



— BUREAU OF —
RECLAMATION

Draft Environmental Assessment

Sumner Dam Radial Gates

Project

Lake Sumner, De Baca County, New Mexico

Upper Colorado Basin



U.S. Department of the Interior

September 2024

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

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

Sumner Dam Radial Gates Project

De Baca County, New Mexico

Upper Colorado Basin – Albuquerque Area Office

This Environmental Assessment was prepared for Reclamation by BRIC, LLC under Contract No. 140R4018A0010

BRIC, LLC | Subsidiary of Diné Development Corporation
Albuquerque, NM 87113

Cover Photo: Sumner Dam radial gates as viewed from downstream. Source: BRIC, LLC.

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Acronyms and Abbreviations

AAO	Albuquerque Area Office
BMP	Best Management Practices
BRIC	A limited liability company and subsidiary of Diné Development Corporation
CCR	Combined City Region
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CID	Carlsbad Irrigation District
CWA	Clean Water Act
CY	Cubic Yards
DOI	Department of the Interior
EA	Environmental Assessment
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
HAER	Historic American Engineering Record
HCPI	Historic Cultural Properties Inventory
HUC	Hydrologic Unit Code
IDT	Interdisciplinary Team
IPaC	Information for Planning and Consultation tool
ITA	Indian Trust Asset
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMCRIS	New Mexico Cultural Resources Information System
NMED	New Mexico Environment Department
NMSU	New Mexico State University
NRCS	Natural Resources Conservation Service

NRHP	National Register of Historic Places
Reclamation	Bureau of Reclamation
SHPO	State Historic Preservation Officer
SOD	Safety of Dams
TCP	Traditional Cultural Property
TMDL	Total Maximum Daily Load
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

1. Project Purpose

1.1 INTRODUCTION

The U.S. Bureau of Reclamation (hereafter Reclamation) Albuquerque Area Office (AAO) has requested an Environmental Assessment (EA) be conducted for the Sumner Dam Radial Gates Project, located on the Pecos River approximately sixteen miles northwest of Fort Sumner, in De Baca County, New Mexico (Figure 1). Sumner Dam impounds a reservoir (Lake Sumner) which contains a total storage capacity of 124,119 acre-feet (ac-ft) at elevation 4,282 feet (ft), which corresponds to the crest of the emergency spillway (Reclamation 2021). Sumner Dam is owned by Reclamation and managed by the Carlsbad Irrigation District (CID) to supply irrigation downstream and to maintain instream flow requirements for the Pecos bluntnose shiner (*Notropis simus pecosensis*). Sumner Dam Lake provides about 36,000 acre-feet of conservation storage for irrigation. In addition to irrigation storage, Sumner Dam and Lake provide flood control and recreation opportunities, such as swimming, boating, and fishing. The U.S. Army Corps of Engineers (USACE) has flood control authority at Sumner Dam and Lake once the elevation reaches 4,261 feet (overflow crest elevation of the dam is 4,259 feet).

This environmental assessment (EA) analyzes the proposed alternatives and their general impacts on the environment. This EA has been prepared in accordance with the Reclamation's National Environmental Policy Act (NEPA) Handbook (Reclamation 2012) pursuant to the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations (CFR) 1500 et seq.), and the U.S. Department of the Interior (DOI) NEPA regulations at 43 CFR 46.

1.2 PURPOSE AND NEED FOR ACTION

The purpose of the proposed Sumner Dam modifications is to replace three existing radial gates, modify the hoisting bridge and equipment, and overlay the existing concrete spillway. The proposed modifications are needed to alleviate identified dam safety issues (i.e., corrosion on lower half of gates with rusted through areas, loose wall plates) and reduce the likelihood of radial gate failure. Reclamation performed a risk analysis for Sumner Dam in 2018 and found the total risk of Sumner Dam was above Reclamation's guidelines due to the deteriorated condition of the radial gates (Reclamation 2018). Sumner Dam and Lake (originally named Alamogordo Dam and Reservoir) were constructed in the 1930s by Reclamation as part of the Carlsbad Project and rehabilitated in the 1950s. Sumner Dam is a rockfill and earth dam with a concrete spillway that is controlled by a weir and three radial gates, and an emergency spillway in the left abutment that consists of a concrete sill buried underneath four fuse plugs (earthen engineered berms with concrete walls). The height of the radial gates is 21 feet with an elevation of 4,275 feet at mean sea level. Sumner Dam is almost 100 years old and over time the radial gates have deteriorated, with corrosion being noted on the radial gates in 1982.

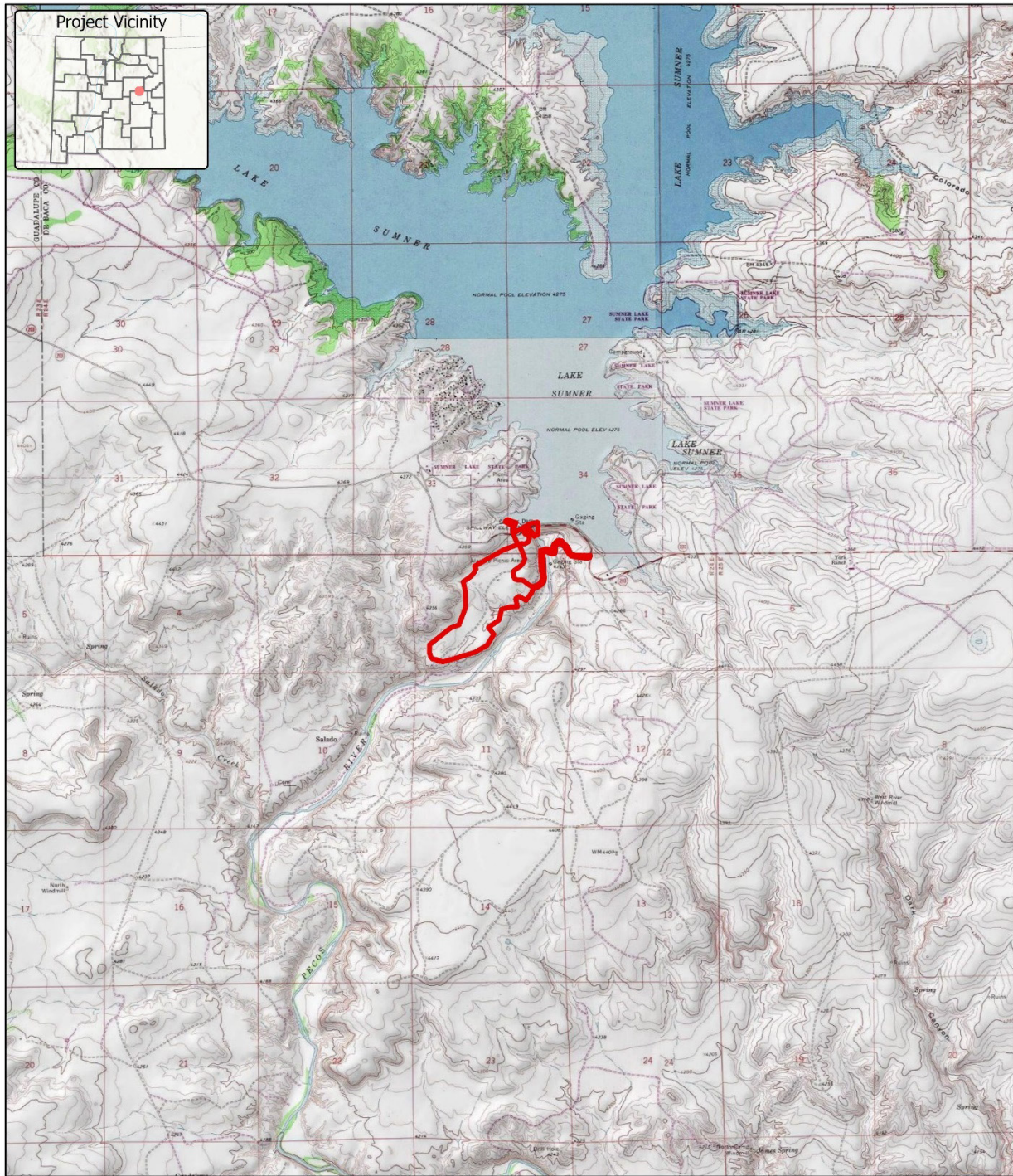
The proposed modifications are needed to provide a long-term solution for safety risks downstream of the dam associated with the potential failure of the radial gates and to restore full functionality of

Sumner Dam and Lake. In 1989, operations and maintenance of Sumner Dam were transferred from Reclamation to CID, and in 1990 Reclamation issued maintenance recommendations for the radial gates. Some repairs were made to the radial gates in 2008 and 2011, which included grit blasting and painting primer on portions of the gates. The past maintenance and repairs have not been able to keep up with the deterioration of the radial gates. In areas where water has pooled behind the radial gates, the lower half of all gates have extensive corrosion, with some areas rusted through entirely. The upper portions of the gates appear to be in good condition except for a few rust stains. The wall plates have come loose from the concrete wall in many places and need to be replaced. Due to the continued deterioration of the radial gates, Reclamation performed a risk analysis for Sumner Dam in 2018. The total risk of Sumner Dam was found to be above Reclamation's guidelines due to the deteriorated condition of the radial gates (Reclamation 2018). Based on Reclamation's findings, the Safety of Dams (SOD) recommended rehabilitation of the radial gates (SOD-2018-A).

Additionally, the 2020 Sumner Dam Issue Evaluation Risk Analysis recommended a Modified Flood Operations Plan be completed until the radial gates could either be repaired or replaced. The Modified Operation Plan and associated environmental compliance was completed in 2021 by Reclamation ([Sumner Dam Modified Flood Operations Plan EA](#)), and a deviation to control the water was issued by the USACE that included gate operation restrictions until the radial gates are replaced. The [Sumner Dam Modified Flood Operations Plan EA](#) was amended in the fall of 2023 and will provide coverage for the current modification until the Sumner Radial Gate Project commences at which time an updated modification will be put in place during construction. Modifying Sumner Dam will also support the Reclamation's Dam Safety Program's mission "to ensure Reclamation dams do not present unreasonable risk to people, property, and the environment."

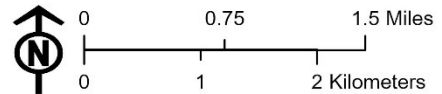
1.3 DECISIONS TO BE MADE

In accordance with NEPA, Reclamation will approve the proposed project, approve the project with additional mitigation measures, or further evaluate the project through an Environmental Impact Statement. If Reclamation decides that the effects of the proposed project would not be significant, a Finding of No Significant Impact (FONSI) will be prepared for approval of Reclamation's proposed federal actions enabling this NEPA process to conclude.



**Sumner Dam Radial Gates Project
General Vicinity Map**

 Sumner Dam Project Area



Projection: NAD 83 UTM Zone 13N
11/16/2023
SLL

Figure 1. Vicinity (project area outlined in red) of the Sumner Dam Radial Gates Project, De Baca County, New Mexico.

1.4 RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS

A variety of laws, their implementing regulations, executive orders, and other types of requirements apply to federal actions and form the basis of the analysis presented in this EA. The NEPA process requires federal agencies to consider the potential environmental consequences of proposed actions and to enhance the environment through well-informed federal decisions. The CEQ was established under NEPA to implement regulations (40 CFR) and to oversee federal policy in this process.

Reclamation must comply with all applicable federal, Tribal, State, and local laws. These laws and regulations may include, but are not limited to, the following:

- The Endangered Species Act of 1973 (P.L. 94-325),
- The Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. 703-712),
- The Federal Water Pollution Control Act of 1948 (Clean Water Act), as amended (33 U.S.C. Chapter 26),
- The Clean Water Act of 1972, as amended (P.L. 95-217),
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. Chapter 103),
- The Antiquities Act of 1906, as amended (P.L. 52-209),
- The National Historic Preservation Act (NHPA) of 1966, as amended (P.L. 89-665),
- The Archaeological and Historic Preservation Act of 1974 (P.L. 86-253),
- The Archaeological Resources Protection Act of 1979, as amended (P.L. 96-95),
- The American Indian Religious Freedom Act of 1978, as amended (42 U.S.C. 1996), and
- The Native American Graves Protection and Repatriation Act of 1990 (P.L. 101-601).

