BUREAU OF RECLAMATION

Environmental Assessment and Finding of No Significant Impact

Short Ditch Extension Piping Project

Colorado River Basinwide & Basin States Salinity Control Program

Upper Colorado Basin: Interior Region 7

Western Colorado Area Office

U.S. Department of the Interior **2022**

Mission Statements

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor 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.

Environmental Assessment and Finding of No Significant Impact for the Short Ditch Extension Piping Project

Colorado River Basinwide & Basin States Salinity Control Program

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Prepared for Reclamation by J-U-B ENGINEERS, Inc.

Cover Photo: J-U-B ENGINEERS, Inc. View of water flowing through segment of existing Short Ditch alignment.

FINDING OF NO SIGNIFICANT IMPACT

United States Department of the Interior
Bureau of Reclamation
Western Colorado Area Office
Grand Junction, Colorado

Short Ditch Extension Piping Project

Introduction

In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Bureau of Reclamation (Reclamation) has conducted an environmental assessment (EA) for the Proposed Action of authorizing the use of federal funds to implement the Short Ditch Extension Company's (SDEC) Short Ditch Extension Piping Project in Delta County, Colorado. Under the legislative authority of the Colorado River Basin Salinity Control Act, Reclamation will fund the Short Ditch Extension Piping Project (Proposed Action) and is the lead agency for purposes of compliance with the NEPA for this Proposed Action.

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

Alternatives

The EA analyzes the No Action Alternative and the Proposed Action Alternative to implement the Short Ditch Extension Piping Salinity Control Project.

Decision and Finding of No Significant Impact

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

Context

The project is located in the existing Short Ditch Extension Lateral, with exception of 5,850 feet of ditch on BLM lands to be abandoned and replaced by a new siphon pipeline, along with a separate Habitat Replacement Site at the Gall/Kampe and Purisima Ridge Partners property along an unnamed drainage connected to Jay Creek. The affected locality is approximately 1 mile south of Hotchkiss and approximately 0.26 miles south of the North Fork of the Gunnison River in Delta County, Colorado. Affected interests include Reclamation, Bureau of Land Management (BLM), SDEC, and adjacent landowners.

Intensity

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

1. Impacts may be both beneficial and adverse. As described in Table 3 of the EA, the Proposed Action will incur both beneficial and adverse impacts. The short-term adverse effects of the Proposed Action include temporary insignificant impacts to air quality, access, transportation, and public safety, recreational and visual resources, BLM grazing allotments, vegetative resources and weeds, wildlife resources, agricultural resources and soils, and noise. The long-term adverse effects include effects to water quality, recreational and visual resources, BLM grazing allotments, vegetative resources and weeds, wildlife resources, special status species, and cultural resources. Beneficial effects include effects to water rights and use, water quality, access, transportation, and public safety, vegetative resources and weeds, and wildlife resources.

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

2. **The degree to which the proposed action affects public health or safety.** As described in Section 3.2.4 of the EA, the safety risks associated with sources of open, moving water will no longer occur within the Project Area. The Delta County Sheriff and the Delta Fire Protection District 4 will continue to cover the Project Area for emergency response, and will not be hindered in their response due to implementation of the Proposed Action. Therefore, there would be no significant effect on public safety.

3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** There are no park lands, prime farmlands, wild and scenic rivers, or ecologically critical areas that will be adversely affected by the proposal. The Proposed Action will have an adverse effect on several ditch elements involved with the Proposed Action, which are resources eligible for listing in the NRHP. A Programmatic Agreement (PA) has been executed between Reclamation, BLM, and the Colorado SHPO, with the Applicant participating as an invited party, regarding the management of cultural resources related to the Proposed Action. The PA outlines stipulations designed to conserve the value of the eligible cultural resources, and is included in Appendix D. Conserving the value of the eligible cultural resources would ensure that piping the canal would not result in the loss of knowledge of early irrigation systems, their design, or reduce the ability to gain knowledge of early irrigation systems into the future. Because the value of the cultural resources related to the Proposed Action would be conserved, there would be no significant impacts to cultural resources as a result of implementing the Proposed Action. The Proposed Action will affect waters under the jurisdiction of Clean Water Act Section 404 (the ditches themselves) and disturb irrigation-induced wetland and riparian vegetation associated with the ditches. However, as a "ditch related activity in the State of Colorado" that is "conducted under a binding agreement with the USBR" (Reclamation), the Proposed Action will be authorized under Regional General Permit (RGP) 5. RGP 5 includes terms and conditions which must be complied with by project proponents to ensure their proposed projects will have minimal individual or cumulative adverse effects on the aquatic environment. The USACE has the authority to determine if an activity complies with the terms and conditions of an RGP. By authorizing use of RGP 5 for the Proposed Action, the USACE has determined that the Proposed Action will have minimal individual or cumulative adverse effects on the aquatic environment.

As described in Sections 3.2.10 and 3.2.2 of the Final EA, neither the impacts to cultural resources or waters under the jurisdiction of Clean Water Act Section 404 (the ditches themselves) and irrigation-induced wetland and riparian vegetation rise to the level of significant.

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

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

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

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Cumulative impacts are possible when the effects of the Proposed Action are added to other past, present, and reasonably foreseeable future actions as described under related NEPA documents and plans. There will be no significant adverse cumulative effects due to implementation of the Proposed Action. The Proposed Action will contribute to the beneficial cumulative effect of the regional efforts to reduce water loss to seepage and evaporation in the Lower Gunnison and Colorado River watersheds. The Proposed Action will also contribute to the beneficial cumulative effect of regional efforts underway to reduce salinity and selenium loading in the Lower Gunnison and Colorado River watersheds, and will cumulatively improve fish habitat within the larger Colorado River basin. These beneficial cumulative effects rise to the level of significant, as described in the Final EA in Sections 3.2.1, 3.2.2, and 3.2.8.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. As described in Section 3.2.10, the Proposed Action will have an adverse effect on several ditch elements involved with the Proposed Action, which is a resource eligible for listing in the NRHP. A PA has been executed between Reclamation, BLM, and the Colorado SHPO, with the Applicant participating as an invited party, regarding the management of cultural resources related to the Proposed Action. The PA outlines stipulations designed to conserve the value of the eligible cultural resources, and is included in Appendix D. Conserving the value of the eligible cultural resource will ensure that piping the canal will not result in the loss of knowledge of early irrigation systems, their design, or reduce the ability to gain knowledge of early irrigation systems into the future. Because the value of the cultural resource related to the Proposed Action will be conserved, there will be no significant impacts to cultural resources as a result of implementing the Proposed Action. There will be no significant effect to districts, sites, highways, structures, or

objects listed in or eligible for listing in the National Register of Historic Places and the Proposed Action will not cause the loss or destruction of significant scientific, cultural, or historical resources.

9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** As described in Section 3.2.9, Reclamation consulted with U.S. Fish and Wildlife (USFWS) regarding the effects on threatened or endangered species and critical habitat from the impacts of the Proposed Action, including the habitat replacement project (USFWS Tails: 2022-0019865). There will be no change to SDEC's historic consumptive use rate or historic water depletions within the Colorado River Basin as a result of the Proposed Action. SDEC's historic depletions are covered under the Gunnison River Basin PBO (USFWS Tails: 65413-2009-F-0044) issued by the USFWS, ensuring the avoidance of jeopardy to the endangered Colorado River fishes and adverse modification of their designated critical habitat. Because the Proposed Action will not result in jeopardy to the species or adverse modification of their designated critical habitat, there would be no significant impact to the endangered fishes or their designated critical habitat.

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

Environmental Commitments

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

Approved by:

LEE TRAYNHAM Digitally signed by LEE TRAYNHAM Date: 2022.12.21 11:27:26 -07'00' Acting For

Ed Warner
Area Manager, Western Colorado Area Office

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1 INTRODUCTION

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) to disclose and evaluate the potential environmental effects of the Short Ditch Extension Company's (SDEC's or "Applicant's") proposed Short Ditch Extension Piping Project (hereinafter "Proposed Action"). The Proposed Action is located in Delta County, Colorado, approximately one mile south of Hotchkiss, Colorado and approximately 0.26 miles south of the North Fork of the Gunnison River (see Figures 1, 2 and 3 [Appendix A]).

J-U-B ENGINEERS, Inc. (J-U-B) prepared this EA on behalf of the U.S. Department of the Interior's Bureau of Reclamation (hereinafter "Reclamation"), which is authorized by the Colorado River Basin Salinity Control Act to provide funding assistance for the Proposed Action. Reclamation awarded a financial assistance agreement to SDEC for the Proposed Action under Assistance Agreement R20AC00017. As the primary funding entity, Reclamation is the lead federal agency for the NEPA analysis of the Proposed Action. Ongoing operation and maintenance of the constructed project would be funded through annual SDEC water user assessments.

There are two classifications of land affected by the Proposed Action: Federal and private. The Federal land is public land administered by the U.S. Bureau of Land Management (BLM). The BLM has a connected action of acknowledging a historic ditch right-of-way (ROW)for a portion of the project that occurs on BLM land.

This document has been prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ) NEPA regulations (40 CFR Parts 1500-1508). After a public review period for the Draft EA, Reclamation determined that a Finding of No Significant Impact (FONSI) for the Proposed Action is warranted.

1.1 Project Location and Legal Description

The Proposed Action Area (Action Area) sits within the North Fork Valley of the larger Gunnison River Basin of the Upper Colorado River Basin, approximately one mile south of Hotchkiss, in Delta County, Colorado (Figure 2 [Appendix A]).

There are two general physical locations involved in the Proposed Action: the Short Ditch Extension and the HRP site (Figures 1 and 2 [Appendix A]).

- The Short Ditch Extension is in Section 6, Township 15 South, Range 92 West and Section 31, Township 14 South, Range 92 West in Delta County, Colorado. The pipeline portion of the Proposed Action is entirely contained within the Short Ditch Extension, which begins approximately 2 miles after the Short Ditch Canal crosses Highway 92 and continues to the final turnout of the Short Ditch Extension. Water in the SDEC is supplied by the North Fork of the Gunnison River. The Short Ditch Extension serves the lower extents of the North Fork Valley to the south and east of the North Fork of the Gunnison River. The Short Ditch Extension is approximately 9.54 miles long and composed of both piped and open, unlined segments. The pipeline would occur within the existing ditch right-of-way (ROW). A ROW easement has been obtained for the construction of the new siphon pipeline.

- The HRP Site is in Sections 17, Township 14 South, Range 92 West in Delta County, Colorado. The HRP site encompasses approximately 6.15 acres of a natural drainage and riparian habitat.

The Action Area is located in an area of shale badlands with significant exposure of underlying Mancos Shale. The North Fork Valley receives less than 8 inches of precipitation annually, with little mid-summer precipitation. The average maximum temperature is approximately 67 degrees, and the average minimum is 34 degrees (FIPS 08029; NRCS 2020). The elevation of the Proposed Action ranges from 5,353 above mean sea level (AMSL) to 5,416 AMSL.

Land cover in the vicinity of the Action Area consists primarily of bare ground and grassland. Land use within the Action Area is predominantly residential, transportation, and BLM rangeland. Agricultural land is adjacent to at least half of the Action Area.

1.2 Need for and Purpose of the Proposed Action

The purpose of the Proposed Action is to comply with the Colorado River Basin Salinity Control Act (Reclamation's federal nexus) by implementing salinity controls in the Gunnison River Basin, within the greater Colorado River Basin; and, to comply with the Federal Land Policy and Management Act of 1976 (BLM's federal nexus).

The Proposed Action is needed to reduce salinity loading to downstream natural resources in the Lower Gunnison Basin and the larger Colorado River Basin. Based on salinity studies in the Lower Gunnison – North Fork area, it is estimated that the Short Ditch Extension contributes approximately 419 tons of salt to the Colorado River Basin annually (Jacobson 2017). The Proposed Action would reduce salt loading in the Colorado River Basin by an estimated 419 tons of salt per year. The Proposed Action is also needed because the Short Ditch Extension occurs on BLM land and requires BLM to acknowledge a historic ditch ROW.

1.3 Decision to be Made

Reclamation and BLM are cooperating agencies with connected actions for authorization of the Proposed Action. Reclamation will decide whether to provide funding to SDEC to implement the Proposed Action, and BLM will decide whether to acknowledge a historic ditch ROW on BLM land to allow for implementation of the Proposed Action.

The Colorado River and its tributaries provide municipal and industrial water to approximately 40 million people and irrigation water to nearly 5.5 million acres of land in the United States. The Colorado River also serves about 3.3 million people and 500,000 acres in Mexico (Reclamation 2020). Salinity affects water quality, which in turn affects downstream users by threatening the productivity of crops, degrading wildlife habitat, and corroding residential and municipal plumbing. From 2005 to 2015, an approximate average of 7.5 million tons of salt flowed into the Colorado River annually, and by the year 2035, 1.68 million tons of salt per year will need to be diverted from the system in order to meet water quality standards in the Lower Basin. Irrigated agriculture contributes approximately 37 percent of the salinity in the overall Colorado River Basin (Reclamation 2017). Irrigation increases salinity in the system both by depleting in-stream flows, and by mobilizing salts found in underlying geologic formations into the system, especially during flood irrigation practices.

In 1974, Congress enacted the Colorado River Basin Salinity Control Act (Public Law [PL] 93-320), which directed the Secretary of the Interior to establish a program to protect water quality in the Colorado River for the United States and Mexico. The Colorado River Basin Salinity Control Act was later amended in 1984 by passing PL 98-569. In 1995, the Secretary of the Interior, through Reclamation, was authorized to implement a basin-wide salinity control program (Reclamation 2020). PL 110-246 of June 18, 2008 amended the Salinity Control Act, establishing the Basin States Program, and authorizing Reclamation to take advantage of new, cost-effective opportunities to control salinity in the basin.

Salinity loading is the result of seepage and deep percolation that picks up salts as they move through the underlying geology. The increase in salinity shows up in streams downgradient of the ditch prism. Expected salinity reduction is calculated based on measured Total Dissolved Solid loads in basin streams, GIS-based model calculations to determine subbasin loads, and ditch mapping data that includes average flows, ditch lengths, and average annual days of use. A list of published references is provided for more detailed information.

Richards, Rodney J. et al., Characterization of Salinity Loads and Selenium Loads in the Smith Fork Creek Region of the Lower Gunnison River Basin, Western Colorado, 2008-2009: U.S. Geological Survey Scientific Investigations Report 2014-5101. https://pubs.usgs.gov/sir/2014/5101.

Schaffrath, K.R., 2012, Surface-water salinity in the Gunnison River Basin, Colorado, water years 1989 through 2007: U.S. Geological Survey Scientific Investigations Report 2012-5128, 47 p. https://pubs.usgs.gov/sir/2012/5128.

Linard, J.I., 2013, Ranking contributing areas of salt and selenium in the Lower Gunnison River Basin, Colorado, using multiple linear regression models: U.S. Geological Survey Scientific Investigations Report 2013-5075, 35 p., http://pubs.usgs.gov/sir/2013/5075.

1.4 Relationship to Other Projects

1.4.1 Salinity Control Program

Both the Basinwide Salinity Control Program and the Basin States Program fund salinity control projects with a one-time grant that is limited to an applicant's competitive bid. Once constructed, the facilities are owned, operated, maintained, and replaced by the applicant at their own expense. Figure 6 [Appendix A] shows the locations of Program projects completed and/or recently funded in the vicinity of the Proposed Action.

Other salinity control projects recently completed or currently underway in the same basin-wide areas as the Proposed Action, include the following (Figure 6 in Appendix A):

- Bostwick Park Water Conservancy District's Siphon Lateral Salinity Control Project (near the City of Montrose)
- Bostwick Park Water Conservancy District's Waterdog and Shinn Park Laterals Piping Project (southeast of the City of Montrose)
- C Ditch Company's C Ditch/Needle Rock Pipeline Project (approximately 3 miles north of the Town of Crawford in Cottonwood Creek drainage)

- Cattleman's Ditches Pipeline Project Phase I and II (south of the Town of Crawford in Alkali Creek drainage)
- Clipper Irrigation Salinity Control Project 4, Zanni Lateral Pipeline Project, Center Lateral Pipeline Project, and Jerdon, West, Hamilton Pipeline Project (approximately 2.5 miles southeast of the Town of Hotchkiss)
- Fire Mountain Canal Piping Project (approximately 2 miles northwest of the Town of Hotchkiss)
- Forked Tongue/Holman Ditch Company's Salinity Control Project (near the Town of Eckert in the Tongue Creek drainage)
- Fruitland Irrigation Company's Gould Canal A & B Salinity Projects (approximately 4 miles southwest of the Town of Crawford)
- Grandview Canal Piping Projects, Upper and Middle & Lower (just south of the Town of Hotchkiss)
- Lower and Upper Stewart Ditch Pipeline Projects (near the Town of Paonia in the North Fork of the Gunnison River drainage)
- Minnesota Canal Piping Project Phase I and II (near the Town of Paonia in the North Fork of the Gunnison River drainage)
- Minnesota L75 Piping Project (approximately 3 miles south of the Town of Paonia)
- North Delta Irrigation Canal Salinity Control Project Phase I (northeast of the City of Delta)
- Orchard Ranch Ditch Piping Project (near the Town of Eckert)
- Spurlin Mesa Lateral Piping Project (near the Town of Crawford)
- Rogers Mesa Water Distribution Association's Slack and Patterson Laterals Piping Project (approximately 3 miles west of the Town of Hotchkiss)
- Uncompahgre Valley Water Users Association East Side Laterals Piping Projects Phases 1 -1 10(throughout the Uncompahgre Valley between Delta and Montrose)
- Zanni Lateral Piping Project (west and southwest of the Town of Crawford)

1.4.2 CRSP Basin Funds

Reclamation's Western Colorado Area Office recently utilized Colorado River Storage Project (CRSP) Basin Funds to implement the Aspen Canal Piping Project (just northwest of the Town of Crawford) and the GK Lateral Piping Project (approximately 6.5 miles southwest of Lazear in Delta County) in the vicinity of the Action Area (Figure 6 in Appendix A).

