers, Albuquerque District (Corps), is seeking your concurrence on a determination of **no adverse effect to historic properties** for the development and implementation of a new vegetation management plan (Plan) for Corps fee land at the Conchas Lake Project in San Miguel County, New Mexico. The Project is located at the confluence of the Conchas River with the South Canadian River in east-central New Mexico, and is about 25 miles north of Newkirk, and 31 miles northwest of Tucumcari, New Mexico (Enclosure 1).

The purpose of the Plan is to ensure that the conservation and sustainability of the land, water, and recreational resources on Conchas Lake are in compliance with applicable environmental laws and regulations and to maintain quality lands for future public use. The 2024 Plan is intended to serve as a comprehensive vegetation management plan with an effective life of approximately 15 years. The need for the Plan is to identify and implement effective vegetation management strategies that promote the health of upland, wetland, and riparian ecosystems of the USACE-owned land at Conchas Lake.

The draft Plan includes the following kinds of methods for removing and managing vegetation at Conchas Lake:

1) Manual vegetation removal; 2) Low Volume Basal Bark Herbicide Application; 3) Cut-Stump Herbicide Application; 4) Foliar Application; 5) Mechanical Removal; and 6) Burn Treatment and other Alternative Treatment Methodology. In addition, post-treatment activities would include reseeding and replanting native vegetation.

Currently, compliance with Section 106 of the NHPA for routine operations and maintenance activities is governed by an existing programmatic agreement (PA)

Specific analyzed areas:

- Only Area A within the Cannon Cove area contains or intersects an eligible historic property. Work within this area would result in no adverse effect to LA 179691 as long as it follows the restricted methods described above
- All other analyzed areas do not intersect historic properties boundaries and would have no effects on those properties
- Work within these areas would have no adverse effect, direct or indirect, on the Conchas Dam Historic District

We seek your concurrence with these determinations.

If you have any questions or require additional information concerning the Conchas Vegetation Management Plan, please contact Jonathan Van Hoose at (505) 342-3687 or by email at jonathan.e.vanhoose@usace.army.mil; me at (505) 342-3661 or by email at danielle.a.galloway@usace.army.mil. You may also provide comments to the above address.

Sincerely,

Danielle Galloway

Danielle Galloway
Chief, Environmental Resources Section

Cortney Wands

Digitally signed by Cortney
Wands
Date: 2024.11.26 14:56:01
-07'00'

I CONCUR

for

MICHELLE ENSEY
NEW MEXICO STATE HISTORIC
PRESERVATION OFFICER

Date

Enclosures