1.5 SCOPING, COORDINATION, AND PUBLIC REVIEW

Reclamation coordinated with other operators in the project area, including CID, USACE, and the United States Fish and Wildlife Service (USFWS) Ecological Services Field Office regarding water storage and flood control management at Sumner Dam. Preliminary modification designs for this EA have been refined based upon feedback and coordination with these partners. Reclamation held public scoping meetings on December 12, 2023, and January 30, 2024, at the Fort Sumner Library and Fort Sumner Community House, respectively. A PowerPoint presentation was developed to provide background information, preliminary designs to date, and resources that may be impacted. Public comments received and responses from Reclamation can be found in Appendix A.

The project interdisciplinary team (IDT) consisted of resource specialists and engineers from Reclamation and contractors. Internal scoping by the IDT identified potential issues, developed the purpose and need, and developed a range of alternatives. Using input from the IDT, a list of issues this EA will analyze in detail was developed in accordance with guidelines set forth in the Reclamation NEPA Handbook (Reclamation 2012). The key issues identified during internal scoping are summarized in the table below. The impact indicators provided are used to describe the affected environment for each issue in Chapter 3, measure change in the issue for the different alternatives, and assess the impacts from the alternatives.

Table 1. Issues Carried Forward for Analysis

	Issue Statement	Impact Indicator
Issue 1	What are the potential impacts to soil from equipment and soil removal from construction activities?	Acres of soil impacted
Issue 2	What are the potential impacts to water quality and quantity?	Decreased water quality from sediment transport or spills/leaks of industrial fluids. Decreased water quantity for irrigation districts from construction activities.
Issue 3	What are the potential impacts to federally listed threatened and endangered species?	Take of threatened or endangered species due to construction activities. Acres of habitat available before and after construction of the Proposed Action. Changes in water quality.
Issue 4	What are the potential impacts to vegetation?	Acres of vegetation impacted
Issue 5	What are the potential impacts to the integrity of known cultural sites?	Cultural sites impacted
Issue 6	What are the potential impacts to waters of the U.S. and jurisdictional wetlands?	Acres of surface water and wetland areas impacted
Issue 7	What impact would the Proposed Action have on Indian Trust Assets?	Acres or amount of Indian Trust Assets to be impacted
Issue 8	What are the potential impacts to environmental justice?	Impacts to minority and low-income populations

Issues considered by the IDT and determined not to need a detailed analysis are listed below in Table 2.

Table 2. Issues Not Carried Forward for Analysis

Resource	Rationale for Not Further Discussing in Detail
How would fugitive dust and emissions generated from ground disturbing activities impact air quality and visibility?	All areas in De Baca County, New Mexico are in attainment with the National Ambient Air Quality Standards. During site preparation and construction, air quality would temporarily be impacted by fugitive dust and pollution by exhaust emissions from motorized equipment. Air pollution from dust and exhaust emissions would cease at the completion of the Sumner Dam modifications. The temporary increase in emissions from site preparation and radial gates and hoist gate construction and spillway overlay would not be expected to result in exceeding the ambient air quality standards for any criteria pollutants in the project area or De Baca County. Fugitive dust from site preparation and construction activities would be controlled as necessary with the application of water or other dust suppressants.
How would the Proposed Action impact migratory birds?	Direct impacts to migratory birds would be avoided with construction activities occurring outside the breeding and nesting season (April 15 to August 15). If construction occurs during April 15 to August 15, then a pre-construction migratory bird nest survey would be conducted. If any active nests are located within the project area and the contractor has determined that project activities cannot be avoided until after the birds have fledged (left the nest), then the contractor must coordinate with Reclamation biologists to contact the USFWS Migratory Bird Permit Office in Albuquerque, NM at 505-248-7882 to determine the appropriate next steps.
What are the potential impacts to introduction and spread of noxious weeds?	A biological site visit was conducted on the project area October 17, 2023. Six New Mexico Department of Agriculture listed weed species were observed in the project area. No herbicide use is proposed under the Proposed Action. Under the Proposed Action, design features would be implemented to prevent the establishment and spread of noxious weeds (See Section 2.2.3).
Would the Proposed Action use or produce hazardous materials?	No chemical subject to reporting under the Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000 pounds would be used, produced, stored, or disposed of annually in association with the Proposed Action. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported, or disposed of in association with the Proposed Action. Design features would be implemented to minimize or avoid impacts from solid wastes (See Section 2.1.2).

2. Alternatives

2.1 NO ACTION ALTERNATIVE

While a No Action Alternative is not required in an EA under CEQ and DOI regulations, Reclamation's practice is to include it because it provides a baseline reference, and a reasonable range of alternatives enabling decision makers(s) to compare the magnitude of environmental effects of the Proposed Action (Reclamation 2012). Under this alternative, the Sumner Dam radial gates and hoist deck would not be replaced. In addition, there would be no changes to the sill elevation to match the upstream weir elevation and a new concrete overlay over the existing spillway would not occur. The dam would remain a high safety risk with the potential for failure of the radial gates. The existing radial gates have extensive corrosion on the lower half, with some areas rusted through entirely. In addition, the wall plates have come loose from the concrete wall in many places. Reclamation performed a risk analysis for Sumner Dam in 2018 and found the total risk of Sumner Dam was above Reclamation's public protection guidelines due to the deteriorated condition of the radial gates, resulting in a moderately high failure probability (Reclamation 2018).

2.2 PROPOSED ACTION ALTERNATIVE

2.2.1 Replacement of Three Radial Gates and Intermediate Portable Bridge Road Detour (Proposed Action)

The Proposed Action would mitigate safety risks at Sumner Dam by replacing three radial gates, replacing the hoist deck, and overlaying the existing concrete spillway (see Appendix B for preliminary plan drawings). Approximately up to 72 acres would immediately be impacted by this alternative (Figure 2). Best Management Practices (BMPs) identified in the 2016 Biological Opinion for the Carlsbad Water Operations and Water Supply Conservation would be implemented to reduce impacts to the river environment, water quality, and bluntnose shiners, and reduce the risk of spills or leaks. If approved, construction is expected to be completed by the end of 2028. If conditions arise to delay the proposed project the timeline may be extended as needed and impacts will be reevaluated at this time to determine if further NEPA is required.

Radial Gates and Hoist Deck Replacement

Radial Gates

The three existing counterweighted radial gates and associated wall plates would be removed and replaced with gates that are 45 foot wide by 16 feet tall and do not have a counterweight. The 5-foot difference between the existing gates and new gates would be made up by increasing the spillway sill elevation to match the upstream weir; this is discussed in more detail under spillway concrete overlay. Replacement of the three existing radial gates would require removal of the existing gates, wall plates, and associated appurtenant equipment. The new gates would reuse the existing embedded pins, which may require on-site machining, scaffolding, and a specialized lathe. The pins would be abrasively blasted with water to remove the coatings. The abrasive blast removal procedure would include measures, such as scaffolding or tenting the work areas, to ensure blast media and waste material are all adequately captured and not allowed to enter the spillway, removed

off site, and disposed of at an approved facility. The new gates and stainless-steel wall plates and sill plates would be lowered into each gate bay in parts using cranes and reassembled in the bay for final installation. The existing pier section would be reinforced with steel. Structural analysis will determine the level of reinforcement and demolition needed for the piers.

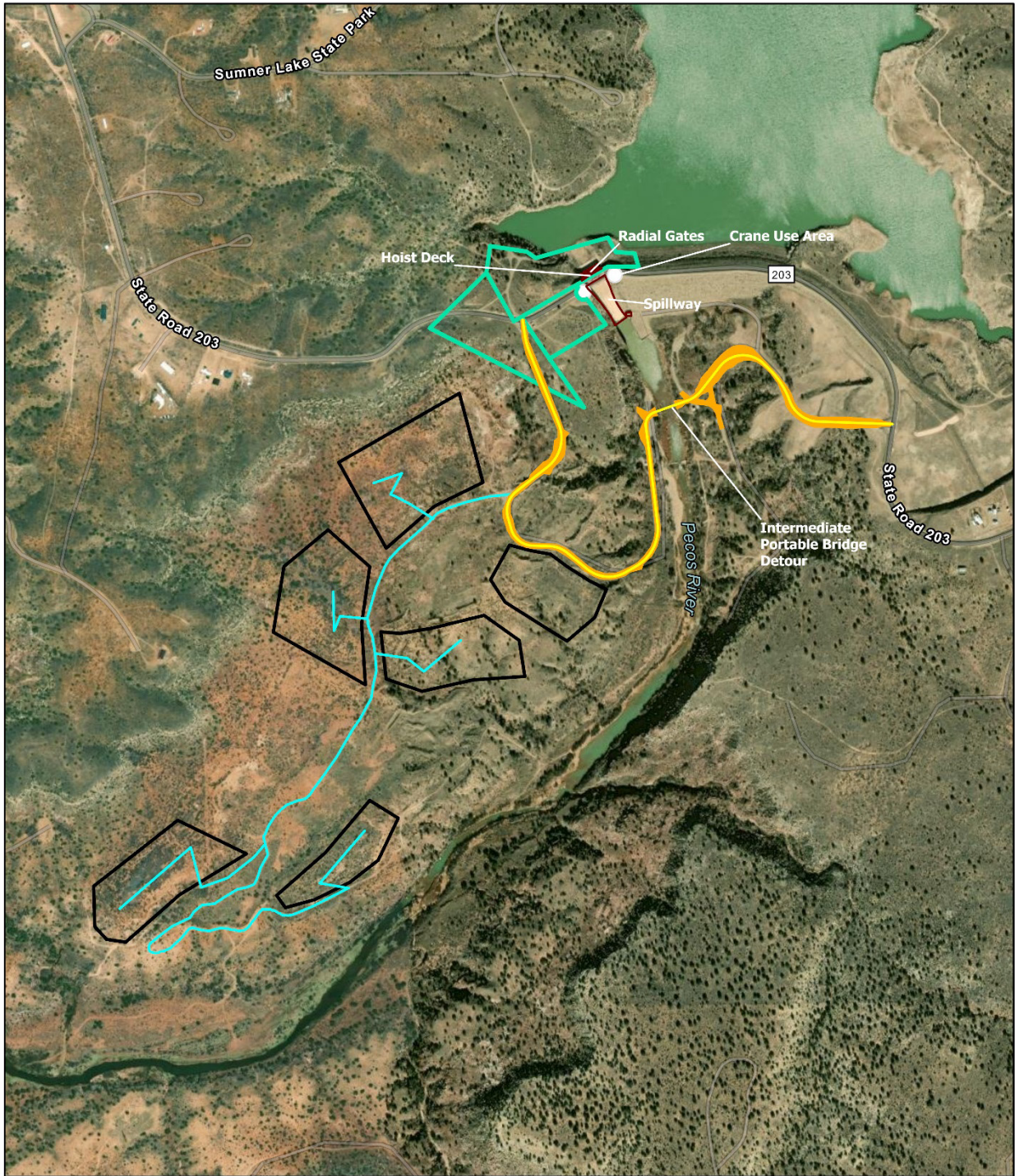
Removal of the radial gates and wall plates would require cranes to be placed on either side of the existing dam along State Highway 203. Another option is to use a smaller crane lowered into the existing spillway to remove the gates, wall plates, and ancillary infrastructure. The smaller crane could be located according to the gate being removed, allowing for shortened pick distances and lower crane capacity requirements. The use of a smaller crane requires further assessment of the spillway floor. Removal of the plates would also require cutting into the existing concrete piers to cut the embedded angles and anchors. Hand tools could be used to cut into the concrete and existing anchors. Power is available at Sumner Dam for operating or charging hand tools.

A bulkhead would be installed in front of the radial gates to protect the construction site and to protect residents downstream during a storm event. The radial gates would normally provide protection to residents downstream in a storm event. Two radial gates would be blocked, and one would remain open to allow for continued flood control downstream.

Hoist Deck

The dam's existing hoist deck would not meet the load requirements of the new radial gate design and would need to be replaced with a hoist deck of a higher capacity within the existing footprint. The existing hoist deck is divided into three 45-foot spans (one per gate) and lays on a bearing plate. The new hoist deck would consist of two adjacent prestressed/precast voided slab beams with cast-in-place reinforced concrete. The existing float wells would be filled with a combination of unreinforced cast-in-place concrete, reinforced cast-in-place concrete, and Controlled Low Strength Material. This would provide an additional bearing area for the replacement hoist deck. The new guardrails would be similar to the existing material with embedded posts added. A new chain link fence could be installed to replace what was removed for access to the construction site. Additionally, the existing power supply is not sufficient for the new hoisting equipment and would be replaced. The new hoist deck would be lowered into place using cranes.