1.4.3 RCPP Funds

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) issued a Regional Conservation Partnership Program (RCPP) grant administered by the Colorado River Water Conservation District under the Lower Gunnison Watershed Plan. RCPP irrigation infrastructure improvement projects planned in the vicinity of the Proposed Action include (See Figure 6 in Appendix A):

- Needle Rock Diversion Project (approximately one mile west of the Pilot Rock Ditch Piping Project)
- Grandview Canal Piping Project (just south of the Town of Hotchkiss)

- Crawford Clipper Ditch Upper West Lateral Master Plan Projects (various) (just west of Crawford)

1.5 Scoping

Scoping for this EA was completed by Reclamation, in consultation with the following agencies and organizations, during the planning stages of the Proposed Action to identify potential environmental and human environment issues and concerns associated with the implementation of the Proposed Action and No Action Alternatives:

- U.S. Bureau of Land Management (BLM), Uncompahgre Field Office, Montrose, CO
- Colorado Office of Archaeology and Historic Preservations, Denver CO
- Colorado Parks and Wildlife, Grand Junction, CO
- U.S. Fish and Wildlife Service (USFWS), Ecological Services, Grand Junction, CO
- U.S. Army Corps of Engineers (USACE), Colorado West Regulatory Branch, Grand Junction, CO
- Colorado Department of Transportation (CDOT), Grand Junction, CO
- Southern Ute Tribe, Ute Mountain Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)

In compliance with NEPA, a public comment period was held for a 30-day comment period from October 8, 2022, to November 9, 2022 (see Section 5). The Draft EA was distributed to private landowners and SDEC shareholders adjacent to the Proposed Action, and the organizations and agencies listed in Appendix B. No comments were received.

Resources analyzed in this EA are discussed in Chapter 3. The following resources in Table 1-1 were identified as *not present or not affected*, and are not analyzed further in this EA.

Table 1-1. Resources Eliminated from Further Analysis

Resource	Rational for Elimination Further Analysis
Indian Trust Assets and Native American Religious Concerns	Indian trust assets may include lands, minerals, hunting and fishing rights, traditional gathering grounds, and water rights. No Indian trust assets have been identified within the Proposed Action Area. The American Indian Religious Freedom Act was enacted to protect and preserve Native American traditional rights and cultural practices. These rights include, but are not limited to, access to sacred sites, freedom to worship through ceremonial and traditional rights, and use and possession of objects considered sacred. No Native American sacred sites were identified within the Action Area. Neither the No Action Alternative nor the Proposed Action would have an effect on

Resource	Rational for Elimination Further Analysis
	Indian trust assets or Native American sacred sites. To confirm this finding, Reclamation provided the Ute Mountain Ute Tribe, the Ute Indian Tribe (Uintah and Ouray Reservation), and the Southern Ute Indian Tribe with a description of the Proposed Action and a written request for comments regarding any effects on ITAs or American Indian sacred sites as a result of the Proposed Action. The Southern Ute Indian Tribe confirmed the project would have no adverse effect to properties of cultural and religious significance, and the other two Ute tribes had no comment on the Proposed Action.
Environmental Justice and Socioeconomic Issues	Executive Orders (E.O.) 12898 provides that federal agencies analyze programs to assure that they do not disproportionately adversely affect minority or low-income populations or Indian Tribes. The Action Area does not occur on Indian reservation lands or within disproportionately adversely affected minority or low-income populations. The Proposed Action would not involve population relocations, health hazards, hazardous waste, property takings, or substantial economic impacts. Therefore, neither the No Action Alternative nor the Proposed Action would have an environmental justice effect.
Wild and Scenic Rivers, Land with Wilderness Characteristics, or Wilderness Study Areas	No Wild and Scenic Rivers, land with wilderness characteristics, or Wilderness Study Areas exist in the Action Area. Therefore, neither the No Action Alternative nor the Proposed Action would impact these designated areas.

2 PROPOSED ACTION & ALTERNATIVES

Alternatives evaluated in this EA include the No Action Alternative and the Proposed Action Alternative. The resource analysis contained within this document, along with other pertinent information, will guide Reclamation's decision about whether to fund the Proposed Action for implementation. The Proposed Action is analyzed in comparison to the existing environment and the No Action Alternative to determine potential environmental effects if funding is authorized and the Proposed Action is implemented.

2.1 Alternative Considered but Not Carried Forward

Several alternatives were considered by SDEC during the conceptual design process for the Proposed Action, but these alternatives were not proposed to Reclamation because they were deemed to be technically challenging, economically prohibitive, and/or potentially more destructive to existing habitat than the Proposed Action.

Initially, SDEC planned to pipe Short Ditch Extension entirely along the existing alignment rather than utilizing a siphon that diverges from the existing alignment. This alternative would be feasible from a design perspective and would not require additional ROW easements; however, SDEC determined this alternative would be too expensive for SDEC to fund despite utilizing Colorado River Basin Salinity Control Act funding, and was therefore not presented to Reclamation as a potential alternative for evaluation.

2.2 No Action Alternative

Under the No Action Alternative, Reclamation would not authorize funding to SDEC to pipe the Short Ditch Extension. Irrigation practices and seepage from the unlined open ditch would continue to contribute to salt and selenium loading in the Colorado River Basin. Riparian habitats associated with the unlined open ditch would likely remain in place and continue to provide some benefit to local wildlife. The HRP would not be implemented and improvements to wildlife habitat at the habitat site would not occur. The BLM would not go through their formal acknowledgement process to verify SDEC's historic ditch ROW.

2.3 Proposed Action Alternative

Under the Proposed Action, Reclamation would authorize funding to SDEC to develop the Short Ditch Extension and HRP site. The Proposed Action would pipe the tail-end of the Short Ditch Extension from the end of the existing piped section to the final turnout. The new pipeline would tie into the existing 24-inch PIP line at the north end of the Action Area and follow the existing Short Ditch Extension alignment for approximately 1,164 feet, until the new pipeline would shortcut the existing alignment by cutting through the shallow valley with an approximate 1,664 foot-long inverted siphon. After the siphon, the new pipeline would follow the existing alignment for 2,613 feet. The Proposed Action would preserve and protect the existing pipe, headwall, and trash rack at the end of existing ditch alignment, and would tie back into the existing 190-foot-long segment of 24-inch pipe that discharges into the final turnout settling pond. The Proposed Action would also abandon and fill approximately 5,850 feet of the existing ditch located on both BLM land and private property; approximately 3,300 feet of the existing ditch is located on BLM land and the

remaining 2,550 feet is within private property. An estimated 27.3 acres of vegetation and ground disturbance would occur as part of the construction of the proposed project. Permanent vegetation removal and disturbance would occur within the Action Area as the ditch is piped and backfilled per Reclamation's requirements.

Three staging areas would be located in close proximity to the Short Ditch Extension. One staging area would be located west of 3400 Road, near the southern extent of the Action Area. Two staging areas would be located east of 3400 Road; one small staging area is at the southern-most extent of the Action Area, the second staging area is situated in the northern portion of the Action Area, near the location of the new siphon pipeline. Existing operations and maintenance (O&M) roads are would remain in their existing positions and would be used to access the Action Area (See Figures 1, 2, and 3 in Appendix A).

In accordance with the Colorado River Basin Salinity Control Act, habitat replacement would be implemented to maintain the value of the riparian and wetland habitat which would be lost as a result from the piping component of the Proposed Action Alternative. The HRP Site would occur approximately 3.75 miles northeast of the Proposed Action on private property. The site consists of a natural drainage, approximately 0.4 miles in length, and is surrounded by private land under agricultural uses.

The pipeline component of the Proposed Action was designed and engineered by J-U-B in accordance with Reclamation standards. J-U-B also prepared the HRP in coordination with Reclamation and SDEC. The Proposed Action would take place on both private land and BLM land along the North Fork of the Gunnison River. The HRP would maintain the riparian and wetland habitat values associated with the Short Ditch Extension. The Proposed Action is described in more detail in Figures 1, 2 and 3(see Appendix A) included with this EA. The HRP Site Map is included in Appendix A.

2.3.1 Pipeline Installation and Ditch Decommissioning

Installation of the new pipeline would require excavation of a trench along the pipeline alignment with sufficient width and depth to allow for adequate compaction around the pipe haunch and accommodation of the minimum bury depths. Piping installed within the existing ditch prism would likely require excavation of the ditch bottom and sides. As the trench is excavated (assuming suitable foundation material is encountered), approximately four inches of uncompacted bedding material would be placed using heavy machinery at the bottom of the trench at the grades and elevations specified in the plans.

The pipe would be installed using specialized equipment and placed on the bedding material. Pipeline embedment and backfill material would be placed in the trench and compacted in lifts until the designed grade is attained. The contractor would attempt to utilize onsite material for embedment and backfill prior to importing aggregate. If the need for imported aggregate arises, it would likely be brought in by dump truck, and integrated into the project where required. Any additional borrow materials which may be needed would be obtained either from the borrow/staging areas designated for the Proposed Action, or from an off-site commercial source. The surface above the pipeline would likely be restored to original condition to allow for livestock grazing and existing uses.

The abandoned ditch would be filled by using heavy equipment to "pull" the ditch sides and adjacent operations and maintenance (O&M) roads into the ditch prism, where necessary, on BLM land. The prism would be contoured where natural arroyos and swales intersect the abandoned alignments to limit erosion on BLM lands in an effort to avoid and minimize erosion.

2.3.2 Habitat Replacement Plan

Habitat value lost due to the ditch piping project would be offset at the habitat replacement site in accordance with the HRP. The HRP would be implemented in Delta County, in the vicinity of the town of Hotchkiss. The HRP site encompasses approximately 6.15 acres and is located on private property owned by two different landowners. The landowners participating in the HRP and party to the conservation easement in place for the HRP are Adam Gall, Anastacia Kampe, and the Purisima Ridge Partners, LP. The HRP is approximately 3.75 miles northeast of the Action Area, and consists of a natural drainage that is approximately 0.4 miles long and is surrounded by private land under agricultural uses.

The timing of work at the HRP would correspond with the most effective and appropriate times for seeding, planting, weed control, irrigation, and other site maintenance, with the following exception: removal of non-native trees or shrubs would be avoided during the migratory bird nesting season (including the nesting season for the yellow-billed cuckoo).

The HRP would be implemented in accordance with the environmental commitments listed in Section 4. BMPs would be used to control erosion, minimize harm to wildlife, prevent spills of petroleum products, and minimize the spread of weeds during site plantings and maintenance (see Section 4). SDEC would be responsible for maintenance of the habitat site for 50 years after its establishment.

2.4 Construction

2.4.1 Equipment

Heavy equipment (likely excavators or trackhoes) would be used to excavate the pipeline trench, place uncompacted bedding material in the trench, and fill the abandoned ditch. Specialized equipment would be used to install the pipeline on top of the bedding material. Dump trucks would be used to carry material to the Action Area.

2.4.2 Access

Construction and access footprints would be limited to only those necessary to safely implement the Proposed Action. The Action Area can be accessed from 3400 Road, or along various O&M roads that follow the alignment of Short Ditch Extension. Existing O&M roads would remain in their existing positions and would be used to access the Action Area.

The HRP site can be accessed via Hanson Mesa Road, from Highway 133. Turn right onto Mystic Mesa Road and follow to the terminus. The HRP site is accessible on foot approximately 0.5 miles east of the road's end, on the opposite side of a cultivated field.

2.4.3 Staging and Borrow Areas

Three staging areas would be located in close proximity to the Short Ditch Extension. One staging area would be located west of 3400 Road, near the southern extent of the Proposed Action. Two

staging areas would be located east of 3400 Road; one small staging area would be at the southernmost extent of the Proposed Action, the second staging area would be situated in the northern portion of the Action Area, near the location of the new siphon pipeline.

The material needed for construction would be generated from within the construction footprint; however, if additional borrow materials are needed, they would be obtained either from the borrow/staging areas designated for the Proposed Action, or from an off-site commercial source.

All surface disturbances caused by construction of the Proposed Action would be reclaimed. Vegetation slash would be hauled to one of the several staging areas and chipped or removed to a proper disposal or composting facility. All disturbed areas would be smoothed with tracked equipment without back dragging the blade and revegetated with a drought-tolerant seed mix approved by Reclamation and BLM appropriate for the surrounding habitat. Reseeding success and noxious weed presence would be monitored subject to agreements between SDEC, BLM and individual landowners, and regulated by Delta County in accordance with Delta County standards (Delta County 2020).

2.4.4 Construction Timeframe

Construction for the Proposed Action is scheduled to begin in the fall and would be completed by the following spring.

The timing of work at the HRP would correspond with the most effective and appropriate times for seeding, planting, weed control, irrigation, and other site maintenance, with the following exception: removal of non-native trees or shrubs would be avoided during the migratory bird nesting season (including the nesting season for the yellow-billed cuckoo).

2.5 Permits and Authorizations

If the Proposed Action Alternative is approved, the following permits, plans, and authorizations would be required prior to project implementation:

- BLM Historic Ditch Acknowledgement
- ROW approvals for private landowners outside the prescriptive easement of the ditch with land involved in the Proposed Action, obtained by SDEC. A ROW easement has been obtained for the new siphon pipeline.
- Stormwater Management Plan to be submitted to Colorado Department of Public Health and Environment (CDPHE) by the construction contractor prior to ground disturbance.
- CWA Section 401 Water Quality Certification in compliance 40 CFR 124.53-124.55
- CWA Section 402 Storm Water Discharge Permit compliant with the National Pollutant Discharge Elimination System (NPDES), to be obtained from CDPHE by the construction contractor prior to ground disturbance (regardless of whether dewatering would take place during construction).
- Spill Prevention, Control, and Countermeasures (SPCC) plan to be prepared in advance of construction by the contractor for areas where spilled contaminants could flow into water bodies.

- Stormwater Pollution Prevention Plan to be prepared in advance of construction by the contractor for the extent of the Action Area, including staging areas.
- Clean Water Act (CWA) Section 404 Regional General Permit 5 for Ditch Related Activities in the State of Colorado: 30-Day Advance of Construction Submittal Package (to include "(1) the respective agency's documentation for compliance with the Endangered Species Act and national Historic Preservation Act and/or the lead Federal Agency NEPA document containing the same, (2) a project description, (3) project plans, and (4) a location map.")
- Utility clearances to be obtained by the contractor prior to construction activities from any local utilities in the area.

Compliance with the following laws and E.O. are required prior to and during project implementation.

2.5.1 Natural Resource Protection Laws

- Clean Air Act of 1963 (42 U.S.C. § 7401); CAA
- Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1544, 87 Stat. 884); ESA
- Clean Water Act of 1972 as amended (33 U.S.C. 1251 et seq.); CWA
- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712); MBTA
- Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668C); BGEPA

2.5.2 Cultural Resource Laws

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

2.5.3 Paleontological Resource Laws

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

3 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This chapter discusses resources that would be affected by the Proposed Action Alternative and the No Action Alternative. For each resource, the affected area and/or interests are identified and the existing conditions and impacts are described under the No Action and Proposed Action Alternatives. This section is concluded with a summary of impacts and a list of environmental commitments.

3.2 Affected Environment and Environmental Consequences

3.2.1 Water Rights & Use

The Short Ditch Extension serves the lower extents of the North Fork Valley, specifically the areas to the south and east of the North Fork of the Gunnison River. The North Fork of the Gunnison River begins at the confluence of Muddy Creek and Anthracite Creek, which originate high in the West Elk Mountains. No major reservoirs supply Short Ditch. The Paonia Reservoir is located in the North Fork system; however, water from the Paonia Reservoir is diverted before it reaches the SDEC service area. Currently, there are regional efforts underway in the Lower Gunnison and Colorado River watersheds to reduce water lost to seepage and evaporation from open, unlined irrigation canals. The effort to reduce water loss is also an effort to reduce salt and selenium loading to the streams and rivers within the Colorado River Basin. These efforts are primarily focused on piping agricultural irrigation ditches and canals, such as the Short Ditch Extension.

A total of 43 shareholders use the Short Ditch system, and 31 shareholders use the Short Ditch Extension. The Short Ditch system supplies water to 346.5 acres of irrigated farmland, and the Proposed Action serves 184.5 acres of irrigated farmland. Just over half of the farmland served by the Proposed Action is irrigated using center pivots, while the remaining land uses gated pipe. The SDEC has senior water rights to 43.5 cubic feet per second (cfs); senior water rights dating back to 1889 (appropriation date) ensure the Short Ditch Extension has sufficient water supply for its users. The average annual flow in the Short Ditch Extension is 5.3 cfs, amounting to 1,870 acre-feet per year.

Water supply in the SDEC system is generally abundant in the beginning of the irrigation season, and steadily reduces as the irrigation season progresses. The inconsistent water supply during the irrigation season can be contributed to seepage and a lack of an associated storage reservoir. Irrigation in the Action Area typically begins in May and continues to early September. The primary crops grown in the Action Area are alfalfa, hay, pasture grass, and small grains.

There may be domestic wells in the area permitted by the State of Colorado to draw on natural supplies of groundwater. Pursuant to Colorado Revised Statute § 37-86-103, "…a ditch right-of-way includes the right to construct, operate, clean, maintain, repair, and replace the ditch and appurtenant structures, to improve the efficiency of the ditch, including by lining or piping the ditch…"

The HRP site encompasses 6.15 acres and is located on private property owned by the Gall Family, in the northeast portion of Hotchkiss and approximately 3.75 miles northeast of the Action Area. The primary feature of the site is an unnamed drainage that originates on private land below the Fire Mountain Canal, and terminates into Jay Creek, a perennial stream. The unnamed drainage receives overflow from the Fire Mountain Canal. The landowners hold the associated water rights for the Fire Mountain Canal and utilize the overflow from the canal.

No Action Alternative: The No Action Alternative would not impact water rights and uses in the Action Area. The SDEC system would continue to function as it has in the past. At the HRP site, spill water and water shares from Fire Mountain Canal would continue to flow down the unnamed drainage and no habitat replacement project would be implemented. No impact to water rights would occur as a result of no action at the HRP site.

Proposed Action: Under the Proposed Action, SDEC would improve the system's efficiency by conserving water that was previously lost to seepage and by eliminating ditch breaches that pose water security and delivery issues. The Proposed Action would protect existing water rights and increase late-season irrigation water supply in the Action Area. At the HRP Site, the Proposed Action would utilize overflow water from the Fire Mountain Canal that is currently being delivered to the site to help improve the available wildlife habitat and the quality of water available for use in the surrounding area. The landowners also hold shares of Fire Mountain Canal water, which would be directed to the HRP, if needed. There would be no new water rights requested and no change to existing water rights.

The water savings resulting from the Proposed Action would contribute to the regional efforts underway to reduce water loss to seepage and evaporation in the Lower Gunnison and Colorado River watersheds. No adverse significant cumulative impacts would result from the Proposed Action when considered in combination with other known actions and trends in the vicinity of the Action Area.

Ditch companies have the right to improve the efficiency of their ditches pursuant to CRS § 37-86-103. Consequently, domestic water well owners cannot rely on canal seepage water to recharge domestic water wells. The proposed project would not alter natural sources of groundwater. Therefore, there would be no significant adverse effect on permits which authorize wells to draw on natural sources of groundwater.

There would be no significant adverse impacts to water rights and use as a result of the Proposed Action.

3.2.2 Water Quality

The Proposed Action is located within the Gunnison River Basin, which is the major tributary of the Colorado River in west-central Colorado. Irrigation practices in the region and in the Action Area contribute to high salinity levels downstream and create an adverse effect on the water quality of the Colorado River Basin (see Section 1.1). Fish habitat quality in the Gunnison and Colorado Rivers is also degraded by elevated selenium levels, which occurs in the Action Area's soils in soluble form, and leaches into the river through deep percolation. Selenium is necessary for cellular function in a wide range of organisms; however, it can be toxic in slightly elevated concentrations.

There is a regional effort to reduce salinity levels in the Gunnison and Colorado River watershed, resulting in improved water quality at a Basinwide scale (see Section 1.4). There are also ongoing regional efforts to reduce selenium loading in the Lower Gunnison and Colorado River basins (SMPW 2011, Reclamation 2020).

The Proposed Action is located in the North Fork Gunnison hydrologic unit (hydrologic unit code [HUC] 14020004). The North Fork Gunnison hydrologic unit encompasses approximately 620,151 acres. A large portion of the North Fork Gunnison hydrologic unit is managed for conservation and recreation by the federal government, specifically by the BLM and USFS. The remaining lands are private, and consist of residential, commercial, and agricultural uses.

The HRP site consists of private land, and contains a drainage associated with the Fire Mountain Canal. Spill waters from the canal are allowed to flow through the drainage, which contributes to sediment and salt loading downstream in Jay Creek.

No Action Alternative: Under the No Action Alternative, water seepage would persist, and the high salt levels contributed to the Colorado River Basin from this system would continue alongside the current levels of selenium loading. The HRP would not be implemented under the No Action Alternative and the Fire Mountain Canal irrigation spill waters would not be put toward wildlife habitat improvement. Irrigation runoff would continue at its current rate, thereby continuing to contribute to sediment and salt loading to downstream waterbodies.

Proposed Action: Maintenance of irrigation waters and improvement of water quality throughout the watershed is the primary focus of the Proposed Action. In the long term, the Proposed Action would eliminate seepage from the unlined ditch, reducing the overall amount of salt loading to the Colorado River Basin by approximately 419 tons per year. The Proposed Action would also reduce selenium loading into the Gunnison River Basin by an unquantified amount. Improved water quality would benefit downstream aquatic species by reducing salt and selenium loading in the North Fork of the Gunnison River. The beneficial effects of improved water quality resulting from the Proposed Action would contribute to the regional efforts underway to reduce salinity and selenium in the Gunnison and Colorado River watersheds.

The Proposed Action would affect waters under the jurisdiction of CWA Section 404 (the ditches themselves) and would disturb seepage-induced wetland and riparian vegetation associated with the ditches. As a "ditch related activity in the State of Colorado" the Proposed Action would be authorized under RGP-5 by submitting documentation required by RGP-5 to the USACE at least 30 days in advance of construction. The required documentation for the new Proposed Action, as a salinity control project per a binding agreement with Reclamation is as follows: "(1) the respective agency's documentation for compliance with the Endangered Species Act and National Historic Preservation Act and/or the lead Federal Agency NEPA document containing the same, (2) a project description, (3) project plans, and (4) a location map." RGP 5 includes terms and conditions which must be complied with by project proponents to ensure their proposed projects will have minimal individual or cumulative adverse effects on the aquatic environment. The USACE has the authority to determine if an activity complies with the terms and conditions of an RGP. By authorizing use of RGP 5 for the proposed action, the USACE has determined that the proposed action would have minimal individual or cumulative adverse effects on the aquatic environment. Therefore, there would be no significant impact to waters under the jurisdiction of CWA Section 404.

The Proposed Action would include invasive species removal and other improvements at the HRP site, which would utilize Fire Mountain Canal irrigation spill water to sustain vegetation included in the habitat improvement. These improvements would result in a beneficial impact on water quality in the area by slowing irrigation runoff and thereby reducing sediment and salt loading to downstream waterbodies.

There would be no significant adverse impacts to water quality as a result of the Proposed Action.

3.2.3 Air Quality

The National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (EPA) under the CAA specify limits for criteria air pollutants. If the levels of a criteria pollutant in an area are higher than the NAAQS, the airshed is designated as a nonattainment area. Areas that meet the NAAQS for criteria pollutants are designated as attainment areas. Delta County is currently in attainment for all criteria pollutants (EPA 2022). Intermittent minor impacts to air quality currently occur from routine ditch maintenance and include dust/particulate from occasional light vehicle travel across unpaved roads along the ditch alignments.

No Action Alternative: Under the No Action Alternative, there would be no effect and no change to air quality in the Action Area. The unlined ditches would continue to operate in their current positions and configurations, and dust and exhaust would occasionally be generated by vehicles and equipment during routine operation and maintenance activities.

Proposed Action: No long-term significant impacts to air quality would result from implementation of the Proposed Action. Dust from construction activities would have a minor short-term effect on the air quality in the Action Area, and these impacts would cease upon completion of the Proposed Action. BMPs would be implemented to minimize dust and would include measures such as wetting the construction site surfaces and access roads, minimizing vehicle travel over unpaved surfaces, limiting activity during periods of extreme winds and stabilizing stockpiles, as appropriate. Following construction, impacts to air quality would be comparable in magnitude to those currently occurring for the existing ditch alignments. Construction of the HRP site would have similar minor, short-term impacts to air quality as those described above and would cease upon completion of the HRP. There are no known projects in the vicinity of the Proposed Action that would occur at the same time as construction; therefore, there would be no significant cumulative effects on air quality associated with the Proposed Action.

There would be no significant adverse impacts to air quality as a result of the Proposed Action.

3.2.4 Access, Transportation, & Public Safety

The major transportation routes in the vicinity of the Action Area are Highway 92 and Highway 133. Short Ditch Extension can be accessed via 3400 Road and private maintenance roads, and the HRP site can be accessed via Mystic Mesa Road. Access points to the portion of Short Ditch Extension on BLM land would be off 3400 Road and located along the existing ditch ROW.

Private roads and county-maintained roads generally provide access and mobility for local residents traveling in and out of the Project Area. There are safety risks associated with sources of open, moving water. The Delta County Sheriff and the Delta Fire Protection District 4 cover the Project Area for emergency response.

No Action Alternative: Under the No Action Alternative, there would be no impact on access, transportation, and public safety.

Proposed Action: Under the Proposed Action, the Action Area would be accessed using existing public and private roads that directly connect to the Action Area. No new access roads would be constructed for the Proposed Action. Any construction, access, or use permits would be obtained which may be required by the Delta County Planning Department, County Engineering and County

Road & Bridge District. There are no known bridges with weight restrictions that would be used by construction vehicles. Implementation of the Proposed Action would result in brief, insignificant traffic delays from construction vehicles entering and existing the Action Area. As there would be no long-term impacts, no significant cumulative impacts would occur as a result of implementation of the Proposed Action.

Under the Proposed Action, the safety risks associated with sources of open, moving water would no longer occur within the Project Area. The Dela County Sheriff and the Delta Fire Protection District 4 would continue to cover the Project Area for emergency response, and would not be hindered in their response. Active construction areas would be adequately marked and barricaded to prevent public access. Trenches left open overnight would be limited to the extent practicable. In the case that a trench is left open overnight, it would be covered to adequately prevent entrapment of people, livestock, or wildlife. Therefore, there would be no significant effect on public safety.

No significant impacts to access, transportation, and public safety would occur as a result of the Proposed Action.

3.2.5 Recreational & Visual Resources

Lands within the Action Area consist of privately owned land that is closed for public recreation, and public lands administered by the BLM. The BLM lands located within the Action Area are managed under the Uncompahgre Resource Management Plan (RMP), which was recently updated in 2019 (BLM 2020). The Proposed Action crosses BLM lands which are used for informal public recreation activities. Evidence of all-terrain vehicle (ATV) use along the Short Ditch Extension and on surrounding BLM lands was observed during the field visit.

Current BLM visual resource management (VRM) classes in the Uncompahgre RMP area include Class I (44,220 acres), Class II (21,930 acres), Class III (280,520 acres), Class IV (9,260 acres), and areas with no data (319,770 acres) (BLM 2020). According to the RMP, the Proposed Action is located within a VRM Class III area. Actions within a Class III area should partially retain the existing characteristics of the landscape, but the Class III designation also allows for a moderate level of change that may attract attention but should not dominate the view of a casual observer. The BLM lands involved in the Proposed Action are not visible to any nearby highways and are partially visible to nearby residences. No formal recreation areas exist within the Proposed Action area.

No Action Alternative: The No Action Alternative would have no effect on recreational and visual resources in the Action Area, including BLM lands. Recreation would continue as it has in the past, and visual resources would remain unchanged.

Proposed Action: Under the Proposed Action, 12.3 acres of BLM land would be affected by construction activities. The Proposed Action would temporarily disrupt the recreational experience in the Action Area due to construction activities (e.g. noise, equipment, access delays, dust, etc.); however, these disruptions would be minor as they would not prohibit recreational activities in the Action Area, and they would end following the completion of construction.

Under the Proposed Action, visual resources would be both temporarily and permanently disturbed. Temporary disturbance to visual resources would occur due to ground disturbance and removal of

vegetation during construction activities, as well as the presence of staging and stockpile areas. After construction, affected areas would be graded to match the surrounding topography and revegetated with a BLM-approved seed mix. Once vegetation is reestablished, the affected areas would blend into the surrounding landscape.

The Proposed Action would permanently impact visual resources in the Action Area by piping the ditch and establishing the HRP site. Piping Short Ditch Extension would alter visual resources by removing segments of open water and vegetation from the landscape. Eliminating seepage and open water would remove a source of water for vegetation that has established along the alignment, which would impact vegetation along the alignment. The impacts to visual resources would be insignificant as they would allow for the partial retention of the existing characteristics of the landscape, and would not dominate the view of a casual observer.

The HRP would alter the vegetation assemblage at the site by removing debris and non-native species to allow for native plantings to establish, ultimately improving riparian habitat and enhancing the visual appeal of the Action Area. This would have a permanent beneficial impact to visual resources in the Action Area.

The Proposed Action would not result in cumulative impacts to recreational lands, as any disruptions to the recreational experience would cease after project completion, and access to recreational lands would be unchanged. The Proposed Action would not result in cumulative impacts to visual resources, as the BLM actively manages visual resources in the area to ensure other activities allow for the partial retention of the existing characteristics of the landscape, and would not dominate the view of a casual observer.

No significant impacts to recreational and visual resources would occur as a result of the Proposed Action.

3.2.6 BLM Grazing Allotments

Approximately 92 percent (619,500 acres) of lands managed under the Uncompahgre RMP are available for livestock grazing. The Action Area is partially located in the South of Town grazing allotment, which is approximately 8,139 acres in size and managed by BLM (BLM 2020). The natural community within the Action Area is characterized by riparian species along the ditch alignment, and a variety of invasive species. Dominant vegetation within the Action Area is described in Table 3-1 below. Overall, vegetative health within the Action Area is reduced due to livestock grazing pressure during the growing season.

No Action Alternative: The No Action Alternative would have no impact on grazing allotments or livestock grazing on BLM lands within the Action Area. Livestock grazing would continue as it has in the past.

Proposed Action: Under the Proposed Action, approximately 12.3 acres of BLM land would be temporarily disturbed during construction. Affected areas would be graded to match the surrounding topography and revegetated. Once vegetation is reestablished, the affected areas would be returned to pre-construction conditions. Livestock grazing would experience a temporary, negligible impact during construction; however, the Action Area represents a small percent (0.001%) of the overall grazing pastureland available in the South of Town grazing allotment. Abandoning and

filling Short Ditch Extension on BLM land would permanently remove a source of water that may be inadvertently utilized by livestock; however, there are other sources of stock water available throughout the South of Town grazing allotment. Open trenches throughout the Action Area would be covered when possible to reduce the potential for entrainment of wildlife or livestock, and public safety concerns. Ultimately, no BLM lands capable of livestock grazing would be eliminated after completion of the Proposed Action. The Proposed Action would result in a negligible increase of lands capable of providing livestock grazing by abandoning, filling, and vegetating a portion of Short Ditch Extension.

The HRP site is not located on a BLM grazing allotment, and the area is not utilized for grazing. Implementation of the HRP would have no impact on livestock grazing.

No BLM lands with active grazing would be impacted by the Proposed Action; therefore, no cumulative impacts to BLM grazing allotments would occur as a result of the Proposed Action.

No significant impacts to BLM grazing allotments would occur as a result of the Proposed Action.

3.2.7 Vegetative Resources & Weeds

Figure 5 (Appendix A) shows the general land cover types in the Action Area. The primary land cover types in the Action Area include bare ground, open water, and grasslands. Due to the sparse herb layer and bare ground, the area is subject to flash flood events and erosion from wind and water. A narrow, vegetated riparian strip (approximately 6 feet to 90 feet wide) is present along the Short Ditch Extension alignment. The natural community within the Action Area is characterized by riparian species and a variety of invasive species, as well as upland, sagebrush steppe species. Staging areas are generally situated in previously disturbed areas that contain a variety of ruderal grass species, as well as greasewood (*Sarcobatus vermiculautus*), rubber rabbitbrush (*Ericameria nauseosa*), and Russian knapweed (*Rhaponticum repens*), and bare ground. The Short Ditch Extension is actively maintained by weed spraying, but noxious weeds such as reed canarygrass (*Phalaris arundinacea*), Russian knapweed, Russian olive (*Elaeagnus angustifolia*), orchardgrass (*Dactylis glomerata*), and tamarisk (*Tamarix* spp.) are still prevalent.

The plant community at the HRP site is dominated by riparian vegetation. Numerous Siberian elm (*Ulmus pumila*) saplings, all of the same age class, provide a sparse, non-functioning midstory layer at the top of the drainage. The non-functioning midstory exists throughout the drainage, approximately 40 percent of which is comprised of Russian Olive and salt cedar (*Tamarix sp.*) The understory consists of showy milkweed (*Asclepias speciose*), hoary tansyaster (*Machaeranthera canescens*), curly dock (*Rumex crispus*), alfalfa, reed canary grass, and alkali sacaton. The herb layer in several locations consists of cattails (*Typha sp.*), which grow densely within the two ponded areas at the top and in the center of the drainage, and elsewhere a mixture of reed canarygrass and sparse grasses and forbs. Canada thistle (*Cirsium arvense*) and Russian knapweed are common throughout the herb layer of the site. At the middle of the drainage there are declining overstory Fremont cottonwoods with little to no midstory. The drainage has steep slopes that are incised in several locations. Fragrant sumac (*Rhus aromatica*), wood's rose (*Rosa woodsia*), rabbitbrush, big sagebrush (*Aremisia tridentata*), Utah juniper (*Juniperus osteosperma*), hairspine prickleypair (*Opuntia polyacantha*) and fourwing saltbush (*Atriplex canescens*) grow commonly on the dry slopes of the drainage, while field horsetail (*Equisetum*

arvense), coyote willow, and Russian olive flank the moist low-lying drainage area, which runs down the center of the site.

Table 3-1. Dominant Vegetation in the Action Area

Common Name	Scientific Name	Short Ditch Extension	Ditch HRP Site	Staging Areas
Alfalfa	*Medicago satvia*	X		
Alkali bulrush	*Bolboschoenus maritimus*	X	X	
Alkali sacaton	*Sporobolus airoides*		X	
Aster	*Aster* spp.	X		
Burdock	*Arctium* spp.	X		
Canada thistle	*Cirsium arvense*		X	
Cattail	*Typha latifolia*	X	X	
Common milkweed	*Asclepias syriaca*	X		
Common sunflower	*Helianthus annuus*	X		
Coyote willow	*Salix exigua*	X	X	
Curly dock	*Rumex crispus*		X	
Field horsetail	*Equisetum arvense*		X	
Fragrant sumac	*Rhus aromatica*		X	
Fremont cottonwood	*Populus fremontii*	X	X	
Fourwing saltbush	*Atriplex canescense*		X	
Goldenrod	*Solidago* spp.	X		
Greasewood	*Sarcobatus vermiculautus*	X		X
Hairspine Pricklypear	*Opuntia polyacantha*		X	
Hoary tansyaster	*Machaeranthera canescens*		X	
Horsetail rush	*Equisetm hyemale*	X		
Lewis's flax	*Linum lewisii*	X		
Narrowleaf cottonwood	*Populus angustifolia*	X		
Orchardgrass	*Dactylis glomerata*	X		
Reed canarygrass	*Phalaris arundinacea*	X	X	
Rubber rabbitbrush	*Ericameria nauseosa*	X	X	X
Russian knapweed	*Rhaponticum repens*	X	X	X
Russian olive	*Elaeagnus angustifolia*	X	X	
Scouring rush	*Equisetum hyemale*	X		
Siberian elm	*Ulmus pumila*		X	
Skunkbush sumac	*Rhus trilobata*	X		
Tamarisk	*Tamarix* spp.	X	X	
White sweet clover	*Melilotus albus*	X		
Winterfat	*Krascheninnikovia lanata*		X	
Wood's rose	*Rosa woodsia*		X	

There is a regional effort to reduce salinity in the lower Gunnison and Colorado River watersheds, resulting in an ongoing area-wide conversion of artificially-created riparian and wetland habitat to

uplands. Consistent with the Colorado River Basin Salinity Control Act, habitat replacement projects compensate for the loss of riparian and wetland habitat values.

No Action Alternative: There would be no effect on existing vegetation or habitat from the No Action Alternative. The Action Area, and specifically seepage from the canal, would continue to support a narrow strip of riparian vegetation and the associated wildlife guilds along the existing ditch alignment. There would be no improvements to habitat at the HRP site.