Demolition of the hoist deck could be achieved using hand tools to cut the steel reinforcement and existing concrete structure. Removal of the existing hoist deck and ancillary infrastructure could require partial demolition of the spans depending on the weight capacity and radius of the cranes. Cranes would be used as described above for the removal of the radial gates. Power supply lines to the hoists would also be removed. All gates, wall plates, hoist materials, and ancillary equipment (e.g., hoist rails, guardrails) are coated with hazardous materials (Reclamation 2022) that will be disposed of at an approved landfill.



Proposed Action

Sumner Dam

Temporary Road Detour

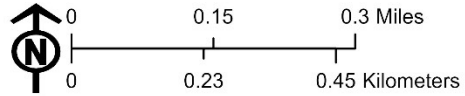
Existing Haul Road

Road Improvement

Borrow Pit

Staging Area

Crane Use Area



Projection: NAD 83 UTM Zone 13N
6/26/2024
SLL

Figure 2. Proposed Radial Gates Replacement, Hoist Deck Replacement, Spillway Overlay, and Road Improvement Areas of Disturbance for the Proposed Action.

Spillway Concrete Overlay

The spillway concrete sill elevation will be raised to 4,259 feet to match the elevation of the existing upstream weir. Construction of the concrete overlay would involve roughening of the existing spillway concrete floor by hydrodemolition; installation of grouted anchors and/or dowels into the existing spillway sill, piers, and walls; form work; and placement of new reinforced concrete, most likely pumped to the point of placement from the roadway on either side of the existing spillway.

Access and Staging

The Project Area would be accessed using existing roads. The project area could be reached through the eastern side of the spillway by taking State Highway 203 off U.S. Highway 84. Alternatively, the site could be reached through the western side of the spillway by taking State Highway 203 coming from Santa Rosa, NM. The hauling of construction equipment will proceed with care as the town does not normally experience large volumes of traffic or heavy equipment. There would be a traffic control plan implemented during construction of the radial gates and hoist deck and spillway modifications. Staging areas for equipment and materials would be located near the proposed project area immediately adjacent to Sumner Dam (Figure 2).

Intermediate Access Route

State Highway 203 currently crosses the dam on a one-lane bridge above the radial gates. The bridge over the radial gates would be closed for the duration of the project. An intermediate bridge for the public and local residents would be installed downstream of Sumner Dam before the bridge over the radial gates is closed (Figure 2). The intermediate bridge will remain in service until the permanent bypass bridge is built and in service. The crossing (approximately 28-foot wide by 150-foot long) would install a portable bridge that spans the Pecos River and concrete bridge abutments outside the river and its floodplain.

Existing roads within the State Park that access the river below Sumner Dam would be used to access the intermediate bridge. Road improvements will be necessary due to the existing road conditions, with approximately 6,100 linear feet of existing road being demolished and reconstructed to bypass Sumner Dam (Figure 3). In addition, concrete abutments on both sides of the intermediate portable bridge would be constructed to connect the east and west segments of the reconstructed bypass road. Most of the reconstructed road alignment will follow the existing road corridor in the state park to reduce impacts of undisturbed areas. Approximately 2.7 acres of asphalt will be demolished and replaced, and 3.8 acres of new ground would be disturbed to widen the road to meet New Mexico Department of Transportation standards and construct the intermediate bridge abutments. The existing road asphalt will be demolished, hauled, and stockpiled at one of the existing borrow areas. Surface soils along the existing road alignment will be excavated and stockpiled at one of the existing borrow areas. The removed soil may be reused for road construction depending on the soil type and suitability. Additional fill soil for road construction will be taken from the identified borrow areas. New road basecourse and asphalt will be imported from an off-site commercial source. The new bypass road and intermediate bridge and abutments will be designed to meet New Mexico Department of Transportation Standards. Mitigation measures would be implemented to minimize impacts to project area and surrounding environment.

CID Water Storage

The CID stores up to 35,917-acre feet of water for irrigation use in the Sumner Reservoir. The CID and Reclamation plan on seeking a permit from the New Mexico Office of the State Engineer (NMOSE) to temporarily store an additional 80,000 acre-feet of water in Brantley Reservoir until

construction of the Sumner Dam Radial Gates Project is complete. The CID will release water from Sumner Lake to Brantley Lake via the primary outlet (not over the spillway) into the Pecos River. The water would then flow in the Pecos River for over 200 river miles down to Brantley Lake, which is located about 15 miles northwest of Carlsbad, NM.



Figure 3. Road Improvements for Intermediate Access Route.

2.2.2 Design Features, Stipulations, and Requirements

General

- The Contractor shall not allow construction, storage, or parking of vehicles or equipment outside the proposed project area footprint.
- The proposed construction project footprint should be kept to the minimum width required for the operation.

Equipment and Operations

- Equipment would be refueled at least 100 feet (outside of the floodplain) from the river.
- Fuel, oil, hydraulic fluid, or substances of this nature would be stored within sealed, storage containers or facilities that are located outside the floodplain and provide secondary containment per Storm Water Pollution Prevention Plan and use Storm Water Pollution Prevention Plan criteria for storage and refueling.
- Appropriate spill containment and clean-up materials will be onsite and construction and other on-site staff will have proper training to deploy and utilize.
- Prior to being onsite, all equipment would undergo high-pressure spray cleaning and inspection prior to initial operation in the project area.
- All equipment would be checked each morning for leaks. Leaking equipment would be removed from the project site until repaired and cleaned.
- Equipment would be parked on pre-determined locations on high ground away from the river overnight.
 -

Natural Resources

- Equipment would be cleaned and free of plant and soil residue. All construction equipment would be pressure washed and/or steam cleaned before entering the watershed to ensure that all equipment, machinery, rocks, gravel, and other materials are cleaned and weed free and inspected daily for leaks. If equipment is used in an area containing invasive or noxious weeds, it would be cleaned before it is moved to another location.
- Construction activities should occur outside the migratory bird breeding and nesting season (April 15 to August 15). If construction occurs during this period, then a pre-construction migratory nesting survey should be completed. If any active nests are located within the project area and the contractor has determined that project activities cannot be avoided until after the birds have fledged (left the nest), then the contractor must contact the USFWS Migratory Bird Permit Office in Albuquerque, NM at 505-248-7882 to determine appropriate next steps. Reclamation's Albuquerque Area Office biologist should be consulted prior to contacting the USFWS.

Cultural Resources

- If previously unknown archeological resources or skeletal remains are discovered, ground disturbance would be stopped in the area of any discovery, protective measures would be implemented, and procedures outlined in 36 *Code of Federal Regulations* Part 800 would be followed, as applicable. The New Mexico State Historic Preservation Officer (SHPO) and Reclamation Archaeologist would be notified of the discovery. Resources would be

evaluated for their National Register of Historic Places (NRHP) significance by the SHPO, and adequate mitigation of project impacts would be implemented. Work would not commence until the SHPO has given approval.

2.3 ALTERNATIVE ELEMENTS CONSIDERED BUT DISMISSED

A number of alternative designs were considered (Reclamation 2020), including a cofferdam constructed upstream of the Sumner Dam as a temporary access route during construction activities. However, this alternative was dismissed due to the higher estimated construction costs and the cofferdam would not provide safety for residents downstream during construction if a flood event occurred compared to installing a bulkhead in front of the existing radial gates and leaving one gate open to allow for water flow during a flood event.

Replacement of Three Radial Gates and Intermediate Culvert Road Detour was also considered but dismissed due to greater environmental impacts to the river and the crossing would require more maintenance efforts and costs than the portable bridge alternative. This action alternative would have all the same elements as described for the Proposed Action Alternative, except the temporary road detour for the public and local residents during construction activities would consist of a temporary crossing over the Pecos River downstream of the spillway. The crossing would place reinforced concrete pipe (RCP) culverts in the Pecos River and compacted backfill sourced from borrow pits southwest of the spillway on top of the culverts (Figure 2). This alternative would require instream work and placement of materials into the Pecos River channel.

A third alternative element considered but dismissed was decommissioning and removing the three existing radial gates. This alternative design was considered, but dismissed because it does not meet the federal dam safety guidelines (Reclamation 2020). Removal of the radial gates would take away the flood control capabilities and storage above the remaining crest. The uncontrolled spillway could release significantly higher flows than the safe channel capacity (Reclamation 2020).

A fourth alternative element considered but dismissed was to decommission the radial gates and raise the weir by three feet to increase storage. This alternative design was considered and dismissed because raising the weir would not allow larger precipitation events to be fully captured within Sumner Lake and would require water to flow down the spillway (Reclamation 2023). In addition, as stated above removal of the radial gates would remove flood control capabilities and storage above the remaining crest. The uncontrolled spillway could release significantly higher flows than the safe channel capacity increasing risk of life downstream.

3. Affected Environment and Environmental Consequences

This chapter describes the existing conditions relevant to the issues presented in Table 1 and provides a comparative analysis of the direct, indirect, and cumulative impacts of the alternatives. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. As defined by NEPA regulations (40 CFR 1501.3(b)(1)), only those resources and conditions having the potential to be affected by the action are discussed and analyzed within this section.

3.1 SOIL RESOURCES

3.1.1 Affected Environment

There are three soil map units in the project area (Table 3). The predominant soil adjacent to Sumner Dam and along the banks of the Pecos River is identified as Latom-Rock outcrop complex. This soil consists of fine, sandy loam soil formed from redbed colluvium and alluvium derived from sandstone and shale deposits. The Ima-Gallen association soil type is the dominant soil within the project area followed by Latom-Rock outcrop. The Ima-Gallen association soil type is typically found in areas with land formations of hillslopes, toe/footslopes and convex downslopes (NRCS 2024). The Natural Resources Conservation Service’s (NRCS) Web Soil Survey website (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) provides complete soil information.

Table 3. Soils Mapped in the Sumner Dam Radial Gates Project Area.

Map Unit	Symbol	Textures	Parent Materials
Gallen-Torriorthents association, 15 to 35 percent slopes	34	Very gravelly sandy loam Very gravelly loamy sand	Redbed alluvium derived from sandstone and shale
Ima-Gallen association, 2 to 7 percent slopes	37	Fine sandy loam Gravelly sandy loam	Redbed alluvium derived from sandstone and shale, and gravelly slope alluvium derived from igneous, metamorphic and sedimentary rock
Latom-Rock outcrop complex, 3 to 20 percent slopes	57	Fine sandy loam, Bedrock	Redbed colluvium and alluvium derived from sandstone and shale

Source: U.S. Department of Agriculture NRCS Soil Survey Staff 2024.

3.1.2 Impacts from the No Action

Under the No Action Alternative, no direct impacts to soil resources are expected as no ground disturbance would occur. The No Action Alternative would result in the continuation of the current soil conditions in the proposed project area. Indirect impacts from a failure of the radial gates due to the continued deterioration of the radial gates could occur. Flow rates from a single radial gate failure were estimated to be up to 3,500 cfs. Failure of all three gates is highly unlikely (Reclamation 2018) and flow rates would be expected to be lower with portions of the radial gate(s) remaining in place and restricting flows. The 3,500 cfs is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow. The potential increased flow from radial gates failure could result in the transport of increased sediment amounts immediately downstream to the Pecos River from churning up sediment in the stilling basin area. A stilling basin is located at the downstream side of the dam and reduces energy of water flowing down the spillway to prevent overtopping and protects the area near the dam and dam itself from erosion.

3.1.3 Impacts from the Proposed Action

Under the Proposed Action Alternative, up to 73 acres could be disturbed from removal of vegetation and preparing the project area for installation of the support abutments for the intermediate portable bridge. Soils associated with the project area for installation of the intermediate portable bridge and associated improvements to existing roads could be structurally mixed, displaced, and exposed to wind and water erosion. Soils where the abutments and road improvements would occur have a moderate water erosion potential; erosion potential is for areas that lack vegetation and are smooth (NRCS 2024). The potential for increased water and wind erosion would depend on precipitation and wind events but it is expected that the risk of erosion would be low due to the generally flat terrain in the project area and implementation of best management practices (BMPs). Best management practices could include but are not limited to stockpiling and covering soil onsite and watering soils to reduce dust, minimizing the risk of soil erosion. Soils excavated from construction of the support abutments and road improvements for the temporary road access could be stockpiled and used as fill material for road detour improvements.

Soils in construction areas could experience soil compaction from heavy equipment use, which could reduce water infiltration capability of soils and soil aeration. The magnitude of soil compaction would depend on the soil texture and the type and weight of the equipment being used. However, implementing mitigation measures during construction and excavation activities such as no construction activities would be performed during periods when the soil is too wet to adequately support construction equipment or using existing roads when possible.

Soils in the project area could also be contaminated by oils and fuels associated with construction equipment. However, implementing BMPs, such as not fueling or servicing equipment in the field and containing cleaning up spills immediately, would be expected to reduce potential impacts to soils from petroleum products.