Proposed Action: Approximately 26 acres of vegetation disturbance would occur due to the Proposed Action. The disturbance would have a temporary effect on upland vegetation in the Action Area, as areas disturbed by the Proposed Action would be restored following construction by contouring and reseeding with appropriate seed mixes developed in coordination with the wishes of underlying landowners. Reseeding success would be monitored subject to agreements between SDEC, individual landowners, and BLM. Revegetation of soils in this area is difficult with a low probability of success. However, much of the alignment currently consists of bare ground or small infestations of knapweed and thistle. Although areas of ground disturbance would be reseeded, much of the alignment may remain unvegetated similar to the surrounding landscape. Therefore, construction activities would have a temporary, minor impact on upland vegetation in the Action Area. Because there would be no long-term impacts to upland vegetation associated with the Proposed Action, there would be no impacts to contribute to a significant cumulative effect on upland vegetation.

The Proposed Action would result in the permanent loss of riparian and wetland vegetation associated with the unlined ditch. However, as stipulated by the Salinity Control Act, a habitat replacement project is included as a component of the Proposed Action to ensure there would be no net loss of fish and wildlife values (in this case, riparian and wetland vegetation) associated with implementation of the Proposed Action. Because there would be no loss of riparian and wetland values associated with implementation of the Proposed Action, the effects of the loss of riparian and wetland vegetation would be insignificant.

The region has experienced the permanent loss of riparian and wetland vegetation associated with piping and lining earthen ditches over the past fifteen to twenty years. Because there would be no loss of riparian and wetland habitat values associated with implementation of the Proposed Action, the Proposed Action would not contribute to cumulative effects on riparian and wetland habitat values within the region.

A habitat evaluation was performed within the Action Area to quantify the fish and wildlife values that would be lost due to implementation of the Proposed Action (J-U-B 2022a). The evaluation followed the methodology outlined in Reclamation's April 2018 *Basinwide Salinity Control Program: Procedures for Habitat Replacement*. The total habitat value that would be lost due to the Proposed Action is 13.8 habitat credits. To replace the loss habitat value, SDEC would implement the HRP described in Section 2.3.2. The HRP would generate 14.76 habitat credits.

Construction of the Proposed Action, including the HRP site, would follow BMPs to minimize construction footprint and temporary impacts, to protect water quality, and to minimize dust and soil erosion. Reseeding success and noxious weed presence would be monitored subject to agreements between SDEC and BLM, individual landowners, and regulated by Delta County in accordance with Delta County standards (Delta County 2020).

The Proposed Action would remove segments of open water, a key element of invasive seed transport. Certain segments of the ditch would no longer require regular maintenance, lowering the potential for the continued spread and establishment of weeds. Downgradient herbaceous and woody noxious weeds which rely on ditch seepage would no longer be supported. BMPs would be implemented to prevent the spread of noxious weeds during construction (see Chapter 4 Environmental Commitments). After construction and reclamation of the Project Area, noxious weed control would continue to be implemented by SDEC according to Delta County standards (Delta County 2020). Despite continued weed control efforts, noxious weeds would continue to be present throughout the Project Area. Because noxious weeds are currently present in the vicinity of the Project Area, their ongoing presence within the Project Area would not constitute a significant impact.

No significant impacts to vegetative resources and weeds would occur as a result of the Proposed Action.

3.2.8 Wildlife Resources

The Short Ditch Extension and the North Fork of the Gunnison River provide riparian and wetland habitat in an overall area that is predominantly bare ground and grassland. The ditch also offers an intermittent source of water to wildlife during irrigation season, and contains mule deer critical winter range and elk severe winter range. Community members have described infrequent bear sightings and frequent deer sightings in the Action Area. Evidence of wildlife use and habitat within the Action Area was observed during the field visit. Coyote scat, deer pellets, and a red-tailed hawk, as well as several species of migratory songbirds were observed along the ditch alignment. No fish were observed in Short Ditch Extension during the field visit.

Due to the earthen lining of the Short Ditch Extension, the ditch has a muddy substrate and runs dry for a portion of the year. The ditch is perched on a hillside and does not have floodplain connectivity to other waterbodies and does not empty into a natural drainage. Given the characteristics of the ditch, Short Ditch Extension does not contain fish habitat.

There is a regional effort to reduce salinity in the lower Gunnison and Colorado River watersheds by piping irrigation ditches, resulting in an ongoing area-wide conversion of artificially-created riparian and wetland habitat to uplands. Wildlife distribution across the landscape, especially wildlife that depend on riparian and wetland habitat, is changing in response to these habitat changes. Consistent with the Colorado River Basin Salinity Control Act, projects to replace the value of the riparian and wetland habitat losses are completed in conjunction with the piping projects

No Action Alternative: Under the No Action Alternative, wildlife currently using the Action Area would not be displaced or disturbed. Seepage and salinity and selenium loading would continue at current rates, which would continue to affect water quantity and quality within the drainage, impacting fish and wildlife within and surrounding the Action Area.

Proposed Action: As a result of the Proposed Action, salinity loading to the Gunnison Basin and larger Colorado River Basin would be reduced by 419 tons per year. Although the Action Area does not contain fish habitat, the Proposed Action would improve fish habitat within the larger Colorado River Basin. The Proposed Action would also temporarily impact upland wildlife habitat, which would result in minor temporary impacts to wildlife species within the Action Area.

Deer and elk populations within the vicinity of the Proposed Action would likely move to other suitable areas to avoid disturbances from temporary construction activities. Habitat for these species is relatively common throughout the area, and population-level impacts would not occur. Overall, impacts would be minor given the small area of impact from the Proposed Project in relation to the amount of deer and elk habitat available in the vicinity. For the protection of wildlife species in the immediate area, pipeline trenches left open overnight would be kept to a minimum and would be covered to reduce the potential for entrapment or harm to large game animals and other smaller mammals. Covers would be secured in place and strong enough to prevent wildlife and livestock from falling through. Wildlife escape ramps would be utilized in areas where trench covers would not be feasible.

Direct impacts to small animals, including burrowing amphibians, reptiles, and small mammals, would include mortality and displacement during construction activities along the existing canal alignments, however population level impacts would not occur due to the prevalence of these species and their habitat within the vicinity of the Action Area. However, an active white-tailed prairie dog town is present just inside the Action Area and adjacent to the Action Area. Adverse temporary impacts from construction associated with the Proposed Action cannot be discounted. The temporary adverse effects would not rise to the level of significant because they would not result in population-level impacts, and would not jeopardize the persistence of the species, nor cause a change in its conservation status. Although the temporary effects would not be significant, conservation measures would be in place to avoid and further minimize impacts to the colonies present. BMPs and Environmental Commitments are detailed in Chapter 4. Post construction of the Proposed Action, human disturbance from canal and vegetation maintenance would cease, which would have a long-term beneficial effect on the dog towns.

The Proposed Action would contribute to a regional trend resulting in the relocation of artificially-created riparian and wetland values from earthen irrigation conveyances to habitat replacement sites. These activities are resulting in the redistribution of riparian and wetland-dependent wildlife across the landscape. Given the minor and temporary nature of the effects listed above, and given that the riparian and wetland values are being relocated rather than lost, the Proposed Action would not generate effects which would contribute to a significant cumulative effect on wildlife resources.

No significant impacts to wildlife resources would occur as a result of the Proposed Action.

3.2.9 Special Status Species

3.2.9.1 Migratory Birds and Raptors

Migratory birds protected under the Migratory Bird Treaty Act (MBTA) use the Action Area for nesting and/or migratory habitat. According to the USFWS Information for Planning and Consultation (IPaC) database, migratory birds of conservation concern protected under the MBTA that could potentially find habitat and be present within the Action Area and immediate vicinity include: Cassin's finch (*Carpodacus cassinii*), evening grosbeak (*Coccothrauste vespertinus*), and Lewis's woodpecker (*Melanerpes lewis*).

In addition to the MBTA, bald eagles and golden eagles are protected by the Bald and Golden Eagle Protection Act of 1940 (BGEPA). The IPaC report also identified bald eagle (*Haliaeetus leucocephalus*) as potentially occurring within the Action Area.

Field investigations found no active nests for raptors or migratory species along the riparian habitat associated with the Short Ditch Extension or at the HRP site, however there are some large trees and shrubs located within the riparian habitat at both locations that could provide suitable breeding and nesting habitat for birds, especially songbirds. Riparian habitat adjacent to the ditch and within the HRP site is not considered suitable foraging habitat for bald eagles because there are no adjacent open bodies of water.

The Action Area does not contain suitable habitat for the federally endangered clay-loving wild buckwheat or the federally threatened Colorado hookless cactus, which are further discussed in Section 3.2.10, and no BLM sensitive plant species are present within the Action Area.

No Action Alternative: Under the No Action Alternative, Short Ditch Extension would not be piped, and portions of the ditch would not be abandoned and filled. Vegetation, including the narrow strip of riparian habitat along the ditch alignment would not be disturbed and would continue to provide habitat for birds and other wildlife in the Action Area.

Proposed Action: Given that construction activities would occur outside of the irrigation season, the majority of construction activities would occur outside of bird migration, breeding, and nesting seasons. Wintering and migrating songbirds and raptors would not experience short-or long-term effects due to construction disturbance or displacement because adult birds have the flexibility to move away from disturbances to other areas. The Proposed Action would require the removal of large trees that may currently provide suitable habitat for migratory birds; as such, the Action Area would be cleared for any active migratory bird or eagle nests no sooner than seven days prior to the removal of large vegetation and the commencement of construction. If an active nest is identified within the Action Area, no work would occur within 50 feet of the nest until the nest fledges. Because construction would occur outside of bird migration, breeding, and nesting seasons or would be halted within 50 feet of an active nest, and because no raptor nests were observed within the Action Area, there would be no significant impacts to migratory birds and raptors.

Many of the more established trees along the canal alignment would slowly decline but would remain standing, providing potential snag habitat for avian species. The HRP would replace the value of the large trees along the canal alignment by improving the structure and function of wildlife habitat in the vicinity of the Proposed Action. There would be no net loss of habitat value for migratory birds and raptors, and therefore there would be no impacts which would incrementally add to the cumulative impacts to migratory birds and raptors resulting from other actions.

No significant impacts to migratory birds and raptors would occur as a result of the Proposed Action.

3.2.9.2 Threatened & Endangered Species & Their Critical Habitats

The Endangered Species Act of 1973 (ESA) protects federally-listed endangered, threatened, and candidate plant and animal species and their critical habitats. A Threatened & Endangered Species Inventory (T&E) was completed for the Proposed Action and will be used by Reclamation for ESA

consultation with USFWS. The results of this consultation will be included in the Final EA document.

As part of the inventory completed for the Proposed Action, a species list from the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) system was generated for the Proposed Action. Table 3-2 describes the federally-listed species that have the potential to occur within the Action Area according to the IPaC and summarizes habitat requirements and the status of each species in the Action Area.

Table 3-2. Federally-listed Species with the Potential to Occur within the Action Area

Common Name	Scientific Name	Listing Status	Effect Determination
Mammals			
Gray Wolf	*Canis lupus*	Endangered	No Effect
Colorado River Endangered Fishes			
Bonytail Chub	*Gila elegans*	Endangered	Adverse*
Colorado Pikeminnow	*Ptychocheilus lucius*	Endangered	Adverse*
Humpback Chub	*Gila cypha*	Endangered	Adverse*
Razorback Sucker	*Xyrauchen texanus*	Endangered	Adverse*
Birds			
Gunnison Sage-Grouse	*Centrocerus minimus*	Threatened	No Effect
Yellow-Billed Cuckoo	*Coccyzus americanus*	Threatened	No Effect
Mexican Spotted owl	*Strix occidentalis lucida*	Threatened	No Effect
Plants			
Clay-Loving Wild Buckwheat	*Eriogonum pelinophilum*	Endangered	No Effect
Colorado Hookless Cactus	*Scelerocactus glaucus*	Threatened	No Effect
*Adverse Effect determination per the 2009 Gunnison River Programmatic Biological Opinion issued by USFWS.			

No Action Alternative: Under the No Action Alternative, there would be no new impacts to any of the aforementioned species or their habitats. Short Ditch Extension would not be piped and portions of the ditch would not be abandoned and filled. Water would continue to be lost to seepage, and salt and selenium loading to the Colorado River Basin would persist. There would continue to be an adverse effect to the endangered fishes due to SDEC's historic depletions.

Proposed Action: The determination of effects for the listed species and their critical habitats are described in detail in the T&E (J-U-B, 2022b) and are briefly summarized below.

Gray Wolf

The USFWS IPaC lists the gray wolf as potentially occurring across all project elements within the Action Area. However, although lone and dispersing wolves may occur throughout this part of Colorado, no suitable habitat free from active human disturbance and containing abundant prey populations is present along the Short Ditch alignment or within the HRP site. The Proposed Action does not include a predator management program. For these reasons, the Proposed Action would have no effect on the gray wolf.

Colorado River Endangered Fishes

Water depletions in the Gunnison Basin have the potential to diminish backwater spawning areas in downstream designated critical habitat in the Colorado River Basin, directly affecting the four endangered fishes and the extents and quality of designated critical habitat. SDEC's historic depletion rate would remain unchanged under the Proposed Action.

The Upper Colorado River Endangered Fish Recovery Program, a partnership of public and private organizations working to recover the four species while allowing continued and future water development, was established in 1988. Recovery strategies include conducting research, improving river habitat, providing adequate stream flows, managing non-native fish, and raising endangered fish in hatcheries for stocking. In 2018, the USFWS determined that the Recovery Program had made "sufficient progress to be the reasonable and prudent alternative to avoid the likelihood of jeopardy to the endangered fishes, and to avoid destruction or adverse modification of their critical habitat" for "existing depletions" (USFWS 2018). Furthermore, the Gunnison River Basin PBO (PBO) issued by USFWS in 2009 found that the Recovery Program is the reasonable and prudent alternative to avoid jeopardy to the endangered Colorado River fishes and avoid adverse modification of designated critical habitat. No change to SDEC's historic consumptive use rate or historic water depletions (the "existing depletion") to the Colorado River Basin would occur as a result of the Proposed Project. However, potential inherent benefits to the Colorado River fishes would occur from the reduction of salt loading to the Colorado River Basin by approximately 419 tons per year, and an unquantified reduction in selenium loading to the Colorado River Basin, as a result of the Proposed Project (Jacobson 2017).

Based on previously issued biological opinions that all depletions within the Upper Colorado River Basin may adversely affect these fish species and their critical habitat, it is determined that the Proposed Action may adversely affect the bonytail chub, Colorado pikeminnow, humpback chub, and razorback sucker and their critical habitat. However, SDEC's historic depletions are covered under the PBO, and the Recovery Program ensures impacts to endangered fishes or adverse modification of their designated critical habitat resulting from projects covered under the PBO would not result in jeopardy to the species. To ensure SDEC's are covered under the PBO, SDEC executed a Recovery Agreement with FWS (Appendix C). Because the Proposed Action would not result in jeopardy to the species,

there would be no significant impact to the endangered fishes or their designated critical habitat.

Gunnison Sage-Grouse

Established sagebrush habitat suitable for the Gunnison sage-grouse with an assemblage of grasses and forbs is not present within the Action Area. The Action Area, including the HRP site, does not contain suitable habitat to support the Gunnison sage-grouse; therefore, the species do not occur in the Action Area. The Proposed Action would have no effect on Gunnison sage-grouse.

Yellow-billed Cuckoo

The Short Ditch Extension alignment contains a narrow riparian fringe (approximately 6 to 90 feet wide) that consists of Russian olive, tamarisk, willow, and cottonwoods, which is inconsistent with suitable habitat for the species. The HRP site also contains narrow riparian fringe which provides low quality wildlife habitat and does not contain suitable or preferred habitat for the yellow-billed cuckoo. Given the lack of suitable habitat for the species, and the timing of construction outside the breeding and nesting season, the Proposed Action would have no effect on yellow-billed cuckoo.

Mexican Spotted Owl

Suitable habitat for the Mexican spotted owl is not present within the Action Area. No cliff structures or narrow, rocky canyons are present, and there are no suitable forest structures to support the species. No individuals of the species were observed in the Action Area during field investigations. Therefore, the Proposed Action would have no effect on Mexican spotted owl.

Clay-loving Wild Buckwheat

Although the Action Area is located within the preferred elevation range of clay-loving wild buckwheat, the soil types present are inconsistent with suitable habitat for the species. Given the lack of suitable habitat for the species, the Proposed Action would have no effect on clay-loving wild buckwheat.

Colorado Hookless Cactus

Although the Action Area is within the preferred elevation range, the soil type within the Action Area is inconsistent with suitable habitat for the Colorado hookless cactus, with the exception of the HRP site, where suitable soils do occur. However, the species is generally more abundant on drier, south-facing slopes, which are not present within the HRP site. There is no record of occurrence of the species within the HRP site, and no individuals of the species were observed during field investigations. Therefore, the Proposed Action would have no effect on the Colorado hookless cactus.

Because the Proposed Action would have no effect on gray wolf, Gunnison sage-grouse, yellow-billed cuckoo, Mexican spotted owl, clay-loving wild buckwheat, and Colorado hookless cactus, there would be no impacts which would incrementally add to the cumulative effects to these species

resulting from other projects. While the Proposed Action would adversely affect the listed Colorado river fishes due to SDEC's historic depletion rate, the Recovery Program ensures cumulative effects to the fishes and their designated critical habitat do not occur due to projects covered under the PBO.

No significant impacts to threatened and endangered species and their critical habitat would occur as a result of the Proposed Action.

3.2.10 Cultural Resources

A number of federal statutes and EOs guide the protection of historic and cultural resources. Cultural resources are often defined as physical or other expressions of human activity or occupation, and can include culturally significant landscapes, prehistoric and historic archaeological sites, isolated artifacts or features, traditional cultural properties, Native American and other sacred places, and artifacts and documents of cultural and historical significance.

Class III cultural resources inventories of the area of potential effect (APE) were completed by Grand River Institute (GRI) and Alpine Archaeological Consultants, Inc. in November 2020 and June 2022. The investigation area covered the length of Short Ditch Extension that would be impacted, including a 50-foot buffer on each side of the ditch, as well proposed staging areas, access locations, and the habitat replacement site. A total of 71 acres were surveyed. The inventories resulted in the identification of cultural resources determined to be eligible for listing in the National Register of Historic Places.

There is an ongoing trend of piping earthen irrigation ditches in the region, many of which are eligible for listing in the National Register of Historic Places (NRHP). This conversion is typically viewed as an adverse effect on the eligible cultural resource.

No Action Alternative: Under the No Action Alternative, the Action Area would not be disturbed, and no cultural resources would be affected.

Proposed Action: : As a result of the Class III cultural resources inventory of the Proposed Action Area, and in consultation with the Colorado State Historic Preservation Officer (Colorado SHPO), Reclamation has determined that the Proposed Action would have an adverse effect on the Short Ditch Extension, which is a resource eligible for listing in the NRHP. Reclamation previously developed a Programmatic Agreement (PA) for compliance with the National Historic Preservation Act between Reclamation and the Colorado SHPO outlining stipulations designed to conserve the value of eligible cultural resources associated with projects involving water structures. The Proposed Action would follow the PA and conserve the values of the cultural resource (Appendix D). This would ensure that piping the canal would not result in the loss of knowledge of early irrigation systems, their design, or reduce the ability to gain knowledge of early irrigation systems into the future. Because the value of the cultural resource related to the Proposed Action would be conserved, there would be no significant impacts to cultural resources as a result of implementing the Proposed Action.

The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources which is occurring as a result of irrigation piping projects. However, the value of the eligible cultural resources in the area which have been or may be affected due to federally funded

irrigation piping projects have been and would continue to be maintained due to the project stipulations developed with the Colorado SHPO, and therefore the adverse cumulative effect of the piping projects on cultural resources would not rise to the level of significant.

No significant impacts to cultural resources would occur as a result of the Proposed Action.

3.2.11 Agricultural Resources & Soils

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maintains and keeps current "an inventory of the prime farmland and unique farmland of the Nation…the objective of the inventory is to identify the extent and location of important rural lands needed to produce food, feed, fiber, forage, and oilseed crops" (7 CFR 657.2). Farmlands are categorized into farmlands of national and statewide importance based on soil types and irrigation status. Prime farmland, as defined by the USDA, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available to these uses. It can be cultivated land, pastureland, forestland, or other land, but is not urban or built-up land or water areas. Farmland of statewide importance are lands that nearly meet the requirements for Prime Farmland and have been identified by state agencies. Farmland of Unique Importance has a special combination of soil quality, location, growing season, and moisture supply required to produce high quality crops when properly managed.

The SDEC system serves approximately 350 acres of irrigated farmland, roughly half of the area is served by the Proposed Action. The primary crops grown in the Action Area include alfalfa, hay, pasture grass, and small grains. The irrigation season typically runs from April through October, averaging 210 days a year. The Short Ditch Extension conveys irrigation water to both prime farmland, farmlands of statewide importance, and prime farmland if irrigated, and the Proposed Action would occur adjacent to irrigated agricultural fields. Within the Action Area, there are some areas designated as prime farmland if irrigated, however these lands are not used for farming and are located within the Short Ditch Extension. Additionally, land within the Action Area contains only a sparse herb layer and consists primarily of bare ground, rending it subject to flash flood events and erosion from wind and water.

The predominant soil types in the Action Area are Limon silt clay loam, which are considered farmland of statewide importance. Other soil types include Killpack silty clay loam, Torriorhents-Rock outcrop, shale, complex, and Chipeta silty clay, which are considered "not prime farmland."

No Action Alternative: No soil disturbance would occur under the No Action Alternative. The No Action Alternative would have no effect on prime farmlands or farmlands of statewide importance, and agricultural operations would continue as they have in the past. Canal seepage and salt and selenium loading to the Colorado River Basin would continue.

Proposed Action: Under the Proposed Action, installation of the buried pipe and removal of vegetation would cause temporary disturbance to soils that are not in agricultural production. The Short Ditch Extension serves active farmlands that are located adjacent to the Action Area. These farmlands would not be directly or indirectly disturbed under the Proposed Action, and there are no active farmlands within the immediate Action Area that would be temporarily or permanently impacted. Given the timing of construction, no part of the irrigation season would be lost during construction. Furthermore, the Proposed Action would benefit agricultural users because the Proposed Action

would improve water quantity and delivery of irrigation water to users. Overall, no impacts to agriculture or farmland of statewide importance would occur. As no impacts to farmland would occur, no cumulative impacts to farmlands would occur as a result of the Proposed Action. Measures would be implemented to minimize soil disturbance and erosion during implementation of the Proposed Action. Any topsoil would be reserved prior to excavation, replaced on the ground surface following pipe installation, then reseeded with BLM and Reclamation approved, weed-free seed mixes.

Although areas of ground disturbance would be reseeded, much of the alignment would remain unvegetated similar to the surrounding landscape, and would therefore continue to be subject to flash flood events and erosion from wind and water. Because this would not represent a change in the flash flood events and erosion from wind and water, it would not represent a significant impact.

No significant impacts to agricultural resources and soils would occur as a result of the Proposed Action.

3.2.12 Noise

A moderate level of noise occurs in the Action Area associated with the nearby Highway 92, farming and ranching activities in the vicinity, and SDEC's operation and routine maintenance of the irrigation system.

SDEC operation and maintenance activities primarily involve the use of light vehicles. Farming and ranching activities in the Action Area involve the use of farming equipment, light vehicles, and the occasional use of heavy equipment.

No Action Alternative: The No Action Alternative would have no effect on baseline noise levels in the Action Area.

Proposed Action: During construction of the Proposed Action, there would be a short-term increase in noise levels above baseline noise levels in the Action Area. Construction noise would be associated with the use of heavy equipment and additional vehicles in the Action Area and would be limited to the duration of construction. Construction noise would not raise the noise level above moderate, and therefore the short-term increase in noise would not be significant. Noise levels would return to baseline noise levels following the completion of construction. Noise associated with maintenance of the irrigation canal would be decreased due to fewer maintenance needs for the piped alignment. As no long-term noise impacts would result from the Proposed Action, no cumulative noise impacts would occur.

No significant impacts to noise would occur as a result of the Proposed Action.

3.3 Summary of Impacts

Table 3-3 summarizes the impacts and environmental consequences of the No Action Alternative and the Proposed Action Alternative analyzed in this EA. As described throughout Chapter 3, environmental consequences of the Action Alternatives were not determined to be significant.

Table 3-3. Summary of Impacts of the No Action and Proposed Action Alternatives

Resource	Impacts	
	No Action Alternative	**Proposed Action Alternative**
Water Rights & Use	No effect	The Proposed Action would improve SDEC efficiency by conserving water that was previously lost to seepage and eliminating ditch breaches that pose water security and delivery issues. The Proposed Action would protect existing water rights and increase late-season irrigation water supply in the Action Area. The water savings resulting from the Proposed Action would contribute to the regional efforts underway to reduce water loss to seepage and evaporation in the Lower Gunnison and Colorado River watersheds.
Water Quality	Salt and selenium loading would continue to affect water quality in the Colorado River Basin.	The Proposed Action would reduce salt loading by 419 tons per year in the Colorado River Basin. The Proposed Action would reduce selenium loading by an unquantified amount. Improved water quality would benefit downstream aquatic species by reducing salt and selenium loading in the Colorado River Basin. The Proposed Action would affect waters under the jurisdiction of CWA Section 404 (the ditches themselves) and would disturb seepage-induced wetland and riparian vegetation associated with the ditches. Improvements at the HRP site would result in a beneficial impact on water quality in the area by slowing irrigation runoff and thereby reducing sediment and salt loading to downstream waterbodies. The beneficial effects of improved water quality resulting from the Proposed Action would contribute to the regional efforts underway to reduce salinity and selenium in the Gunnison and Colorado River watersheds.
Air Quality	No effect	Dust from construction activities would have a minor short-term effect on the air quality in the Action Area. No cumulative effects.
Access, Transportation, and Public Safety	No effect	Implementation of the Proposed Action would result in brief, insignificant traffic delays from construction vehicles entering and existing the Action Area. The safety risks associated with sources of open, moving water would no longer

Resource	Impacts	
	No Action Alternative	**Proposed Action Alternative**
		occur within the Project Area. No cumulative effects.
Recreational & Visual Resources	No effect	The Proposed Action would temporarily disrupt the recreational experience in the Action Area due to construction activities (e.g. noise, equipment, access delays, dust, etc.); however, these disruptions would be minor as they would not prohibit recreational activities in the Action Area, and they would end following the completion of construction. Temporary disturbance to visual resources would occur due to ground disturbance and removal of vegetation during construction activities, as well as the presence of staging and stockpile areas. Piping Short Ditch Extension would permanently alter visual resources by removing segments of open water and vegetation from the landscape. No cumulative effects.
BLM Grazing Allotments	No effect	Livestock grazing would experience a temporary, negligible impact during construction; however, the Action Area represents a small percent (0.001%) of the overall grazing pastureland available in the South of Town grazing allotment. If once accessible by cattle, the loss of the open canal would remove a source of drinking water for cattle grazing in the area. No lands capable of providing grazing would be permanently lost because of the Proposed Action. The Proposed Action would result in a negligible increase of lands capable of providing livestock grazing by abandoning, filling, and vegetating a portion of Short Ditch Extension. No cumulative effects.
Vegetative Resources and Weeds	No effect.	Approximately 26 acres of vegetation disturbance would occur due to the Proposed Action. The disturbance would have a temporary effect on upland vegetation in the Action Area, as areas disturbed by the Proposed Action would be restored following construction. There would be a long-term loss of riparian and wetland habitat (valued at 13.8 habitat credits) due to elimination of seepage from the ditch. The HRP component of the Proposed Action generates 14.76 habitat credits, which replaces the value of the habitat lost from piping the Short Ditch Extension. Vegetation would be enhanced by the HRP. Weed

Resource	Impacts	
	No Action Alternative	**Proposed Action Alternative**
		control measures would be implemented as part of the Proposed Action, and the piping of the ditch would remove open water from the Action Area, a contributing factor to invasive seed transport in the landscape. Revegetation of native seed would be put in place where there is ground disturbance, however success rates would be low and the desired assemblage may not result because of the presence of weeds already in the ditch alignment. No cumulative effects.
Wildlife Resources	No effect	Due to the reduction in salinity and selenium, the Proposed Action would improve fish habitat within the larger Colorado River Basin. The Proposed Action would also temporarily impact upland wildlife habitat, which would result in minor temporary impacts to wildlife species within the Action Area. Impacts to the deer and elk population would be minor given the small area of impact from the Proposed Project in relation to the amount of deer and elk habitat available in the vicinity. Direct impacts to small animals, including burrowing amphibians, reptiles, and small mammals, would include mortality and displacement during construction activities along the existing canal alignments, however population level impacts would not occur due to the prevalence of these species and their habitat within the vicinity of the Action Area. Direct impacts would result in a temporary adverse effect to an existing white-tailed prairie dog colony. The HRP component of the Proposed Action would replace fish and wildlife values foregone and would improve habitat for ungulates, avian species, and small mammals. The Proposed Action would contribute to a regional trend resulting in the relocation of artificially-created riparian and wetland values from earthen irrigation conveyances to habitat replacement sites.
Special Status Species	No effect	Given that construction would occur outside of the irrigation season, the majority of construction activities would occur outside of bird migration, breeding, and nesting seasons, there would be no direct effect on the listed avian species.

Resource	Impacts	
	No Action Alternative	**Proposed Action Alternative**
		The Proposed Action would have no effect on Gunnison sage-grouse, yellow-billed cuckoo, Mexican spotted owl, clay-loving wild buckwheat, and Colorado hookless cactus. However, the Proposed Action would adversely affect the Colorado River endangered fish species. USFWS concurrence with the T&E effect determinations and SDEC's Recovery Agreement ensuring their historic depletions are covered under the PBO are included in Appendix C.
Cultural Resources	No effect	The Proposed Action would have an adverse effect on the Short Ditch Extension segment involved with the Proposed Action, which is a resource eligible for listing in the NRHP. The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources which is occurring as a result of irrigation piping projects. No cumulative effects.
Agricultural Resources & Soils	No effect	The Proposed Action would temporarily disturb the soils that are not in agricultural production. No farmlands would be permanently removed from production as a result of the Proposed Action, and no interruption to agricultural production would occur. No part of the irrigation season would be lost during implementation of the Proposed Action. There would be no changes in existing levels of erosion. No cumulative effects.
Noise	No Effect	Short-term minor increase in noise associated with construction activities would occur as a result of the Proposed Action. Noise levels would return to baseline noise levels following the completion of construction. No cumulative effects.

4 ENVIRONMENTAL COMMITMENTS

This section discusses the environmental commitments developed to lessen the potential adverse insignificant effects of the Proposed Action. The environmental commitments listed in Table 4-1 would be implemented by SDEC if the Proposed Action is implemented. The environmental commitments would be included in the contractor bid specifications.

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

Table 4-1. Environmental Commitments

Environmental Commitment	Affected Resource	Authority
Pre-construction		
BLM shall provide acknowledgement of the historic ditch ROW on BLM land prior to the commencement of construction.	Historic Ditch ROW on BLM lands	BLM
A Spill Response Plan and a Stormwater Pollution Prevention Plan (SWPPP) shall be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.	Water Quality	CWA
Stormwater Management Plan is to be submitted to CDPHE by the construction contractor prior to ground disturbance.	Water Quality	CWA
CWA Section 402 Storm Water Discharge Permit compliant with the NPDES, to be obtained from CDPHE by the construction contractor prior to ground disturbance (regardless of whether dewatering would take place during construction).	Water Quality	CWA
Construction limits shall be clearly flagged to avoid unnecessary plant loss or ground disturbance.	Vegetation, Weeds, habitat, Wildlife	Delta County Weed Management Plan (2020) The Colorado Noxious Weed Act §3505.5-105 (CNWA)

Environmental Commitment	Affected Resource	Authority
Equipment would be cleaned to avoid noxious weed dispersal before being brought to the construction area.	Vegetation, Weeds, Habitat, Wildlife	Delta County Weed Management Plan (2020). CNWA
Vegetative material shall be removed by mowing or chopping, and either hauled to the County landfill or to a proposed staging area to be chipped and/or mulched. Stumps shall be grubbed and hauled to the County landfill or a proposed staging area to be burned. Within BLM land, cut and chip Tamarisk and Russian Olives and use as mulch on the reclaimed ditch.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020) CNWA
Vegetation removal shall be confined to the smallest portion of the Action Area necessary for completion of the work.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020) CNWA
Vegetation removal shall avoid the primary nesting season of migratory birds (April 1 – July 15) and the breeding season of yellow-billed cuckoo.	Special Status Species, Wildlife	MBTA
Topsoil shall be stockpiled and then redistributed after completion of construction activities.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020) CNWA
Any construction, access, or use permits would be obtained which may be required by the Delta County Planning Department, County Engineering and County Road & Bridge District.	Access, Transportation, and Public Safety	Delta County
Surface occupancy or use may be restricted and sensitive species restrictions applied within habitat for the following BLM sensitive wildlife species: Gunnison and white-tailed prairie dog towns. Special design, construction, and implementation measures including relocation of operations by more than 200 meters (656 feet), may be required. The operator may be required to submit a plan of development that reduces or eliminates threats to BLM identified sensitive species by siting or prioritizing vegetation clearing, facility construction, and concentrated operational activities (e.g. drilling, completion, and utility installation). The project sponsor, project engineer, and operator must coordinate with BLM prior to construction.	Wildlife	BLM

Environmental Commitment	Affected Resource	Authority
During Construction		
Straw wattles, silt curtains, cofferdams, dikes, straw bales, or other suitable temporary erosion control measures shall be used to prevent erosion from entering water bodies during construction.	Water Quality, Soil	CWA
Any concrete pours shall occur in forms and/or behind cofferdams to prevent discharge into waterways. Any wastewater from concrete-batching, vehicle washdown, and aggregate processing shall be contained and treated or removed for off-site disposal at an approved facility.	Water Quality	CWA
All necessary BMPs would be in place to control sediment and erosion, and to protect water quality during construction activities. Piping would occur outside the irrigation season while the ditch is dry.	Water Quality, Soil	CWA
The contractor shall transport, handle, and store any fuels, lubricants, or other hazardous substances involved with the Proposed Action in an appropriate manner that prevents them from contaminating soil and water resources.	Water Quality, Soil	CWA
Portable secondary containment shall be proved for any fuel or lubricant containers staged on BLM land within the Action Area. Any staging of fuels or lubricants, or fueling or maintenance of vehicles and equipment, would not be conducted within 100 feet of any water body or drainage.	Water Quality, Soil	CWA
Equipment shall be inspected daily and immediately repaired, as necessary, to ensure equipment is free of petrochemical leaks.	Water Quality, Soil	CWA
Construction equipment shall be parked, stored, and serviced only at approved staging areas.	Water Quality, Soil	CWA
A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substance shall be furnished to BLM concurrent with the filing of the report(s) to the involved Federal agency or State government.	Water Quality, Soil	CWA
BMPs would be implemented to minimize dust and would include measures such as wetting the construction site surfaces and access roads, minimizing vehicle travel over unpaved surfaces, limiting activity during periods of extreme winds and stabilizing stockpiles, as appropriate	Air Quality	CDPHE
Ground disturbance and construction areas shall be limited to only those areas necessary to safely implement the Proposed Action.	Soil, Vegetation, Weeds, Habitat, Wildlife	ARPA PRPA
Pipeline trenches left open overnight shall be kept to a minimum and covered to reduce potential hazards to the public and to wildlife. Covers shall be secured in place and strong enough to prevent livestock or wildlife from falling	Access, Transportation, and Public Safety,	CDPHE, CPW, CRS 22-1-101 to 125