3.2 WATER QUALITY AND QUANTITY

3.2.1 Affected Environment

The project area falls within 2 different watersheds, the Pecos Headwaters Watershed (hydrologic unit code (HUC) 13060001) and the Upper Pecos Watershed (HUC 13060003). The Pecos Headwaters Watershed encompasses most of the northern project area including Sumner Lake and the Upper Pecos Watershed runs through the southernmost portion of the project area. The Pecos River, which runs downstream from Sumner Dam into the Upper Pecos Watershed area, is a perennial river and a jurisdictional water of the U.S. Peak flows occur in the monsoon season from heavy rain events. Monsoons in the summer months may result in high flows of mostly short duration. The average annual maximum stream flow between 2000 to 2020 for the water monitoring station below Sumner Dam (USGS station 08384500) is 1,499 cubic feet/second (cfs). The average annual maximum stream flow ranged from 1,300 cfs (2000) to 1,700 cfs (2021).

Section 303(d) of the Clean Water Act states that authorized states are required to develop lists of impaired waters that do not meet the water quality standards. The Pecos River segment from Santa Rosa Reservoir to Sumner Reservoir has been identified as impaired due to nutrient and *E. coli* exceedances (NMED 2024). The NMED has identified the Sumner Reservoir as impaired due to mercury exceedances and an associated fish consumption advisory (NMED 2024). Total maximum daily loads (TMDL) for *E. coli* and nutrient exceedances are being prepared and expected to be completed in 2024 (NMED 2024). These TMDLs may require monitoring and reduction of certain water quality parameters in any discharges to impaired waters.

Water Storage

Sumner Dam allows storage of water in Sumner Reservoir, which is currently one of four impoundments on the mainstem of the Pecos River in New Mexico that are authorized to store irrigation water for CID. The CID is the only entity that has irrigation storage on the Pecos River in New Mexico, with a storage allotment of 31,923 acre-feet (ac-ft) in Sumner Reservoir. Other portions of Sumner Reservoir's pool include an allotment for the minimum pool at 2,500 ac-ft, and sediment storage at 1,492 ac-ft. The total of these combined allotments is referred to as the conservation storage pool, which is 35,917 ac-ft. There is also a flood pool of 88,200 ac-ft that sits on top of the conservation pool. The total entitlement storage allotment for CID is 176,500 acre-feet, divided among four reservoirs—Santa Rosa Reservoir, Lake Sumner, Brantley Reservoir, and Avalon Reservoir.

If available in the winter, CID is able to store an additional 20,000 ac-ft of water from November 1st to April 31st. In this instance the entitlement storage may go above 31,923 ac-ft until it is released prior to May 1st. When the winter storage is full the reservoir elevation sits above the 4,261 feet at 4,267 feet (bottom of radial gate elevation when fully open; Reclamation 2020).

3.2.2 Impacts from the No Action

Under the No Action Alternative, no direct impacts to water quality or quantity are expected as no ground disturbance or construction activities would occur. The radial gates would be expected to continue to deteriorate and the risk of failure of the radial gates would remain. The failure of the radial gates could result in flood control storage shifted to other project reservoirs, possibly effecting physical storage space in the reservoirs and impacting project operations. However, winter storage for CID irrigation delivery at Sumner Lake has been available only about 8% of the time over the

past 20 years (Reclamation 2021), and it is likely that little winter storage could be captured in the future, similar to the past 20 years and given the current drought conditions.

Water quality could be impacted from increased sediment amounts immediately downstream to the Pecos River from churning up sediment in the stilling basin area. Flow rates from a single radial gate failure were estimated to be up to 3,500 cfs. Failure of all three gates is highly unlikely (Reclamation 2018) and would be expected to be lower with portions of the radial gate(s) remaining in place and restricting flows. The 3,500 cfs is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow, with potential scouring in the stilling basin area.

3.2.3 Impacts from the Proposed Action

Construction activities for removal and installation of the radial gates and hoist deck and overlay of the spillway would occur within the existing footprints and would not require soil disturbance. The radial gates and hoist deck would be removed using cranes located along State Highway 203, with hand tools used to cut the hoist deck into segments. Furthermore, all materials removed from the existing radial gates and hoist deck would not be allowed to go down the spillway to the Pecos River and all materials would be disposed of following all required local, state, and federal laws. The overlay of the existing spillway would also occur within the existing footprint and not require soil disturbance. Therefore, there would be no impacts to water quality from removal and constriction of new radial gates and hoist deck and overlaying of the existing spillway.

The Intermediate Portable Bridge Detour would span the river with the concrete support abutments installed outside the Pecos River and its floodplain. Soils could be disturbed from installation of the bridge and its abutments and road reconstruction of 6,100 linear feet needed to the existing roads in the picnic area to meet New Mexico Department of Transportation standards. However, implementing mitigation measures, such as stockpiling and covering soils or placing sediment barriers along abutment construction areas (e.g., silt fences, fiber logs) would reduce the potential for soil to enter the river and increase turbidity or sediment loads. Water quality within the project area could be impacted temporarily by increased sediment concentrations and turbidity until soil moving activities were completed for installation of the intermediate bridge and associated road improvements. Both installation and road improvements are expected to have minor, temporary impacts to water quality that would be diluted by the Pecos River flows.

Prior to construction activities occurring, all required permits in compliance with the Clean Water Act would be obtained. All construction activities would occur outside the Pecos River and fill material would not be placed within the river. The USACE stated that a Clean Water Act (CWA) 404 permit would not be required as long as dredge or fill material are not placed into the Pecos River, a water of the U.S. (Appendix C). A storm water pollution prevention plan would be prepared and implemented during construction to reduce potential impacts to water quality and disturbance to surrounding riparian area.

There may be potential for accidental spills or release of materials (e.g., oil, gas, concrete) that could impact water quality. Potential impacts to water quality from accidental spills would be incidental during construction. BMPs, design features, and adherence to the conditions of the USACE permits would minimize the potential for adverse effects from accidental spills or construction activities. BMPs that would be implemented to reduce potential impacts to water quality include but are not limited to steam cleaning equipment, daily inspection of construction equipment for leaks, removing

leaking equipment from the site; keeping fuels, oils, and lubricants in a sealed storage container or off-site; and refueling at least 100 feet from the river.

The proposed replacement of the radial gates and associated infrastructure, hoist deck and overlay of the spillway, would restore the full functionality of the radial gates and reservoir storage capability for flood waters. The amount of water available for winter storage for CID would not decrease during construction activities but could be stored in Brantley Lake until construction is completed. The CID and Reclamation are seeking a permit from NMOSE to temporarily store up to an additional 80,000 acre-feet in Brantley Reservoir until construction of the Sumner Dam Radial Gates Project is complete. The CID would release water from Sumner Lake where it would flow 223.8 river miles down to Brantley Lake along the Pecos River. The travel time for block releases during typical water operations from Sumner Dam to Brantley Reservoir is about 5 days (Reclamation and NMSOE 2006). Water flow would not be disrupted by the proposed radial gates construction activities because water is released via the primary outlet into the Pecos River not over the spillway. Therefore, water quantity would not be impacted by the proposed radial gates project.

Although past studies found average annual evaporation rates at Brantley Reservoir and Sumner Lake to be 84 and 89 inches per unit area, respectively, Brantley Reservoir is less impacted from evapotranspiration due to the additional amount of bank storage present (Reclamation and NMSOE 2006). Bank storage is present at Brantley Reservoir from the connection with Major Johnson Aquifer and as the pool elevation changes, water moves in or out of the bank storage. Therefore, temporarily storing an additional 80,000 acre-feet of water in Brantley Reservoir would not be expected to impact water quantity available to CID for irrigation deliveries. Furthermore, water quantity available for winter storage would not be expected to decrease as storage operations from 2000 to 2020 have exceeded the 4,259 feet of elevation for less than 9% (full winter storage at Sumner Lake is 4,267 feet of elevation) with 8.3% coinciding with the winter storage period (November 1 through April 31) (Reclamation 2021). Riparian and Wetland Resources

3.2.4 Affected Environment

The proposed project area has been mapped by the National Wetland Inventory as riverine wetlands—Riverine Lower Perennial Unconsolidated Bottom Permanently Flooded (R2UBH), Riverine Lower Perennial Seasonally Flooded (R4SBC), and riverine unknown perennial unconsolidated bottom permanently flooded (R5UBH) (USFWS 2024a). The riparian area along the Pecos River is dominated by Russian olive (*Elaeagnus angustifolia*), salt cedar (*Tamarix ramosissima*), cottonwood (*Populus deltoides*), Alkali sacaton (*Sporobolus airoides*), narrow leaf willow (*Salix exigua*). No wetland areas were observed adjacent to or within the Pecos River floodplain (BRIC 2024a).

Jurisdictional Waters of the United States, including wetlands, are protected under several rules and regulations including federal guidelines outlined by the Clean Water Act; Sections 401, 402, and 404, Executive Order (E.O.) 11988 (Floodplain Management), E.O. 11990 (Protection of Wetlands) and by the New Mexico Environment Department Surface Water Quality Bureau. Appropriate Clean Water Act permits would be obtained if needed prior to starting the proposed radial gates project.

3.2.5 Impacts from the No Action

Under the No Action Alternative, no direct impacts to riparian and wetland resources are expected as no ground disturbance or construction activities would occur. Indirect impacts to riparian and wetland resources would not be expected to occur from the continued deterioration of the radial

gates and the risk of failure remaining. The flow increase due to a single radial gate failure was estimated to be 3,500 cfs. Failure of all three gates is highly unlikely (Reclamation 2018) and would be expected to be lower with portions of the radial gate(s) remaining in place to restrict flows. The 3,500 cfs is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow. The potential increased flow from radial gates failure would not impact riparian and wetland areas along the riverbanks because it would be expected stay within the existing river channel.

3.2.6 Impacts from the Proposed Action

Under the Proposed Action Alternative, all construction activities would occur outside the Pecos River and fill material would not be placed within the river. The USACE stated that a CWA 404 permit would not be required as long as dredge or fill material are not placed into Pecos River, a water of the U.S. (Appendix C). A storm water pollution prevention plan would be prepared and implemented during construction to reduce potential impacts to water quality and disturbance to surrounding riparian area.

Vegetation would not be removed along the riverbanks for installation of the proposed Intermediate Portable Bridge and support abutments because this would occur outside the river and not immediately adjacent to the riverbanks. Furthermore, BMPs would be implemented to prevent establishment of noxious weeds adjacent to the riverbank where construction would be conducted, such as cleaning equipment before entering the project area to ensure that all equipment, machinery, rocks, gravel, and other materials are cleaned and weed free. Adherence to design features, stipulations, and BMPs would minimize potential for indirect adverse effects, such as increased sedimentation into the Pecos River, to riparian resources.

3.3 VEGETATION

3.3.1 Affected Environment

The vegetation community in the proposed project area was mapped as the Plains and Great Basin Grassland Vegetation Community (Brown 1994). Dominant vegetation consists primarily of one-seed juniper (*Juniperus monosperma*), honey mesquite (*Prosopis glandulosa*), salt cedar, cottonwood, alkali sacaton (*Sporobolus airoides*), Russian olive, Christmas tree cholla (*Cylindropuntia leptocaulis*), sideoats grama (*Bouteloua curtipendula*), black grama (*Bouteloua eriopoda*), feather fingergrass (*Chloris virgata*), soaptree yucca (*Yucca elata*), six-weeks three-awn (*Aristida adscensionis*), indigobush (*Amorpha fruticosa*), bermuda grass (*Cynodon dactylon*), and narrowleaf willow. New Mexico listed noxious weed species in the project area include Russian olive and saltcedar (NMSU 2020).

3.3.2 Impacts from the No Action

Under the No Action Alternative, no impacts to vegetation would be expected as no ground disturbance or construction activities would occur. Indirect impacts to vegetation would not be expected to occur from the continued deterioration of the radial gates and the risk of failure remaining. The flow increase due to a single radial gate failure was estimated to be 3,500 cfs. Failure of all three gates is highly unlikely (Reclamation 2018) and flow rates would be expected to be lower than 3,500 cfs with portions of the radial gate(s) remaining in place and restricting flows. The 3,500

cfs is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow. The potential increased flow from radial gates failure would not impact vegetation along the riverbanks because it would be expected stay within the existing river channel.