Environmental Commitment	Affected Resource	Authority
through. Where trench covers would not be practical, wildlife escape ramps shall be installed.	Wildlife, Grazing, Recreation	Parks and Wildlife Article 1: Wildlife
If previous undiscovered cultural or paleontological resources are discovered during construction, construction activities must immediately cease in the vicinity of the discovery and Reclamation must be notified. In this event, the SHPO shall be consulted, and work shall not be resumed until consultation has been completed. Additional surveys shall be required for cultural resources if construction plans or proposed disturbance areas are changed.	Cultural Resources	NHPA ARPA PRPA
In the event that threatened and endangered species are encountered during construction. Construction activities must cease until Reclamation has consulted with USFWS to ensure adequate measures are in place to avoid or reduce impacts to the species.	Special Status Species, Habitat	ESA
Vegetation on the uphill side of the reclaimed ditch shall be retained, where possible. Any live cottonwoods within the Action Area associated with the reclaimed ditch shall be left standing. Dead cottonwoods shall be knocked down to be used as trail limiters, or as large woody debris within the reclaimed ditch.	Vegetation, Habitat	ESA
Non-native tree and shrub removal at the HRP site shall avoid the primary breeding season of migratory birds (April 1 – July 15).	Special Status Species	MBTA
If a new raptor nest is discovered within 1/3-mile of the Action Area during construction, or a bald eagle or other raptor roost site is discovered within ¼-mile of the Action Area during construction, construction would cease until Reclamation would complete consultation with USFWS and CPW.	Special Status Species	MBTA BGEPA
Native fill material shall be utilized to the maximum extent possible to diminish new weed introductions to the Action Area. Imported topsoil shall not be incorporated into the Action Area.	Vegetation, Weeds, Habitat, Special Status Species	ARPA PRPA Delta County Weed Management Plan (2020) CNWA
BLM TL-24 Stipulation: prohibit surface use and surface disturbing and disruptive activities within 300 feet of active	Wildlife	BLM

Environmental Commitment	Affected Resource	Authority
prairie dog colonies from March 1 to June 15. The project engineer and operator must coordinate with BLM prior to surface and ground disturbance.		
Post-Construction		
Following construction, all disturbed areas shall be smoothed with tracked equipment (without back dragging blade), shaped, and contoured to as near to the pre-disturbance topography as possible.	Soil, Vegetation, Weeds, Habitat	CWA
All equipment shall be cleaned before it is transported to another job site, to avoid introducing weed species from the Action Area to another job site.	Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020) CNWA
Re-seeding shall occur following project construction at appropriate times and with appropriate methods, using drought tolerant, weed-free seed mixes per underlying landowner specifications and BLM stipulations. Specifically, a BLM-prescribed seed mix shall be used to re-seed all disturbances on BLM lands and within the ditch easement area, unless otherwise requested by a landowner for agricultural acreages. On private lands, SDEC shall coordinate with landowners to develop a seed mix compatible with the surrounding native vegetation and approved by Reclamation.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020) CNWA
Weed control shall be implemented by SDEC or SDEC's contractor in accordance with BLM ROW stipulations and current Delta County weed control standards (Delta County 2020). Reseeding success and noxious weed presence will be monitored subject to agreements between SDEC and BLM, individual landowners, and regulated by Delta County in accordance with Delta County standards (Delta County 2020).	Soil, Special Status Species, Vegetation, Weeds, Habitat	CNWA

5 CONSULTATION & COORDINATION

5.1 Introduction

Reclamation's public involvement process presents the public with opportunities to obtain information about a given project and allows interested parties to participate in the project through written comments. This chapter discusses public involvement activities taken to date for the Proposed Action.

5.2 Public Involvement

In compliance with NEPA, the Draft EA was released for a 30-day public review period from October 8, 2022, to November 9, 2022. Notice of the public review period and availability of the Draft EA was distributed to private landowners and water users adjacent to the Action Area, and the organizations and agencies listed in Appendix B. The Draft EA was made available on Reclamation's website (https://www.usbr.gov/uc/DocLibrary/index.html). No comments were received.

The Final EA meets the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the document can be accessed by those with disabilities using accessibility software tools.

6 PREPARERS

The following Table 6-1 contains the list of those who participated in the preparation of this EA.

Table 6-1. List of Preparers

Name	Title	Areas of Responsibility
Jennifer Ward	U.S. Bureau of Reclamation	Preparation of EA and supporting documents
Jana Moe	Realty Specialist, Bureau of Land Management	Review of Draft EA
Autumn Foushee Davies	Senior Biologist; J-U-B ENGINEERS, Inc.	Preparation of EA and supporting documents
Lexie Yoder	Environmental Scientist; J-U-B ENGINEERS, Inc.	Preparation of EA and supporting documents
Zachary Scott	Environmental Scientist; J-U-B ENGINEERS, Inc.	Preparation of EA and supporting documents
Danny White	Environmental Specialist; J-U-B ENGINEERS, Inc.	Water Resources Assessment preparation
Rebecca Hendricks Miller	Environmental Scientist; J-U-B ENGINEERS, Inc.	Supporting document preparation
Adam Petry	Western Biology Principal	Sensitive Species Inventory
Carl E. Conner	Principal Investigator; GPI	Cultural resources assessment
Jacki Mullen	Director of Corporate Operations; Alpine Archaeological Consultants, Inc.	Cultural resources assessment
Matt Landt	Principal Investigator; Alpine Archaeological Consultants, Inc.	Cultural resources assessment

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8 ABRREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Definition
Action Area	Proposed Action Area
AIRFA	American Indian Religious Freedom Act
AMSL	Above Mean Sea Level
ARPA	Archaeological Resources Protection Act
BGEPA	Bald and Golden Eagle Protection Act
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
CAA	Clean Air Act
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic feet per second
CO	Carbon monoxide
CPW	Colorado Parks and Wildlife
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
E.O.	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FR	Federal Register
HUC	Hydrologic unit code
HRP	Habitat Replacement Plan
Interior	U.S. Department of the Interior
J-U-B	J-U-B ENGINEERS, Inc.
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	Ozone
O&M	Operations and maintenance
PA	Programmatic Agreement
Pb	Lead
PM	Particulate Matter

Abbreviation or Acronym	Definition
PL	Public Law
Reclamation	U.S. Bureau of Reclamation
RMP	Resource Management Plan
ROW	Right-of-way
SDEC	Short Ditch Extension Company
SHPO	State Historic Preservation Officer
SO_2	Sulfur dioxide
SPCC	Spill Prevention, Control and Countermeasures
USACE	U.S. Army Corps of Engineer
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management
WRA	Water resources assessment

Appendix A

A. Figures
    1. Project Vicinity Map
    2. Project Area Map
    3. Piping Project Area Map
    4. Land Ownership Map
    5. Ecoregions Map
    6. Nearby Projects Map
    7. Proposed Construction Alignment

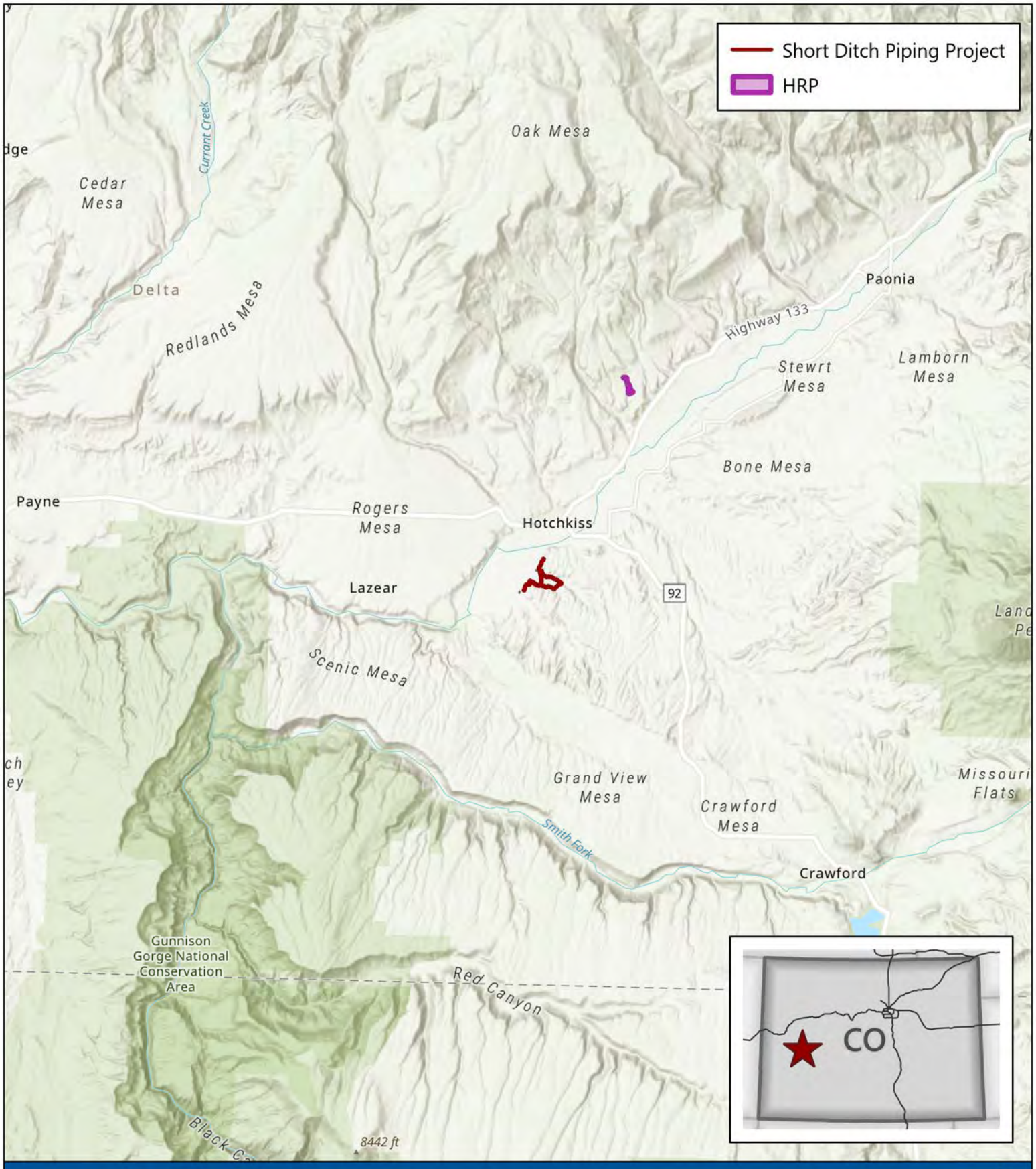
PROJECT VICINITY

0 50 100
Miles

N

J-U-B ENGINEERS, INC.
THE LANGDON GROUP
GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 1



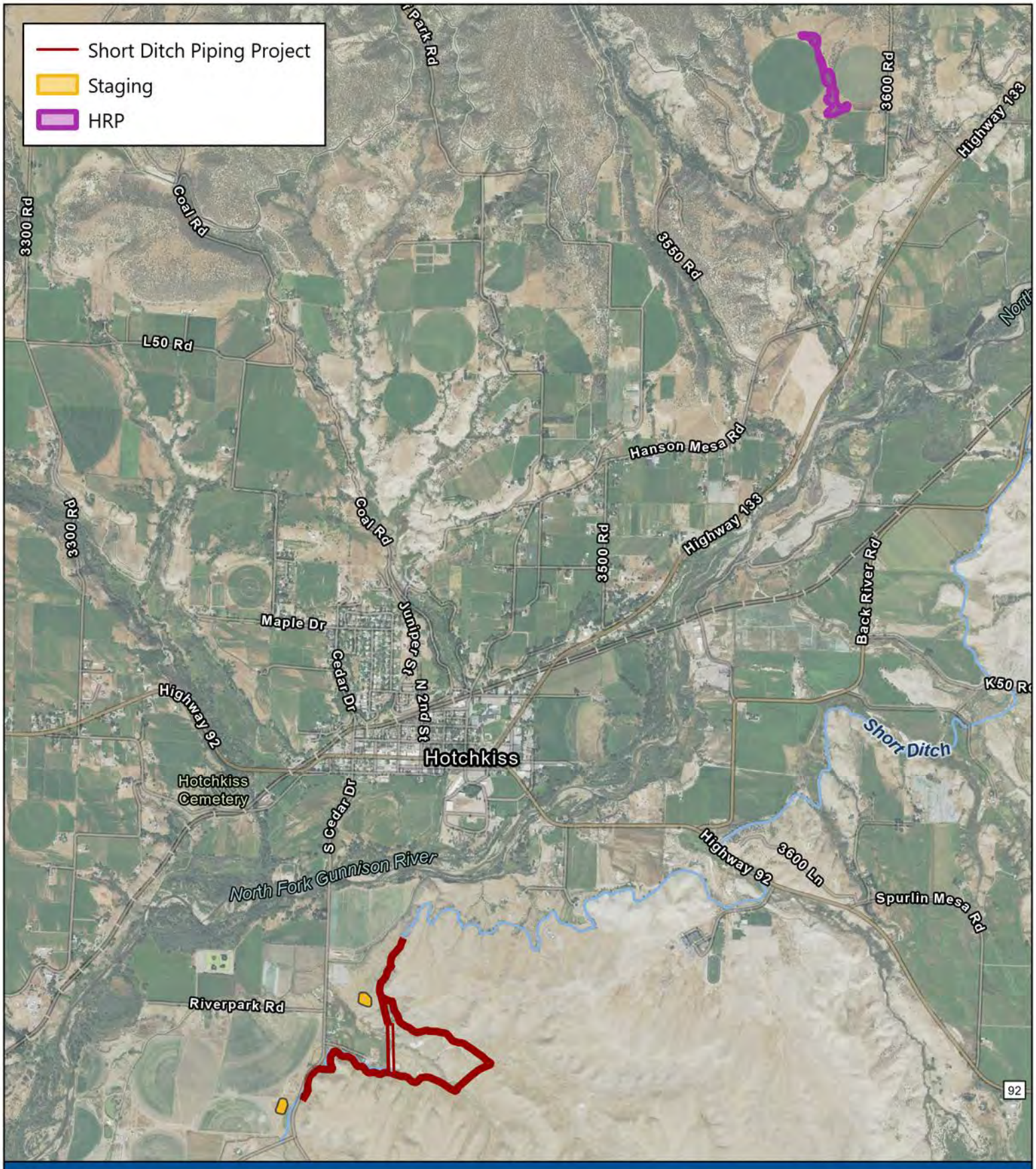
PROJECT AREA

0 2.5 5
Miles

N

J-U-B ENGINEERS, INC. | THE LANGDON GROUP | GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 2



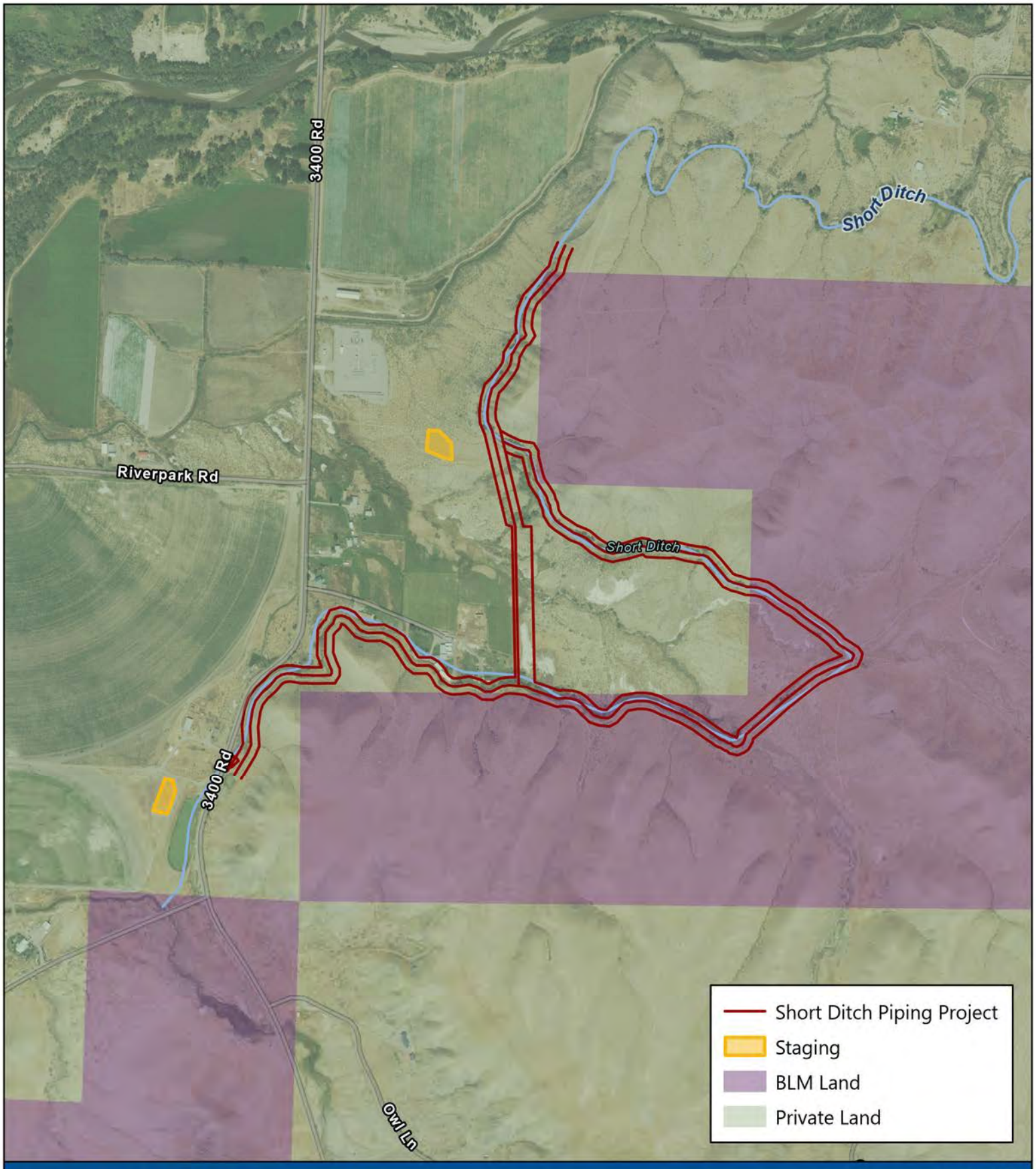
PROJECT AREA

0 0.5 1
Miles

N

J-U-B ENGINEERS, INC.
THE LANGDON GROUP
GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 3