3.3.3 Impacts from the Proposed Action

The proposed radial gates replacement and installation of the intermediate bridge and associated support abutments could disturb vegetation. The abutment structure on the east side of the river would occur in a previously disturbed designated picnic area with sparse vegetation. The project area has a history of long-term public use and land management, with man-made hills and depressions from agriculture and stock management areas being common in the existing material borrow sites. The removal of upland vegetation would remove up to 73 acres of the Plains and Great Basin Grassland Vegetation Community identified within the area. Therefore, no substantial populations or communities of native plants would be affected by the Proposed Action. BMPs would be implemented to prevent establishment of noxious weeds in the construction work area, such as cleaning equipment before entering the project area to ensure that all equipment, machinery, rocks, gravel, and other materials are cleaned and weed free (see section 2.2.3 for additional design features).

3.4 THREATENED AND ENDANGERED SPECIES AND CANDIDATE SPECIES

3.4.1 Affected Environment

Under the Endangered Species Act of 1973 (ESA), all federal departments and agencies have the responsibility to avoid jeopardizing federally listed species that are endangered or threatened, to address impacts to candidate species actively proposed for listing, and to avoid adversely modifying designated critical habitat. The USFWS evaluated Reclamation's proposal to conserve the Pecos bluntnose shiner, a federally threatened fish species, and to conserve the Carlsbad Project water supply (USFWS 2016). Carlsbad Project operations include diverting water to storage and releasing water for authorized uses. Sumner Lake is the storage reservoir located immediately upstream of the reach of the river where the shiner is still present. In 2016, the USFWS issued a Final Biological and Conference Opinion for the Bureau of Reclamation Carlsbad Project Water Operations and Water Supply Conservation on the Pecos River, New Mexico (USFWS 2016) to address the effects of a wide variety of proposed actions on the endangered Pecos Bluntnose Shiner, other listed species, and their critical habitats.

A list of threatened and endangered species for the Proposed Action was acquired from the USFWS Information for Planning and Consultation tool (IpaC 2024; Appendix D). The USFWS identified three species that could occur within the project area (Table 3). The Pecos bluntnose shiner was considered for the 2016 Biological Opinion for the Carlsbad Project (USFWS 2016). However, Sumner Dam and Reservoir are upstream of the reach of the river where the shiner is still present and water flows for the shiner would not be impacted by the proposed Radial Gates Project action alternatives and was not listed in the list of threatened and endangered species provided by the USFWS.

There were no designated or proposed critical habitats within the project area (USFWS 2024b). The nearest final designated critical habitat is for the Pecos Bluntnose Shiner which is approximately 30

miles downstream of the project area below Fort Sumner, New Mexico (USFWS 2024b). Therefore, critical habitat would not be adversely modified and was not carried forward for analysis in this EA. Additionally, the Pecos River flows downstream of the project area would not change from the existing conditions.

Table 4. Federally Listed Threatened, Endangered, and Candidate Species and Their Likelihood of Occurring in the Project Area.

Common/Scientific Name	*Status	Potential to Occur
Bird		
Southwestern Willow Flycatcher (<i>Coccyzus americanus</i>)	ESA T MBTA	Nests in dense riparian habitats near or adjacent to perennial rivers or underlain by wet soil (USFWS 2002). One Southwestern Willow Flycatcher nest was observed along the Pecos River in 2017 (Durst 2012). The proposed project area, existing Sumner Dam and associated infrastructure footprint, and the proposed crossing area downstream do not have dense riparian habitat suitable for nesting. Suitable habitat is not present in the project area.
Lesser Prairie Chicken (<i>Tympanuchus pallidicinctus</i>)	ESA E	Habitat in New Mexico is shinnery oak/grasslands dominated by shin oak and multiple tallgrass species that include bluestem, grama, and dropseed grasses (New Mexico Avian Conservation Partners 2017). The primary populations occur in north Lea, south Roosevelt, and northeast Chaves counties. Sparse and scattered populations occur in portions of north Roosevelt and Curry counties, and small portions of east De Baca and south Quay counties (New Mexico Avian Conservation Partners 2017). The proposed project area does not include tallgrass prairie or shinnery oak/grasslands suitable for lesser prairie chicken habitat. Suitable habitat is not present in the project area.
Insect		
Monarch Butterfly (<i>Danaus plexippus</i>)	ESA C	Monarch butterfly is a candidate for listing under the ESA as of December 17, 2020 (USFWS 2020). Migratory species that summers in the State of New Mexico. Adults feed on flower nectar and larvae feed exclusively on milkweed leaves. Monarchs require abundant source of flowering plants; breeding only where milkweeds are found. The project area lacks abundant sources of milkweed to support their breeding preferences, as well as flowers that could supply nectar to adult monarchs. Suitable habitat is not present in the project area. Additionally, their fall and spring migration routes occur outside of the project area (USFWS 2022).

* ESA C, E and T = Endangered Species Act candidate, endangered and threatened. MBTA = Migratory Bird Treaty Act.

3.4.2 Impacts from the No Action

Under the No Action Alternative, no impacts to federally listed or proposed threatened and endangered species would occur as no ground disturbance would occur. Indirect impacts to federally listed or proposed threatened and endangered species would not be expected to occur from the continued deterioration of the radial gates and the risk of failure remaining. The flow increase due to a single radial gate failure was estimated to be 3,500 cfs. Failure of all three gates is highly unlikely (Reclamation 2018) and would be expected to be lower with portions of the radial gate(s) remaining in place to restrict flows. The 3,500 cfs is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow. Furthermore, there would be *no effects* to the following species under the No Action Alternative due to lack of habitat or because the project area is outside the current principal range of the species, both of which make occurrence in the project area unlikely and discountable: Southwestern Willow Flycatcher, Lesser Prairie Chicken, and Monarch Butterfly.

3.4.3 Impacts from the Proposed Action

There would be *no effects* to the following species under the Proposed Action Alternative due to lack of habitat or because the project area is outside the current principal range of the species, both of which make occurrence in the project area unlikely and discountable: Southwestern Willow Flycatcher, Lesser Prairie Chicken, and Monarch Butterfly.

3.5 CULTURAL RESOURCES

3.5.1 Affected Environment

The proposed project area is located within the southeast subregion of New Mexico. The southeast subregion is bounded on the west by the Sacramento and Guadalupe Mountains; the Texas border on the east and south; and a line drawn from the juncture of Torrence, Guadalupe, and Lincoln counties northeastward to the Texas border in Quay County. In general, the history of the southeastern subregion can be divided into four major periods: Paleo-Indian (ca. 9500 B.C. to 6000 B.C.), Archaic (ca. 6000 B.C. to A.D. 400), Formative Period (A.D. 400 to 1450), and the Historic Occupation (A.D. 1539 to present), which includes Native American as well as later Hispanic and Euro-American settlers. Detailed descriptions of these various periods and additional information can be found in the Cultural Resource Inventory Report, Cultural Resource Survey for Proposed Sumner Dam Radial Gates Project, New Mexico Cultural Resource Information System (NMCRIS) # 154085 (BRIC 2024b).

Effects to cultural resources must be taken into consideration under every NEPA-governed Proposed Action. The term “cultural resources” refers to any historic or prehistoric resource. This encompasses a wide range of material remains that have the potential to provide information about the human use and occupation of the project area. These cultural resources generally consist of archaeological sites and Traditional Cultural Properties (TCPs). Cultural sites vary considerably and can include, but are not limited to, simple artifact scatters, structures, or structural remains of various types with a myriad of associated features, rock art and inscriptions, ceremonial/religious features, and roads and trails.

The NHPA and the NRHP (36 CFR Part 800) are the benchmarks by which the significance of cultural resources is evaluated by a federal agency when considering what effects its actions may have on cultural resources. To summarize, Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council a reasonable opportunity to comment on such undertakings. This process includes consultation, involvement of the public, identification of historic properties by contractors, assessment, and possible resolutions of adverse effects by the action. The evaluation of eligibility, the standard which the process uses to determine adverse effects, has criteria established by the NRHP. The NRHP states that for a historic property significance to be considered eligible a cultural resource must have integrity of location, design, setting, materials, workmanship, feeling, and association, *and* meet one or more of the following criteria: a) are associated with events that have made a significant contribution to the broad patterns of our history; b) are associated with the lives of significant persons in or past; does it c) embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction; or d) have yielded or may be likely to yield information important in history or prehistory. If a site, regardless of age, meets these standards it is referred to as a “historic property.”

A records search of the NMCRIIS database and the National and State Registers of Historic Places was conducted. The search radius included a buffer area of 500 meters (0.3 km) from the project area boundaries. The search revealed four (4) previously conducted investigations and nine (9) previously recorded sites within 500 meters (0.3 km) of the project area.

A Class III cultural resource pedestrian survey of the proposed project area was conducted on September 5–6, 2023 and January 3rd and February 6, 2024 (BRIC 2024b). A total of eight cultural sites were encountered within the project area, three (3) previously recorded sites and five (5) new archeological sites. Of these sites, five are historic, two are multi-component, and one is prehistoric. Reclamation has determined one site (LA 105556) is eligible under criteria A and C for listing in the NRHP, one is determined ineligible for listing on the NRHP, and the remaining are undetermined and need more data. Sixteen (16) isolated occurrences were also recorded. Isolated occurrences are not eligible for listing on the NRHP.

LA 105556 is Sumner Dam and qualifies as historic resource under New Mexico Historic Preservation Division guidelines. An initial Historic Property Inventory (HCPI) form was completed, and Sumner Dam was recorded as HCPI 54428. Sumner Dam is found eligible under Criteria A and C by Reclamation and is recommended potentially eligible to the NRHP. The dam is found eligible under Criterion A because it is recognized as contributing to the period in which water control in the American West became paramount to the greater expansion of the United States and agriculture, the Great Depression and the New Deal. Reclamation finds the dam eligible under Criterion C because it embodies and retains distinctive elements of Civilian Conservation Corps (CCC) stone masonry workmanship and water-control engineering technology of the 1930s; and the associated CID water storage and transmission system also embody significant new adaptations to private- and public- water control structures significant to dry land farming and permanent settlement in the arid West. Additionally, Reclamation finds Sumner Dam eligible under Criterion A for the period of water infrastructure reconstruction in the 1950s at the height of the Reclamation Dam Building Period (1945–1970), the beginning of emphasis on recreation at Reclamation facilities, and importance of National Infrastructure in association with the Cold War. A Level 2 Historic American Engineering Record (HAER) documentation is recommended to be completed for Sumner Dam before the undertaking is completed to mitigate adverse impacts (BRIC

2024b). The undetermined sites that need more data would be treated as eligible and flagged for avoidance if disturbance would occur within 50 feet of the site boundary.

Traditional Cultural Properties (TCPs)

TCPs are a separate class of cultural resources and are places that have cultural values that transcend the values of scientific importance that are normally ascribed to cultural resources such as archaeological sites and may or may not coincide with archaeological sites (Parker and King 1998).

A TCP is defined as a property that is listed on or is eligible for inclusion on the NRHP because of its association with cultural practices or beliefs of a living community that are: (1) rooted in that community's history; and (2) important in maintaining the continuing cultural identity of the community (National Register Bulletin #38). Native American communities are most likely to identify TCPs, although TCPs are not restricted to those associations. Some TCPs are well known, while others may only be known to a small group of traditional practitioners, or otherwise only vaguely known. Native American tribal perspectives on what is considered a TCP are not limited by a places age or its National Register eligibility or lack thereof.

TCPs cover a wide range of locales and use areas. Properties may include sacred landforms (e.g., mountains, rivers, lakes, outcrops, or naturally discolored rocks), places associated with deities, plant gathering areas, places mentioned in traditional histories, habitation sites, and ceremonial or offering places.

3.5.2 Impacts from the No Action

Under the No Action Alternative, no impacts to cultural resources are expected as no ground disturbance or replacement of existing infrastructure at Sumner Dam would occur. The replacement of the radial gates and hoist deck and overlay of the spillway would not occur, resulting in the overall risk of failure of the gates remaining. The possible failure of all three gates is unlikely, but failure of any of the gates could impact the integrity of Sumner Dam, HCPI 54428. The damage or removal of the radial gate(s) would impact the 1956 construction, not the CCC/WPA-era construction components, and as a HAER has not been completed, the historical engineering information for the period of water infrastructure reconstruction in the 1950s at the height of the Reclamation Dam Building Period for the associated radial gates could be lost or degraded.

3.5.3 Impacts from the Proposed Action

Under the Proposed Action Alternative, the three radial gates would be replaced causing the need to replace the hoist deck and raising the elevation of the spillway. Construction of this alternative would result in removal of the three existing radial gates and hoist deck of HCPI 54428, and raising the elevation of the spillway, therefore adversely affecting the cultural resource. However, adverse impacts to Sumner Dam would be mitigated through conducting a Level 2 HAER of the dam before construction activities were started. Additionally, the six sites recommended as undetermined and need more data to make a determination would be flagged and disturbance would not occur within 50 feet of the site boundary. The Proposed Action is not known to physically threaten any TCPs, prevent access to sacred sites, prevent the possession of sacred objects, or interfere with or hinder the performance of traditional ceremonies or rituals.

It has been determined there will be a direct adverse effect to the dam with the proposed Sumner Dam Radial Gates Project. Conducting Level 2 HAER documentation of the dam to mitigate impacts to HCPI 54428 is recommended, as well as no disturbance within 50 feet of undetermined

site boundaries. In addition, if the contractor discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery would be suspended and the discovery would be promptly reported to the Reclamation archeologist and New Mexico State Historic Preservation Office (SHPO). The New Mexico SHPO would specify what action would be taken.

Reclamation recommends the project go forward, with the mitigative strategy of a Level 2 HAER to mitigate adverse effects to historic properties and a 50-foot avoidance buffer for undetermined sites; thus, satisfying the Section 106 process of the NHPA (as amended). The New Mexico SHPO concurred with the cultural resource inventory report (BRIC 2024b) that the proposed Sumner Dam Radial Gates Project would have adverse impacts to the dam. The NM SHPO recommends that a project-specific programmatic agreement be developed that provides **phased consultation** as new elements of the project are identified, per 36 CFR 800.4.b.2 and executed per 36 CFR 800.14(b) on April 26, 2024. Furthermore, the NM SHPO recommended a memorandum of agreement be developed to resolve the known adverse effects to the dam, with provisions for phased consultation, per 36 CFR 800.4.b.2.

3.6 INDIAN TRUST ASSETS

3.6.1 Affected Environment

The DOI Manual Release 512 Department Manual 2 (1995) requires each bureau and office to identify potential effects of Departmental activities upon Indian Trust Assets (ITAs). The ITAs are legal interests in assets held in trust by the federal government for federally recognized Indian tribes or individual Indians. Secretarial Order 3175 and Reclamation ITA policy require that Reclamation assess the impacts of its projects on ITA. An inventory of all ITA within the proposed project area is required. If any ITAs are impacted, mitigation or compensation for adverse impacts to these assets is required. No ITAs were identified for this project. Therefore, the proposed radial gates and hoist deck replacement and spillway overlay is not on and would not affect ITAs.

3.6.2 Impacts from the No Action

Under the No Action Alternative, the radial gates and hoist deck and overlay of the spillway would not occur, resulting in safety issues and overall risk of failure of the radial gates remaining. However, no impacts to ITAs would be expected because no ITAs were identified for this project.

3.6.3 Impacts from the Proposed Action

The Proposed Action would have no effects to ITAs because the proposed actions are not on and would not affect Tribal trust lands.

3.7 ENVIRONMENTAL JUSTICE

3.7.1 Affected Environment

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” directs each federal agency to develop strategies for considering

environmental justice in their programs, policies, and activities. Additionally, the CEQ has issued the “Environmental Justice Guidance under the NEPA “to further assist federal agencies with their procedures under NEPA. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations of the execution of federal, state, local, and tribal programs, and policies.

The U.S. Environmental Protection Agency published the Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analyses (1998), which indicates that a minority population exists when either:

- The minority population of the affected area is greater than fifty percent of the affected area’s general population, or
- The minority population percentage of the affected area is meaningfully greater than the population percentage in the general population or other appropriate unit of geographic analysis.

An environmental justice screening analysis must determine whether any significant impacts of the Proposed Action (if any) would disproportionately adversely affect local low-income and/or minority populations. If a disproportionate impact is determined, mitigation measures must be implemented to reduce the adversity of the impact to a less-than-significant level. According to the federal guidelines, the environmental justice screening analysis assesses whether “the potentially affected community includes minority and/or low-income populations.” The guidelines indicate that a minority population exists when the minority population is 50 percent or more of the affected area’s total population. The 50 percent threshold is also used to determine the presence of low-income populations in the study area.

The nearest Census Designated Places to the project area is the Fort Sumner Village with a combined city region (CCR) population of 1,206 as of 2022 (U.S. Census Bureau 2024). The CCR has approximately 14.0% of individuals in poverty which is less than compared to De Baca County at 16.3% but more than the 12.5% for the State (U.S. Census Bureau 2024). The CCR’s racial makeup is Hispanic at 74.3%, white at 23.5%, African American and Native American at 0.1% each, and two or more races at 2%. The percentage of Hispanic population is greater than the population in De Baca County which is at 63.5% and for the State which is at 49.8% (U.S. Census Bureau 2024).

The Carlsbad Irrigation District users are located in the southeastern portion of Eddy County that has a population of 61,264 as of 2022 (U.S. Census Bureau 2024). The county has approximately 11.8% of individuals in poverty which is less than the 12.5% for the State (U.S. Census Bureau 2024). The racial makeup is Hispanic at 51.5% followed by white at 43.5%, African American at 1.1%, Native American at 1.1%, Asian and other race at 0.7% each, and two or more races at 1.3% (U.S. Census Bureau 2024). The Hispanic population is greater than the State which is 49.8% (U.S. Census Bureau 2024).

3.7.2 Impacts from the No Action

The No Action Alternative would not disproportionately impact low-income or minority individuals or populations because radial gate replacement and intermediate access route construction would not occur. Indirect impacts would not be expected to occur if the radial gate(s) failed because the increased flow rate of up to 3,500 cfs for failure of a single radial gate is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow. Furthermore, the risk assessment conducted by Reclamation showed a zero-life loss as the likely outcome for a failure of the radial gates during normal operations (Reclamation 2018). However, fishermen and campers immediately downstream of the dam, if present, could be subjected to life threatening flows and may have to climb to safety quickly. Impacts to campers and fisherman immediately downstream of the dam are discussed under the Public Health and Safety Section.

3.7.3 Impacts from the Proposed Action

The proposed replacement of the radial gates and hoist deck and overlay of the concrete spillway would not change the existing community structure or lands for other uses. Indirect impacts could include a temporary increase in noise, dust, traffic, and activity disturbance to residents adjacent and near the Sumner Dam construction activities. These impacts would apply to all residents in the proposed project area equally. Replacement of the radial gates and hoist deck and overlay of the spillway would not result in disproportionate negative effects to minority or low-income populations.

The completion of the radial gates project would require CID to pay a portion of the construction costs, which could result in increased costs for the water users. The CID would need to generate additional revenue to pay for their responsibility for the construction costs. The current water user fee is \$96 per acre-feet per water right and would be expected to increase. The annual water use fees could increase by an additional \$10 to \$43 per acre-feet depending on the funding secured by CID to cover their portion of the construction costs. This rate increase does not account for increased operations and maintenance costs. The increased water use fees could result in farmers in CID changing how they irrigate their crops in the short-term or what crops they plant and how much they plant in the long-term to reduce their water use and costs. A study in California showed that short increases for water usage changed how farmers irrigated their crops, while long-term cost increases changed the amount and type of crops planted (Berlig et al. 2024). They could also use their supplemental irrigation wells that are used when surface water supplies fall short of their crop irrigation demands to reduce costs.

3.8 ACCESS/TRANSPORTATION

3.8.1 Affected Environment

The project area would be accessed by using the existing road network. The existing road network includes U.S. Highway 84, State Highway 203 and paved and unpaved local roads. State Highway 203 crosses Sumner Dam on a one-lane bridge above the dam's radial gates and adjacent to the existing hoist deck.

The proposed intermediate road detour routes would include existing paved local roads near an existing picnic area on Reclamation managed lands (Figure 2). The local paved roads would require replacement and widening shoulders to meet New Mexico Department of Transportation standards (Figure 3).

3.8.2 Impacts from the No Action

Under the No Action Alternative, no impacts to access and transportation are expected as no ground disturbance or replacement of existing infrastructure at Sumner Dam would occur. Indirect impacts to transportation network would not be expected to occur from the continued deterioration of the radial gates and the risk of their failure remaining. The increased flow rate of up to 3,500 cfs for failure of a single radial gate is below the safe channel capacity of approximately 8,000 cfs (Reclamation 2018), and the spillway would be expected to carry the increased flow to the river. The potential increased flow from radial gates failure would not impact the existing transportation network because it would be expected stay within the existing river channel.

3.8.3 Impacts from the Proposed Action

Increased traffic during construction of the proposed Radial Gates Project would occur on State Highway 203 and local paved roads, which would be used to access the proposed project area under the Proposed Action Alternative. Construction activities would not be expected to interfere with local traffic patterns as the intermediate portable bridge would be constructed prior to construction begins for the replacement of the radial gates and hoist deck and overlay of the spillway and requires temporary closure of the existing bridge along State Highway 203 over the dam. All residents would be notified of the bridge closure via an electronic message board placed at the lake residential area and announcements via the local newspapers. Approximately 6,100 linear feet of existing road being demolished and reconstructed to bypass Sumner Dam. However, most of the reconstructed road alignment would follow the existing road corridor in the state park to reduce impacts of undisturbed areas. Approximately 2.7 acres of asphalt will be demolished and replaced, and 3.8 acres of new ground would be disturbed to widen the road to meet New Mexico Department of Transportation standards and construct the intermediate bridge abutments. Reconstructing the existing road would not increase the existing road network miles.

If traffic control is needed, the contractor would provide a traffic control plan prior to commencing work. Traffic control would likely include traffic signs that inform the public of construction activities. The contractor would be required to submit a traffic control layout/implementation plan provided by a licensed traffic control contractor. Overall, impacts from construction activities would be expected to be negligible to the existing transportation network and access with an intermediate portable bridge constructed prior to construction activities to provide a safe and continuous access route for public, including emergency vehicles and commercial vehicles, during construction activities and no roadway closures needed.

3.9 PUBLIC HEALTH AND SAFETY

3.9.1 Affected Environment

Reclamation has identified dam safety issues at the existing Sumner Dam structure, specifically the potential failure of the radial gates. The existing radial gates have extensive corrosion with areas

rusted entirely through and wall plates are loose from the concrete wall in some areas. In 2018, Reclamation performed a risk analysis and found the dam to be above Reclamation's guidelines for risk due to the current condition of the radial gates (Reclamation 2018). Based on Reclamation's findings, the Safety of Dams recommended rehabilitation of the radial gates (SOD-2018-A).

3.9.2 Impacts from the No Action

Under the No Action Alternative, no direct impacts to public health and safety are expected as no ground disturbance from radial gate replacement and intermediate access route construction would occur. Indirect impacts to public health and safety could occur from the risk of failure of the radial gates remaining as the probability of failure would remain moderately high, exceeding the threshold of Reclamation's public protection guidelines. The risk assessment conducted by Reclamation showed a zero-life loss as the likely outcome for a failure of the radial gates during normal operations (Reclamation 2018). However, fishermen and campers immediately downstream of the dam, if present, could be subjected to life threatening flows and may have to climb to safety quickly. The minimum wintertime flows are less than 35 ft³/s, (Reclamation 2021) and a sudden increase of flows up to 3,500 ft³/s would result in a rapid rate of rise along the river immediately downstream of the dam.

In addition, the deterioration of the radial gates has reduced their structural capacity resulting in an interim reservoir elevation restriction to 4,259 feet (top of joint use and initiation of winter flood control; Reclamation 2021). During high flood flow events, USACE would have to release flood flows for longer durations because the reservoir would not be able to hold its full flood allocation, and the overall flood waters could not exceed the 12 feet of static water held against the gates. This could result in longer impacts to downstream users, including the state park facilities immediately below the dam.

3.9.3 Impacts from the Proposed Action

The replacement of the radial gates would alleviate the identified dam safety issues and reduce overall risk of failure of the radial gates. New radial gates would also allow for operational releases, as well as emergency drawdown releases during heavy precipitation events. With the replacement of the radial gates, the Sumner Dam Reservoir would be able to store more flood water up to 4,282 feet (normal operation storage conditions) and release it more slowly during high flood flow events with the reservoir being able to hold its full flood allocation. During construction activities a bulkhead would be installed in front of the existing radial gates to protect the construction site and to protect residents downstream during a storm event should it occur.

In addition, an intermediate portable bridge spanning the Pecos River would be constructed prior to construction activities at Sumner Dam. The intermediate portable bridge would allow continued access for the public, including emergency response vehicles, during replacement of the radial gates and hoist deck and spillway overlay activities.