LAND OWNERSHIP MAIN PROJECT

0 800 1,600 Feet

N

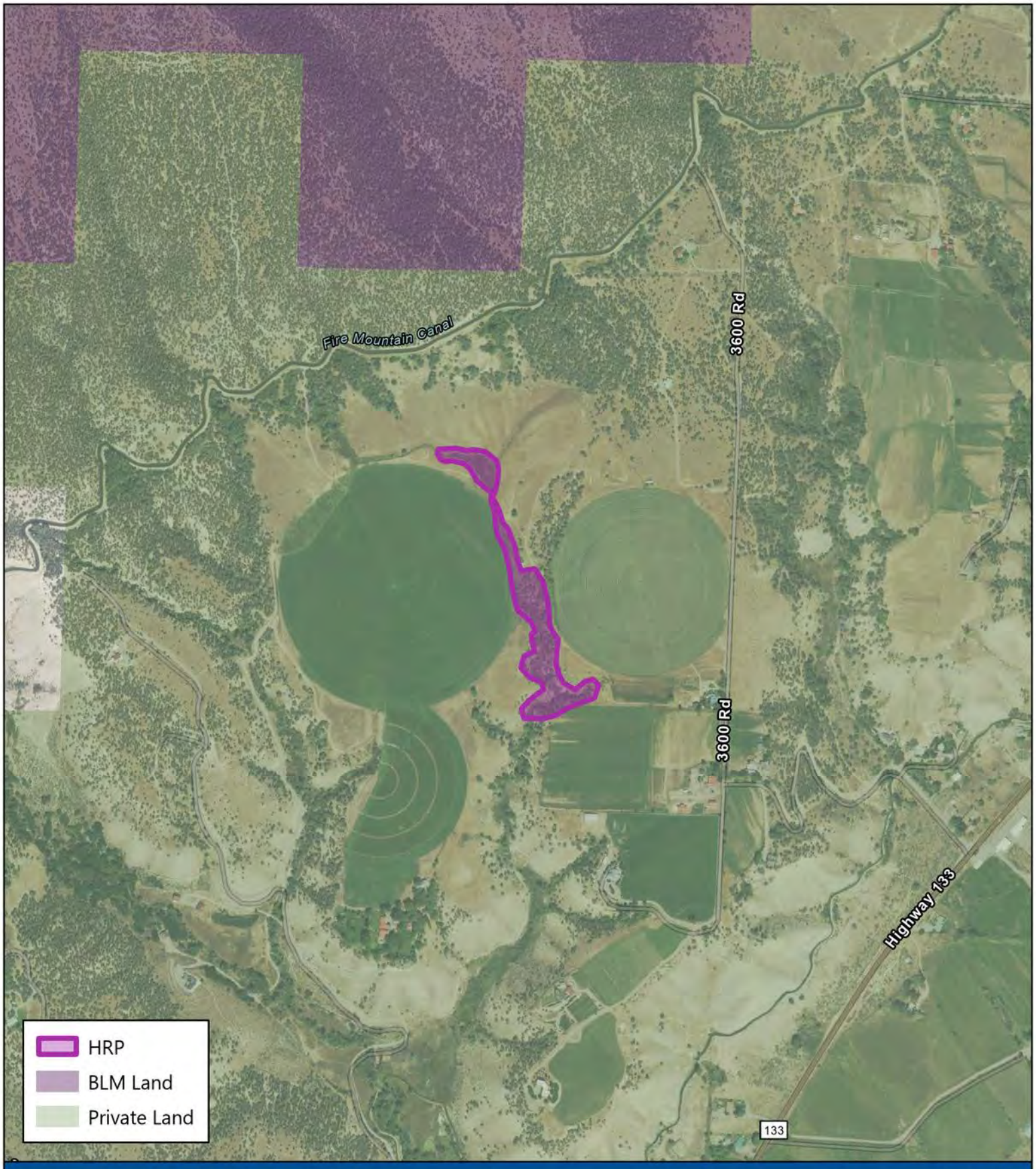
J-U-B ENGINEERS, INC.

THE LANGDON GROUP

GATEWAY MAPPING INC.

J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 4a



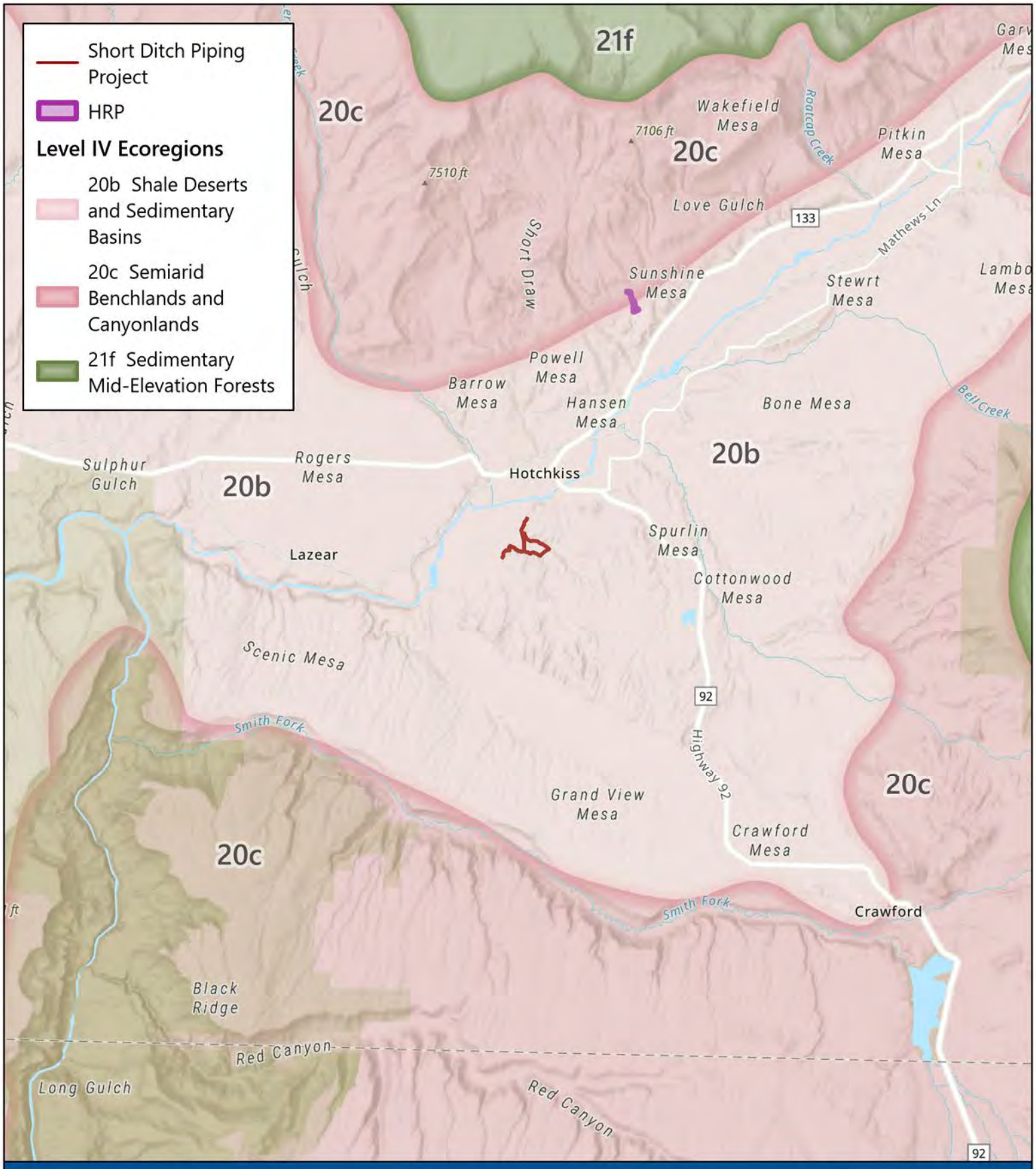
LAND OWNERSHIP
HRP

0 800 1,600
Feet

N

J-U-B ENGINEERS, INC.
THE LANGDON GROUP
GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 4b



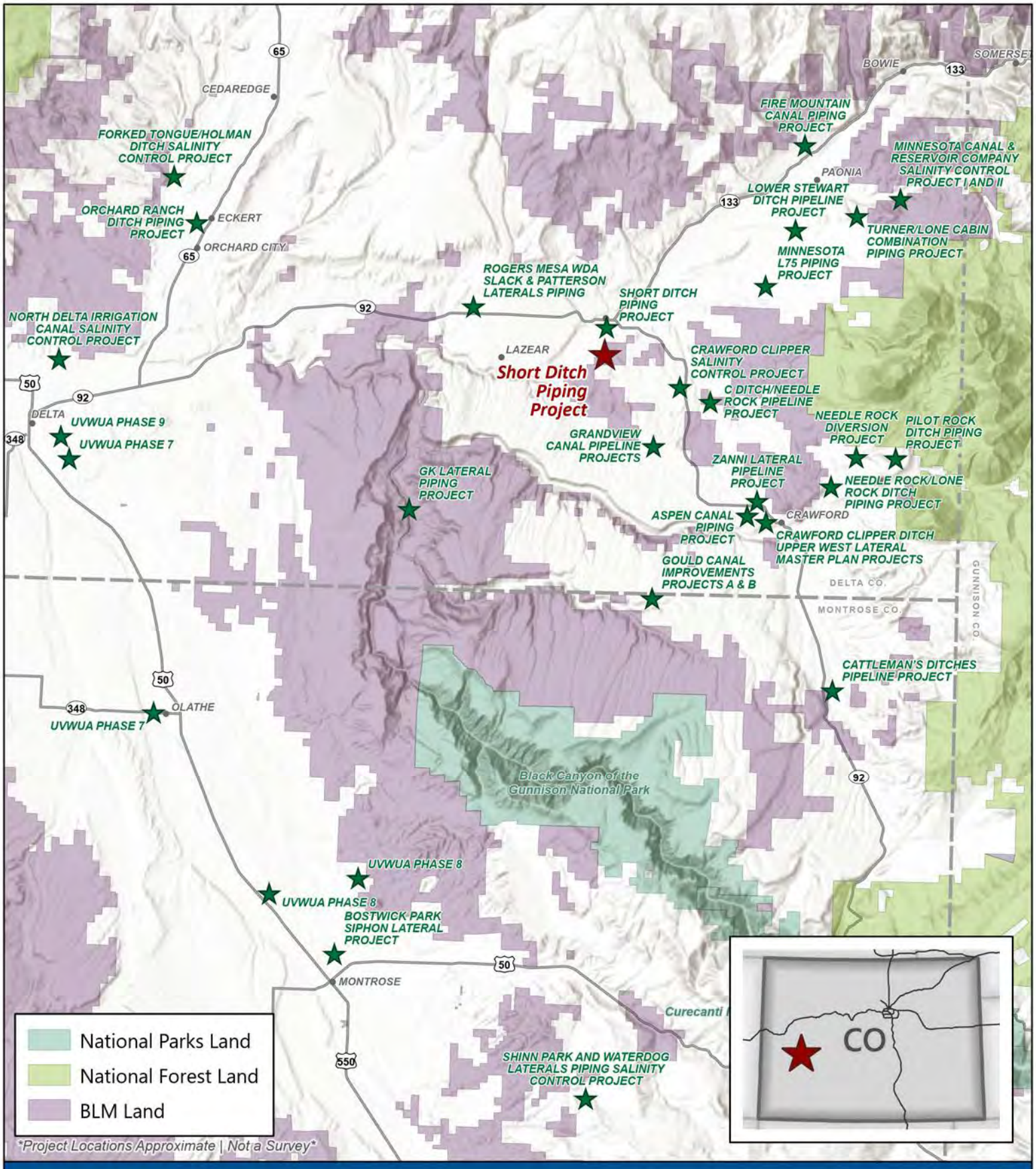
ECOREGIONS

0 2 4
Miles

N

Short Ditch Piping Project: Figure 5

J-U-B ENGINEERS, INC. | THE LANGDON GROUP | GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES



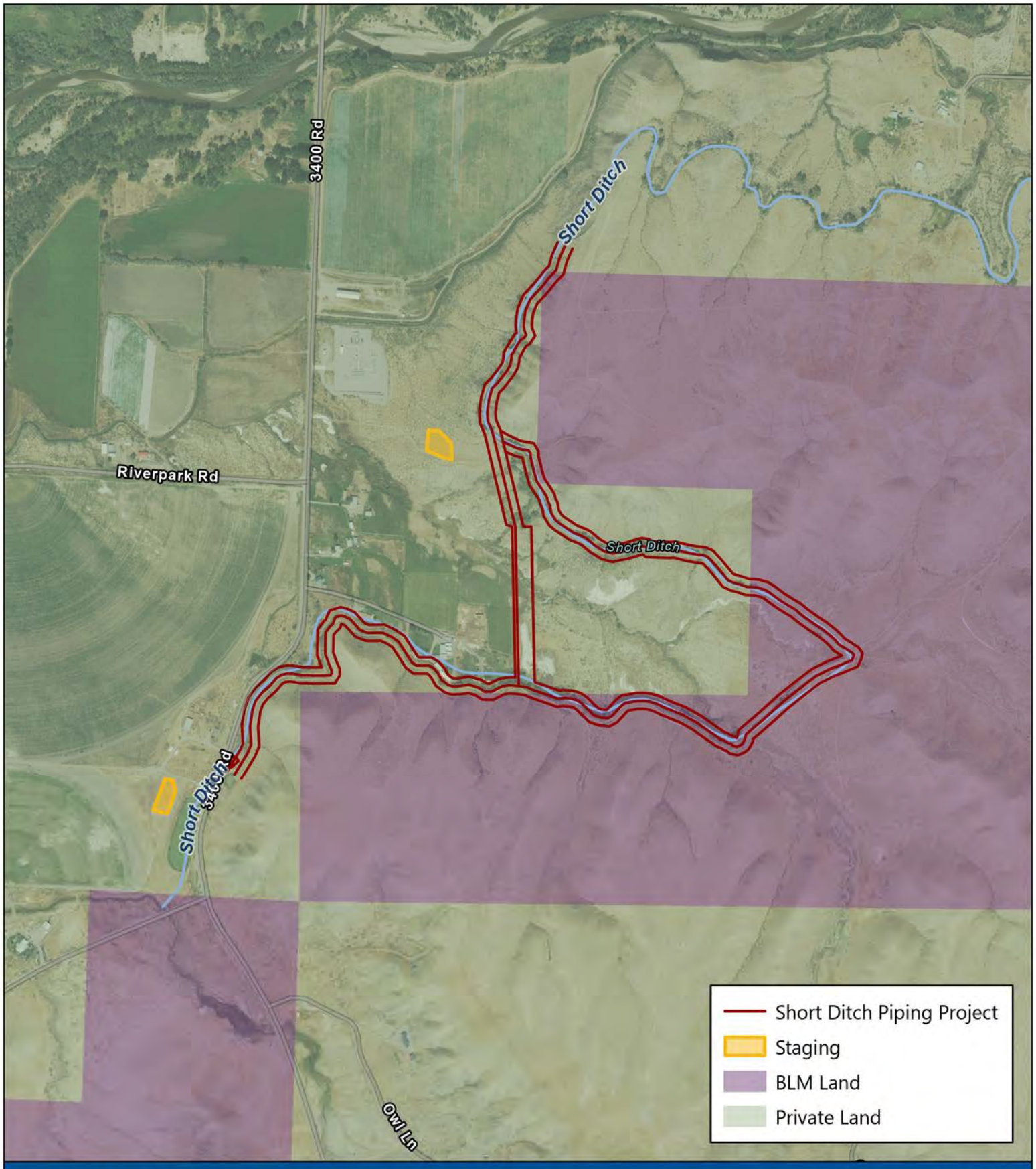
NEARBY PROJECTS

0 4.25 8.5 Miles

N

J-U-B ENGINEERS, INC. | THE LANGDON GROUP | GATEWAY MAPPING INC. | J-U-B FAMILY OF COMPANIES

Short Ditch Piping Project: Figure 6



PROPOSED CONSTRUCTION ALIGNMENT MAIN PROJECT

Short Ditch Piping Project: Figure 7a

0 800 1,600 Feet

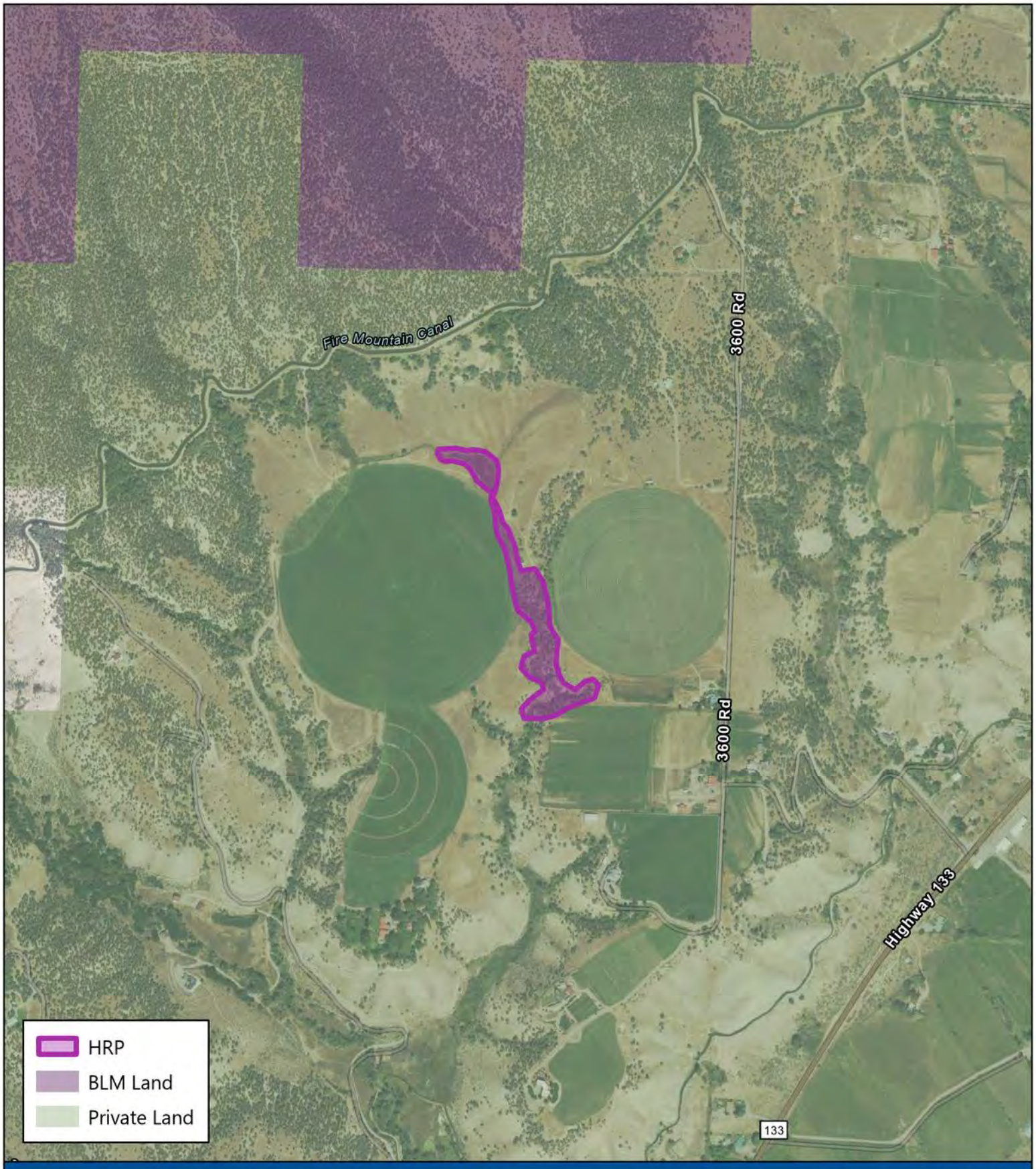
N

J-U-B ENGINEERS, INC.