During construction activities, heavy equipment would be used for removal of the existing radial gates and hoist deck and installation of the new gates, hoist equipment and improvements of the existing access roads. The Occupational Safety and Health Administration laws regulate worker safety and would be followed to prevent work site accidents. Potential safety hazards to the general public include accidents associated with vehicle traffic.

3.10 CUMULATIVE EFFECTS

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

Past human caused and natural events have had varying levels of impacts on the resources and values affected by the proposed Radial Gates Project construction activities. Past and present actions include agricultural developments, livestock grazing, and infrastructural development such as roads and residential homes. There are no other reasonably foreseeable actions within or near the project area besides continued maintenance and operation of flood control and irrigation releases at Sumner Dam and the other three dams along the Pecos River and a permanent bypass bridge to replace the existing one lane bridge that crosses over Sumner Dam along State Highway 203.

Proposed Action

Other ongoing activities along the Pecos River may negatively impact water quality, erosion, channel maintenance, sediment levels and riverine habitats. These include stormwater runoff, agricultural runoff, municipal wastewater discharges, riparian clearing, and chemical use for vegetation control and cultivated crops. Recreation in the river, urban and industrial growth, and riparian vegetation clearing without replanting could also impact water quality, erosion, sediment levels, and riverine habitat.

In 2021, Reclamation implemented a modified flood operations plan due to the deterioration and risk of failure of the radial gates. The Proposed Action would contribute to beneficial cumulative impacts by resolving safety issues at Sumner Dam and reducing the overall risk of failure of the radial gates. Replacing the radial gates and hoist deck and overlaying the existing spillway would allow for controlled operational releases, as well as emergency drawdown releases during flood events. Mitigation measures and BMPs would be implemented under the Proposed Action to minimize adverse impacts from construction activities for the Sumner Dam Radial Gates Project. The proposed radial gates and hoist deck replacement and spillway overlay would contribute negligibly to cumulative adverse effects because they are temporary and transient in nature and localized with implementation of mitigation measures and BMPs. Overall, the Proposed Action would meet the Reclamations Safety of Dams Act to ensure that Reclamation’s dams preserve the structural safety of dams and related facilities.

4. Consultation and Coordination

The ESA requires the consideration of impacts on federally listed species for all federally funded, permitted, or authorized projects. Reclamation requested a species list from the USFWS IPAC that identified threatened, endangered, proposed, and candidate species that may occur within the project area or may be affected by the Proposed Action. The proposed actions will have no effect on federally listed species, thus, does not require further section 7 consultation or coordination with the USFWS. The draft EA will be provided to the USFWS for review and comment.

Section 106 of the NHPA as amended in 1992 (16 USC 470 *et seq.*) requires the consideration of impacts on historic properties that are listed, or eligible to be listed, in the NRHP. The Sumner Dam Radial Gates Project will comply with the American Indian Religious Freedom Act, NRHP, and other legislation pertaining to cultural resources. The cultural resource inventory report has been sent to the New Mexico SHPO for review and concurrence of the recommended determinations. Additionally, a copy of this EA will be available online for public review and comment.

5. List of Preparers

A list of who participated in the development of this EA is provided below.

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APPENDIX A. PUBLIC SCOPING COMMENTS SUMMARY AND RESPONSES

Commentor	Format	Comment	Reclamation Response
Multiple Commentors	Email	Will the intermediate bridge be installed prior to radial gates replacement activities to allow access for public to cross the river?	Yes. The intermediate bridge will be installed and be in service before the bridge over the radial gates is closed permanently to the public and construction on the Sumner Gates Radial Gates Project begins.
Multiple Commentors	Email	Will Highway 203 be closed during or after project construction?	No. Residents will maintain access to Highway 203 during construction via an intermediate access route. Future permanent bridge and road installations are out of the scope of the current Radial Gates project, however, residents will continue to have access to the road before, after and during construction efforts at Sumner Dam.
Jim Lyssy	Email	What is the maximum load capacity for the permanent bypass bridge?	(Out of scope of Sumner Dam Radial Gates Project) However, Reclamation has chosen to include known information about the future permanent bypass bridge project with the public during public scoping meetings due to the connected efforts of the two projects. The permanent bypass bridge is anticipated to hold an 80,000-pound load capacity.
N/A	Teams Meeting Participant	Is this project eligible for Water Resources Development Act funding?	(Out of scope of Sumner Dam Radial Gates Project) However, this project is ineligible for Water Resources Development Act funding due to it being an Army Corps of Engineering funded project.
Leroy and Sandy Sandoval	Letter	Will Statewide Transportation Improvement Program (STIP) funding be used for the permanent bypass bridge?	(Out of scope of Sumner Dam Radial Gates Project) However, Reclamation provided some funding information during second public scoping meeting in order to address previous public comments and concerns. No. Project is eligible for federal funds but uses their own system of tracking referred to as the "TIP".
Jim Lyssy	Email	Who owns the (current) bridge and who owns the road (State Road 203)?	Reclamation owns the bridge and land underneath the bridge, NM DOT owns the road.

Commentor	Format	Comment	Reclamation Response
Jim Lyssy	Email	What is the Maximum Load Capacity for the intermediate Mabey Bridge and bridge over the radial gates?	The maximum load capacity for the current bridge over the radial gates has reduced to 15 tons. *15-ton capacity is based on the Federal Highway requirements for the existing bridge and not the road.
Alan Manning	Email	Do archeological and environmental studies need to be completed before activities are started?	No. Archeological and environmental studies have already been completed in compliance with the National Environmental Policy Act (NEPA) process for the Sumner Dam Radial Gates Project. All finding and collected data will be included in the project's Environmental Assessment
N/A	Email	Will the public be able to still participate in recreation activities during construction of the radial gates and intermediate bridge?	Yes, the public will still have recreational access to Sumner Lake during project construction activities. There may be limited access to areas of the lake being used for construction activities and back filling while construction efforts are underway.
Jim Lyssy	Email	What are the weight limitations of the temporary bridge and how long can it be utilized by the community?	Reclamation will determine the load rating (and height restriction) of the intermediate bridge once the ends of the bridge have been put into place and the length of the bridge is able to be determined. Once the temporary bridge in place, it' will be inspected by a team of engineers on a yearly basis while in use. The temporary bridge will remain in place until a permanent bridge is in place.
Mike Craft	Email	I propose Alternative D— Branch off from Tamarack Dr. on the west side of the fire dept. (heading N-N/W), with a road, somewhat parallelling the west side of the lake. At a point of feasibility then erect a MaBey modular bridge, crossing the Pecos to the north of the lake and connecting with U.S. Highway 84. This action may potentially open up more lake access with development for homes in that area, thus increasing revenue for the county.	The proposed route for an alternative access around the north side of Lake Sumner would be both cost and time prohibitive when compared to the current proposed route.
Comments Addressed During 2nd Public Scoping Meeting- January 30th, 2024			
Jim Lyssy	Public Meeting Comment	Where is the radial gate funding coming from for the following: Sumner Dam Radial Gates, the Intermediate Bridge, and the Permanent Bypass Bridge?	(Out of scope of Sumner Dam Radial Gates Project) However, it was stated during the scoping meeting that New Mexico DoD will be responsible for funding of the permanent bypass bridge, the intermediate bridge, and the radial gates project funding will likely come from the bipartisan infrastructure backlog.
Public Scoping Meeting Attendee	Public Meeting Comment	Is the project eligible for funding from the president's budget FY 2025?	Out of the scope of current project. Reclamation response during meeting stated funding applications is usually started 3 years previous to start of project.
Public Scoping Meeting Attendee	Public Meeting Comment	When does Reclamation find out if they have received the grant funding applied for a given project?	Out of scope of current project. Reclamation is unable to determine the timelines in which grant money for a given project application will be awarded.

Commentor	Format	Comment	Reclamation Response
Public Scoping Meeting Attendee	Public Meeting Comment	Why can't the bridge location be moved downstream to a different crossing area within the park area?	Out of scope of current Radial Gates project. Multiple preliminary studies of the dam area have been conducted. The current Radial Gates project is a result of combining the safest design plan for the dam area with the most cost-effective budget.
Public Scoping Meeting Attendee	Public Meeting Comment	What about the fiber optic cable/ cables that are run through the dam?	Out of scope of Sumner Dam Radial Gates Project. Reclamation is currently working with the county to determine what easements and right of ways are located before beginning design for future projects (i.e., permanent bridge structure)
Public Scoping Meeting Attendee	Public Meeting Comment	Will the current bridge remain where it is?	Yes. Reclamation confirmed the current bridge will remain where it is, although it will not be used at all unless needed for maintenance purposes.
Jim Lyssy	Public Meeting Comment	What if you keep the bridge where it is, and you adjust it to a weight limit of so much?	Out of scope of Sumner Dam Radial Gates Project. The current weight limit for the bridge is 15,000 tons, which does not meet the weight requirements of the community nor safety requirements.
Public Scoping Meeting Attendee	Public Meeting Comment	Will the counterbalances be replaced as well?	The counterbalances will no longer be necessary with the new radial gate design for this project. Reclamation is moving away from the practice of using counterbalances and toward a more modern design for radial gates.
Public Scoping Meeting Attendee	Public Meeting Comment	How Many Radial Gates are being replaced?	There are three radial gates located on Sumner Dam and all three will be replaced.
Public Scoping Meeting Attendee	Public Meeting Comment	Will the hoist bridge be replaced as well?	Yes. The current hoist bridge will be replaced with a hoist bridge that is designed for the new radial gates design.
Public Scoping Meeting Attendee	Public Meeting Comment	Who was responsible for the repairs on the bridge (filling holes, pebble sealant)?	Reclamation is responsible for all work on the bridge itself.
Public Scoping Meeting Attendee	Public Meeting Comment	Out of the dams in the 500-mile radius of Fort Sumner, how many facilities are close that are high risk?	Out of scope of current Sumner Dam Radial Gates Project.
Public Scoping Meeting Attendee	Public Meeting Comment	How old is the temporary bridge?	Reclamation approximates the temporary bridge to be about 30 years old.
Public Scoping Meeting Attendee	Public Meeting Comment	When this project is completed, will Carlsbad Irrigation district allow us to maintain the same water capacity?	Out of project scope. Future decisions regarding water capacity will be the decision of the CID board.

Commentor	Format	Comment	Reclamation Response
Public Scoping Meeting Attendee	Public Meeting Comment	When Fort Sumner irrigation needs water, if we start to run dry, how will we get water? Is there anything in agreement that insures the irrigations district will have water during their watering times from March to October?	Out of scope of Sumner Dam Radial Gates project. Reclamation has stated Fort Sumner Irrigation District will not be impacted.
Public Scoping Meeting Attendee	Public Meeting Comment	What is going to prevent rust from affecting the bridge again?	Reclamation will put a plan in place in which bridge maintenance is overseen by a team of engineers who will determine the best action to maintain the bridge (sand blasting, coating, etc.)
Public Scoping Meeting Attendee	Public Meeting Comment	Did you know that where they are going to put in the road on the west side, that there used to be a dump down there?	Out of scope of project. However, archeological surveys and evaluation are required before any project construction can begin.
Public Scoping Meeting Attendee	Public Meeting Comment	Who will own the new permanent bypass bridge and the road (State Road 203)?	NM DOT will own the permanent bypass bridge as well as State Road 203.
Public Scoping Meeting Attendee	Public Meeting Comment	Will Socioeconomics analysis to residents be included in this EA?	No, because the socioeconomic impacts occurred when the existing bridge load capacity was reduced to 15 tons*. Highway 203 is rated to be able to handle over 15 tons, but the existing bridge cannot. The temporary portable bridge will have a higher load capacity rating than the existing bridge as will the future permanent bridge. There will be no reduction in the current load capacity and should be able to handle concrete trucks and utility rucks (e.g., power poles). *The 15-ton capacity is based on the Federal Highway requirements for the existing bridge not the road.
Public Scoping Meeting Attendee	Public Meeting Comment	Did Reclamation Consider funding all 3 phases (temporary bridge, radial gates replacement, and permanent bridge) at once?	Yes, Reclamation did consider this approach, but this will not meet current high priority and timeline for replacement of the radial gates and needs to proceed forward due to health and safety risks associated with them.
Public Scoping Meeting Attendee	Public Meeting Comment	How will the community be notified of possible temporary bridge closure? The Lake Community does not have access to local newspaper or radio stations.	Reclamation will notify public prior to temporary closures by means that reach the Lake Community residents too, such as a portable message board and working with community to post on their Facebook page and other social media platforms

APPENDIX B. RADIAL GATES PRELIMINARY DESIGNS

See Stand Alone Appendix

APPENDIX C. USACE CORRRESPONDENCE

From: [Randell Seeley](#)
To: [Stephanie Lee](#)
Subject: Fwd: Ft. Sumner Lake CWA Question
Date: Tuesday, February 13, 2024 10:12:34 AM
Attachments: [image003.png](#)
[image001.png](#)

Hi Steph,

Please see below the response from the Corps regarding Fort Sumner.

Get [Outlook for Android](#)

From: Schroeder, Christina L CIV USARMY CESP (USA) <Christina.L.Schroeder@usace.army.mil>
Sent: Tuesday, February 13, 2024 10:05:31 AM
To: Randell Seeley <Randell.Seeley@ddc4c.com>; SPA-RD-NM <SPA-RD-NM@usace.army.mil>
Subject: Ft. Sumner Lake CWA Question

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello,

An irrigation exemption is not applicable to this situation. However, if your activity does not involve the discharge of dredge or fill material into waters of the U.S., authorization from the Corps under Section 404 of the Clean Water Act is not required.

Sincerely,

Christina Schroeder
New Mexico/Texas Branch Chief
Albuquerque District

Office: 505-342-3374
Mobile: 505-377-8799

APPENDIX D. USFWS IPAC T&E SPECIES LIST



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:

06/26/2024 22:46:31 UTC

Project Code: 2024-0006490

Project Name: Sumner Dam Radial Gates

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: 2024-0006490
Project Name: Sumner Dam Radial Gates
Project Type: Dam - Maintenance/Modification
Project Description: Radial gates at the dam site will be replaced due to deterioration. There are three 45' wide by 21' tall radial gates that will each be replaced by 45' wide by 16' tall radial gates. The 5' difference will be made up by raising the spillway invert elevation to the upstream weir elevation. During construction, bulkheads will be installed in front of two of the radial gates with one remaining open for flood control. NM State Hwy 203, which crosses the dam, may be taken out of service and an alternate one-lane bypass route may be constructed just downstream of the dam. This crossing would follow the existing roads on both eastern and western sides of the Pecos River just downstream of the stilling basin. It may be a portable bridge with abutments outside the riverbed or a dirt road on top of new concrete culverts and compacted backfill in the same location. It would be approximately 18' wide and 84' long. Improvements on the east side of the dam may include developing radii at the sharper turns and reducing grading. If material is needed to install the new road, it is assumed it can be borrowed from a nearby borrow source located southwest of the spillway. The project perimeter provided includes area with proposed staging area and borrow source locations. Some vegetation removal may be required. Some road development may be necessary to conform to NMDOT regulations. The construction period is approximately 3 years.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.601557799999995,-104.39327972411462,14z>



Counties: De Baca County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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
Lesser Prairie-chicken <i>Tympanuchus pallidicinctus</i> Population: Southern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1924	Endangered
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> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

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.

APPENDIX E. SHPO CONSULTATION



IN REPLY REFER TO:

ALB-702
2.1.1.04

United States Department of the Interior

BUREAU OF RECLAMATION
Albuquerque Area Office
555 Broadway NE, Suite 100
Albuquerque, NM 87102-2352

March 15, 2024



VIA U.S. AND ELECTRONIC MAIL

Jeff Pappas, PhD.
State Historic Preservation Officer and Director
New Mexico Historic Preservation Division
Bataan Memorial Building,
407 Galisteo Street, Suite 236
Santa Fe, NM 87501

Subject: Section 106 Consultation, Sumner Dam Spillway Radial Gates Replacement Project, De Baca County, New Mexico.

Dear Dr. Pappas:

The Bureau of Reclamation working with the Carlsbad Irrigation District (CID) and the United States Army Corps of Engineers plans to replace three radial gates at Sumner Dam (LA 105556/HCPI54428) in De Baca County, New Mexico. The spillway gates have not functioned properly since 2004, creating a severe risk to life and property downstream of the dam. The new gates will not have counterweights, like the current gates do, and there will be extensive modification needed to the hoist deck and hoists, along with modernized electrical supply and controls. Some concrete demolition will also be required. Additionally, all handrails must be replaced in order to meet current safety regulations.

The project Area of Potential Effect (APE) is approximately 57.20 acres including two staging areas. Sumner Dam is owned by Reclamation but is operated and maintained by CID. The proposed project will be funded by Reclamation and, therefore, requires compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA, as amended). As such a Class III Cultural Resources Inventory was performed under New Mexico Cultural Resources Information System (NMCRIIS) #154085, Sumner Radial Gates Replacement Project by BRIC LLC to identify historic properties with potential to be impacted by the undertaking. All reporting documentation has been uploaded to the Archaeological Records Management Section (ARMS) for review.

Sumner Dam

Sumner Dam and Lake Sumner are on the Pecos River about 250 river miles north of Carlsbad and about 16 miles northwest of Fort Sumner, New Mexico. The dam was originally called Alamogordo Dam but renamed to avoid confusion with the town of the same name. It was constructed between 1936 and 1937 by Reclamation with Works Progress Administration (WPA) and Civilian Conservation Corps (CCC) labor. It underwent major modification in 1956 when the height of the dam was raised, and an improved spillway was installed. Previous recordings of the dam found it to be eligible for inclusion in the National Register of Historic Places (NRHP) under Criteria A and D in 1997 (Historic Preservation Division [HPD] Log 52596) and again in 2002 (HPD Log 64889). Reclamation concurs with the previous determinations of eligibility in the current analysis and documentation.

Proposed Project Components

The proposed undertaking will be comprised of two main components: demolition and installation. The demolition component consists of the removal of the three 45 by 21-foot non-functioning radial gates, removal of the existing hoist deck, and removal of the three-chain hoists and automatic gate operating equipment. Installation will include three new 45 by 16-foot radial gates, raising the existing spillway invert 5 feet, new concrete corbels, cathodic protection, a new hoist deck with wire rope hoists, increased power supply, modern automated control for the gates, and new railings and fencing that meet modern safety standards. Additionally, concrete will be placed in the float wells.

Secondary Components

Borrow Pits

As originally conceived, the project would require a coffer dam upstream of the construction area to protect against storms and/or rising lake levels due to flood-water runoff. The earth for the coffer dam would have been taken from the areas used to remove soil for the initial 1930s dam construction and the 1950s dam modification. The cultural resources survey for this is reflected in the Class III report (which will be sent simultaneously with this letter but under separate cover). Since the time of the Class III survey (5 and 6 September 2023), the project scope has changed, the coffer dam no longer is planned, and the Borrow Pits are not needed for the completion of the proposed undertaking.

Temporary Bridge

State Highway 203 crosses the spillway and is supported by the spillway walls and piers. The road must be closed to traffic during construction. In initial planning a temporary route for the road across the planned coffer dam was an alternative. After elimination of the coffer dam from design, plans to install a temporary bridge downstream of the dam that will connect with existing roads was chosen as the preferred alternative. The downstream bridge was also part of initial planning and was included in the Class III survey area. Reclamation is working with New Mexico Department of Transportation on initial designs for a permanent downstream bridge and reroute of State Highway 203. This will be a separate undertaking at a future date and is not part of the current radial gates project.

Cultural Resources Within the APE

A total of eight cultural resource sites was encountered during the Class III inventory. Of these, five are historic, two are multi-component, and one is prehistoric. Reclamation has determined one of these to be eligible for inclusion in the NRHP, one is determined not eligible to the NRHP and the remainder are undetermined and need more data (see attached determinations of eligibility).

LA 105556/HCPI 54428, Sumner Dam, is determined by Reclamation to be eligible to the NRHP under Criteria A and C. The dam is found to be eligible under Criterion A by Reclamation because it is recognized as contributing to the period of time in which water control in the American West became paramount to the greater expansion of the United States and agriculture, the Great Depression and the New Deal. Reclamation also finds Sumner Dam eligible under Criterion C primarily in the period of initial construction in the 1930s for its association with an architectural style that is distinctly tied to the works of the CCC supported by WPA. Reclamation further finds that Sumner Dam is eligible for inclusion in the NRHP under Criteria A for the period of water infrastructure reconstruction in the 1950s at the height of the Reclamation Dam Building Period (1945 – 1970), the beginning of emphasis on recreation at Reclamation facilities, and importance of National Infrastructure in association with the Cold War.

With regard to the remainder of the sites, please refer to the eligibility determinations attached and the Class III cultural resources report for justification of findings.

Impact and Effect

LA 105556/HCPI 54428

The proposed project will restore Sumner Dam to its original functionality by replacing the existing radial gates, however, the undertaking will have direct impact to the dam and Reclamation finds that there will be *adverse affect* to the historic cultural property. It is important to note that the expected impact will be on the 1956 construction, not the CCC/WPA-era construction components.

With regard to the remaining seven cultural resource sites, see attached treatment findings. It is important to note that sites LA 204070 – 204220 are no longer within the planned APE (borrow pit area, see above); however, should the area be needed for other construction purposes then the treatment findings will apply.

Proposed Mitigation

Sumner Dam meets the 50-year guideline and has been identified as a historic property that is eligible to the NRHP, the dam was never formally documented on Historic Property Inventory (HCPI) forms until the current project. Based on current documentation, the undertaking will have an adverse effect to the historic property and Reclamation finds that the appropriate mitigation strategy is a Level 2 Historic American Engineering Record (HAER) analysis. Reclamation recommends the project go forward as planned, with the mitigative strategy of a Level 2 HAER to mitigate adverse effects to historic properties and thus satisfy the Section 106 process of the NHPA (as amended). At this time, we are requesting concurrence from your office in support of this project, determinations of eligibility, and the recommended mitigation strategy. As always, we look forward to working with you on this important project.

Please direct your questions and comments to Dr. John Cater of my office at (505) 418-6377 or jcater@usbr.gov. As always, we look forward to working with you. Individuals who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services.

Sincerely,



Digitally signed by JENNIFER
FALER
Date: 2024.03.15 16:19:57 -06'00'

Jennifer Faler, P.E.
Area Manager

Enclosure

Determinations of Eligibility

Site Number	Site Type	BRIC	BOR
LA 105556/HCPI 54428	Historic/Structural	Eligible, A, C	Eligible, A, C
LA 105557	Historic/Structural	Undetermined	Undetermined
LA 105558	Historic/Structural	Not Eligible	Not Eligible
LA 204070	Historic/Non-structural	Undetermined	Undetermined
LA 204071	Historic/Non-structural	Undetermined	Undetermined
LA 204072	Prehistoric/Non-structural	Undetermined	Undetermined
LA 204073	Multicomponent/Non-structural	Not Eligible	Undetermined
LA 204220	Historic/Structural	Not Eligible	Undetermined

Treatment Findings

Site Number	BOR Determinations
LA 105556/HCPI 54428	Level 2 HAER Analysis
LA 105557	Flag for Avoidance if disturbance is within 50'
LA 105558	No treatment required
LA 204070	Flag for Avoidance if disturbance is within 50'
LA 204071	Flag for Avoidance if disturbance is within 50'
LA 204072	Flag for Avoidance if disturbance is within 50'
LA 204073	Flag for Avoidance if disturbance is within 50'
LA 204220	Flag for Avoidance if disturbance is within 50'



Michelle Lujan-Grisham
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

April 26, 2024

Dr. John Cater
Bureau of Reclamation
Albuquerque Area Office
555 Broadway NE, Suite 100
Albuquerque, NM 87102-2352

Re: Sumner Dam Radial Gate Replacement adverse effect (NMCRIS 154085; HPD log 122116, 122117)

Dear Dr. Cater:

I am following up on our call of earlier today concerning the Bureau of Reclamations' (BOR) undertaking to replace the gates at Sumner Dam in De Baca County, New Mexico. based on our conversation, it is the SHPOs' opinion that it is too early to develop an agreement to resolve adverse effects because the project activities, such as plans to reroute NM 203, are still being developed.

We recommend one of two courses of action. The first is to develop a project specific programmatic agreement that provides phased consultation as new elements of the project are identified, per 36 CFR 800.4.b.2 and executed per 36 CFR 800.(14)b.

The second course is to develop a memorandum of agreement to resolve the known adverse effects, with provisions for phased consultation, per 36 CFR 800.4.b.2.

We also recommend that BOR consult with the Advisory Council on Historic Preservation (ACHP) for the most appropriate course of action.

We are looking forward to working with you on this important project. If you have any questions or comments, please feel free to call me directly at 505-827-4225 or email me at bob.estes@dca.nm.gov.

Best regards,

John R. (Bob) Estes Ph.D.
HPD Staff Historic Preservation Specialist