THE LANGDON GROUP

GATEWAY MAPPING INC.

J-U-B FAMILY OF COMPANIES



PROPOSED CONSTRUCTION ALIGNMENT HRP

Short Ditch Piping Project: Figure 7b

0 800 1,600
Feet

N

J-U-B ENGINEERS, INC.

THE LANGDON GROUP

GATEWAY MAPPING INC.

J-U-B FAMILY OF COMPANIES

Appendix B

B. Distribution List

Distribution List: Short Ditch Extension Piping Project

The Draft Plan EA was distributed to the following agencies, organizations, tribes, and individuals.

- Federal
  - U.S. Bureau of Land Management, Uncompahgre Field Office
  - U.S. Fish and Wildlife Service, Ecological Services
  - U.S. Army Corps of Engineers, Colorado West Regulatory Branch
  - Natural Resources Conservation Service, Area 1
- State
  - Colorado Parks and Wildlife
  - Colorado Department of Transportation
  - Colorado Office of Archeology and Historic Preservation
- Local
  - Delta County Planning and Development
  - Delta County Road and Bridge
  - Delta County Commissioners
  - City of Hotchkiss
- Tribal
  - Southern Ute Tribe
  - Ute Mountain Ute Tribe
  - Ute Indian Tribe (Uintah and Ouray Reservation)
- Other
  - Trout Unlimited
  - Colorado Water Conservation Board
  - Colorado River Water Conservation District
  - Citizens for a Healthy Community
  - 27 adjacent landowners and shareholders

Appendix C

C. Endangered Species Act Compliance Documentation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Colorado Ecological Services Field Office Western Team
445 W. Gunnison Ave Suite 240
Grand Junction, Colorado 81501

In Reply Refer to:
FWS/R6

ECOSPHERE 2022-0019865

October 19, 2022

Memorandum

To: Ed Warner, Area Manager, Western Colorado Area Office, Bureau of Reclamation, Grand Junction, Colorado

From: Colorado Field Office Western Team Supervisor, U.S. Fish and Wildlife Service Ecological Services, Grand Junction, Colorado JOHN CLAYTON Digitally signed by JOHN CLAYTON Date: 2022.11.01 14:36:36 -06'00'

Subject: Request for Consultation under Section 7 of the Endangered Species Act for the Short Ditch Extension Piping Project (Agreement No. R20AC00017)

In accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.), and the Interagency Cooperation Regulations (50 CFR 402), the Fish and Wildlife Service (Service) transmit this correspondence to serve as the final biological opinion (BO) for the Short Ditch Extension Piping and Habitat Replacement components in one project located in Delta County, Colorado. This project is part of the Colorado River Salinity Control Program to reduce salt loading into the Colorado River.

Reclamation has made the determination of **No Effect** for gray wolf, Gunnison Sage-Grouse, Mexican spotted owl, yellow-billed cuckoo, clay-loving wild buckwheat, and Colorado hookless cactus. We acknowledge your determination of **No Effect** for these species and will not address them further in this BO. However, we do appreciate you informing us of your analysis for these species.

The subject project involves a historic average annual depletion estimated at 2,542 acre-feet per year (AF/yr) to the Gunnison River, which may affect the listed Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), Bonytail chub (*Gila elegans*) and the Razorback sucker (*Xyrauchen texanus*) and their critical habitats.

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated on January 22, 1988. The Recovery Program was intended to be the reasonable

and prudent alternative for individual projects to avoid the likelihood of jeopardy to the endangered fishes from impacts of depletions to the Upper Colorado River Basin. In order to further define and clarify the process in the Recovery Program, a section 7 agreement was implemented on October 15, 1993, by the Recovery Program participants. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan (RIPRAP) which identifies actions currently believed to be required to recover the endangered fishes in the most expeditious manner.

On December 4, 2009, the Service issued a final Gunnison River Basin Programmatic Biological Opinion (PBO) (this document is available for viewing at the following internet address: Gunnison River PBO | Upper Colorado Website (coloradoriverrecovery.org). The Service has determined that projects that fit under the umbrella of the Gunnison River PBO would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts. The Gunnison River PBO states that in order for actions to fall within the umbrella of the PBO and rely on the RIPRAP to offset its depletion, the following criteria must be met.

1. A Recovery Agreement must be offered and signed prior to the conclusion of section 7 consultation. (You have forwarded the Recovery Agreement signed by the Water User as part of the Threatened and Endangered Species Inventory prepared for BOR, by JUB Engineers, Inc.)
2. The project will result in no change to the historic depletions to the Colorado River Basin, and there are no new depletions. Therefore, a fee to fund recovery actions will not be required.
3. Re-initiation stipulations will be included in all individual consultations under the umbrella of this programmatic.
4. The Service and project proponents will request that discretionary Federal control be retained for all consultations under this programmatic.

The Recovery Agreement has been signed and dated July 9, 2022, by the Water User and the Service (attached). The depletions associated with this project are historic depletions that do not make contributions to fund recovery actions. The Bureau of Reclamation has agreed to condition its approval documents to retain jurisdiction should Section 7 consultation need to be reinitiated. Therefore, the Service concludes that the subject project meets the criteria to rely on the Gunnison PBO to offset depletion impacts and is not likely to jeopardize the continued existence of the species, and is not likely to destroy or adversely modify designated critical habitat. The reinitiation criteria, outlined in the Gunnison PBO, apply to all projects under the umbrella of the PBO. Therefore, if the PBO is reinitiated, re-initiation of this biological opinion would follow as well.
The Service and the Recovery Program track all water depletions that are covered under the Gunnison PBO and other water depletion PBOs within the Upper Colorado River Basin on a quarterly basis. A summary of those depletions are available at: Budget and Depletion Charge Adjustments | Upper Colorado Website (coloradoriverrecovery.org).

Also, in accordance with Section 7, Sufficient Progress and Historic Projects Agreement, the Service reviews cumulative accomplishments and shortcomings of the Recovery Program in the upper Colorado River basin. Per that Agreement, the Service uses the following criteria to evaluate whether the Recovery Program is making "sufficient progress" toward recovery of the four listed fish species:

- actions that result in a measurable population response, a measurable improvement in habitat for the fishes, legal protection of flows needed for recovery, or a reduction in the threat of immediate extinction;
- status of the fish populations;
- adequacy of flows;
- and magnitude of the impact of projects.

Through these bi-annual Sufficient Progress reviews, the Service evaluates the best available and current information to determine if the Recovery Program continues to offset depletion effects identified in existing Section 7 consultations including the depletions covered by these PBOs. In the most recent assessment (dated February 12, 2021), the Service determined that sufficient progress has been made towards recovery. Sufficient Progress reports can be found at: Sufficient Progress Memo | Upper Colorado Website (coloradoriverrecovery.org).

If you have any questions regarding this consultation or would like to discuss it in more detail, please contact Kathleen Gissing of our Colorado Field Office—Western Team at (970) 628-7183 Email: kathleen_gissing@fws.gov.

cc: Jennifer Ward (jward@usbr.gov)

GUNNISON BASIN RECOVERY AGREEMENT

This RECOVERY AGREEMENT is entered into this 7th day of July, 2022, by and between the United States Fish and Wildlife Service (Service) and the Short Ditch Extension Company (Water User).

WHEREAS, in 1988, the Secretary of Interior, the Governors of Wyoming, Colorado and Utah, and the Administrator of the Western Area Power Administration signed a Cooperative Agreement to implement the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program); and

WHEREAS, the Recovery Program is intended to recover the endangered fish while providing for water development in the Upper Basin to proceed in compliance with state law, interstate compacts and the Endangered Species Act; and

WHEREAS, the Colorado Water Congress has passed a resolution supporting the Recovery Program; and

WHEREAS, on December 4, 2009, the Service issued a programmatic biological opinion (2009 Opinion) for the Gunnison River Basin and the operation of the Wayne N. Aspinall Unit concluding that implementation of specific operation of the Aspinall Unit, implementation of a Selenium Management Plan and specified elements of the Recovery Action Plan (Recovery Elements), along with existing and a specified amount of new depletions, are not likely to jeopardize the continued existence of the endangered fish or adversely modify their critical habitat in the Gunnison River subbasin and Colorado River subbasin downstream of the Gunnison River confluence; and

WHEREAS, Water User is the owner of the Short Ditch Extension Piping Project (Water Project), which causes or will cause depletions to the Gunnison River subbasin; and

WHEREAS, Water User desires certainty that its depletions can occur consistent with section 7 and section 9 of the Endangered Species Act (ESA); and

WHEREAS, the Service desires a commitment from Water User to the Recovery Program so that the Program can actually be implemented to recover the endangered fish and to carry out the Recovery Elements.

NOW THEREFORE, Water User and the Service agree as follows:

1. The Service agrees that implementation of the Recovery Elements specified in the 2009 Opinion will avoid the likelihood of jeopardy and adverse modification under section 7 of the ESA, for depletion impacts caused by Water User's Water Project. Any consultations under section 7 regarding Water Project's depletions are to be governed by the provisions of the 2009 Opinion. The Service agrees that, except as provided in the 2009 Opinion, no other measure or action shall be required or imposed on Water Project to comply with section 7 or section 9 of the ESA with regard to Water Project's depletion impacts or other impacts covered by the 2009 Opinion. Water User is entitled to rely on this Agreement in making the commitment described in paragraph 2.

2. Water User agrees not to take any action which would probably prevent the implementation of the Recovery Elements. To the extent implementing the Recovery Elements requires active cooperation by Water User, Water User agrees to take reasonable actions required to implement those Recovery Elements. Water User will not be required to take any action that would violate its decrees or the statutory authorization for Water Project, or any applicable limits on Water User's legal authority. Water User will not be precluded from undertaking good faith negotiations over terms and conditions applicable to implementation of the Recovery Elements.

3. If the Service believes that Water User has violated paragraph 2 of this Recovery Agreement, the Service shall notify both Water User and the Management Committee of the Recovery Program. Water User and the Management Committee shall have a reasonable opportunity to comment to the Service regarding the existence of a violation and to recommend remedies, if appropriate. The Service will consider the comments of Water User and the comments and recommendations of the Management Committee, but retains the authority to determine the existence of a violation. If the Service reasonably determines that a violation has occurred and will not be remedied by Water User despite an opportunity to do so, the Service may request reinitiation of consultation on Water Project without reinitiating other consultations as would otherwise be required by the Reinitiation Notice section of the 2009 Opinion. In that event, the Water Project's depletions would be excluded from the depletions covered by 2009 Opinion and the protection provided by the Incidental Take Statement.

4. Nothing in this Recovery Agreement shall be deemed to affect the authorized purposes of Water User's Water Project or The Service statutory authority.

5. This Recovery Agreement shall be in effect until one of the following occurs.

a. The Service removes the listed species in the Upper Colorado River Basin from the endangered or threatened species list and determines that the Recovery Elements are no longer needed to prevent the species from being relisted under the ESA; or

b. The Service determines that the Recovery Elements are no longer needed to recover or offset the likelihood of jeopardy to the listed species in the Upper Colorado River Basin; or

c. The Service declares that the endangered fish in the Upper Colorado River Basin are extinct; or

d. Federal legislation is passed or federal regulatory action is taken that negates the need for [or eliminates] the Recovery Program.

6. Water User may withdraw from this Recovery Agreement upon written notice to the Service. If Water User withdraws, the Service may request reinitiation of consultation on Water Project without reinitiating other consultations as would otherwise be required by the Reinitiation Notice section of the 2009 Opinion.

Bill Clayton
Water User Representative

1-27-22
Date

JOHN CLAYTON
Digitally signed by JOHN CLAYTON
Date: 2022.11.01 14:34:33 -06'00'

for Western Colorado Supervisor
U.S. Fish and Wildlife Service

Date

Appendix D

D. Colorado SHPO Concurrence Letter/Programmatic Agreement

PROGRAMMATIC AGREEMENT

AMONG

THE U.S. DEPARTMENT OF THE INTERIOR – BUREAU OF RECLAMATION, BUREAU OF LAND MANAGEMENT, THE U.S. DEPARTMENT OF AGRICULTURE – NATURAL RESOURCES CONSERVATION SERVICE, THE U.S. DEPARTMENT OF AGRICULTURE – FOREST SERVICE ROCKY MOUNTAIN REGION, THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE – MOUNTAIN – PRAIRIE REGION, THE COLORADO STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

REGARDING

THE MANAGEMENT OF WATER CONTROL FEATURES IN THE STATE OF COLORADO

PA Mitigation Proposal for Adverse Effects to Components of Irrigation Systems

Project Proponent: Short Ditch Extension Company

Lead Agency: Bureau of Reclamation

Project Name, Agency Project Number, and Description: Short Ditch Piping Project, Basin-wide and Basin States Projects, Salinity Control Program

The Short Ditch Project proposes to pipe approximately 5,950 feet, install a siphon, and abandon 4,360 feet of the Short Ditch.

Projected Project Construction Date: 2023

Finding of Effect (describe the resource(s) affected by Smithsonian # including type of effect, scope of effect, and other details as needed):

Reclamation has applied the criteria of adverse effect and determined that the proposed undertaking would adversely affect Short Ditch Segment (5DT.1666.3) by piping, adding a siphon, and altering the alignment by removing sections of the ditch. Therefore, Reclamation has determined that the proposed project has a finding of adverse effect on historic properties under 36 CFR 800.5.

Selected mitigation from Appendix B of the PA or other mitigation activity:

The identification of historic properties for this project included the development of a report including photography and mapping of Short Ditch Segment (5DT.1666.3), affected by the undertaking. We propose to reformat (as needed for the webpage) and contribute this information to further develop Appendix B Topic: *X. Local Canal, Canal System, or Regional Irrigation History*. Historic narrative content for the topic will cover the entire length of the Short Ditch. Current images will focus on the impacted segment.

Mitigation for the resolution of the adverse effect(s) stated above in accordance with the PA is agreed upon by the proponent, lead agency, and SHPO/THPO. The scope of the mitigation and timeline for completion shall be commensurate with the adverse effect being mitigated. The proponent agrees to the included schedule to complete the required mitigation. Failure to complete mitigation will result in an

adverse effect to a historic property that will require the proponent and lead agency to negotiate a Memorandum of Agreement to resolve adverse effects to historic properties in accordance with 36 CFR 800.6.

Mitigation for this project will be completed no later than ___December 1, 2025____

The proponent will pay a one-time $400 website hosting fee to PaleoCultural Research Group.

SHPO/THPO concurrence letter will be attached acknowledging the adverse effect and the mitigation proposed.

SIGNATURE PAGE

PROGRAMMATIC AGREEMENT

AMONG

THE U.S. DEPARTMENT OF THE INTERIOR – BUREAU OF RECLAMATION, BUREAU OF LAND MANAGEMENT, THE U.S. DEPARTMENT OF AGRICULTURE – NATURAL RESOURCES CONSERVATION SERVICE, THE U.S. DEPARTMENT OF AGRICULTURE – FOREST SERVICE ROCKY MOUNTAIN REGION, THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE – MOUNTAIN – PRAIRIE REGION, THE COLORADO STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

REGARDING

THE MANAGEMENT OF WATER CONTROL FEATURES IN THE STATE OF COLORADO

Proponent's signature and date Bill Coyner 12 14 22

SIGNATURE PAGE

PROGRAMMATIC AGREEMENT

AMONG

THE U.S. DEPARTMENT OF THE INTERIOR – BUREAU OF RECLAMATION, BUREAU OF LAND MANAGEMENT, THE U.S. DEPARTMENT OF AGRICULTURE – NATURAL RESOURCES CONSERVATION SERVICE, THE U.S. DEPARTMENT OF AGRICULTURE – FOREST SERVICE ROCKY MOUNTAIN REGION, THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE – MOUNTAIN – PRAIRIE REGION, THE COLORADO STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

REGARDING

THE MANAGEMENT OF WATER CONTROL FEATURES IN THE STATE OF COLORADO

Lead agency official signature and date _____ Digitally signed by Ed Warner Date: 2022.12.12 07:48:54 -07'00'

SIGNATURE PAGE

PROGRAMMATIC AGREEMENT

AMONG

THE U.S. DEPARTMENT OF THE INTERIOR – BUREAU OF RECLAMATION, BUREAU OF LAND MANAGEMENT, THE U.S. DEPARTMENT OF AGRICULTURE – NATURAL RESOURCES CONSERVATION SERVICE, THE U.S. DEPARTMENT OF AGRICULTURE – FOREST SERVICE ROCKY MOUNTAIN REGION, THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE – MOUNTAIN – PRAIRIE REGION, THE COLORADO STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

REGARDING

THE MANAGEMENT OF WATER CONTROL FEATURES IN THE STATE OF COLORADO

Agency official signature and date SUZANNE COPPING Digitally signed by SUZANNE COPPING Date: 2022.12.09 12:01:51 -07'00'

Schedule of accomplishments for the mitigation proposal

Date submitted to SHPO/THPO (30-day review/comment for accepting proposal):

November 17, 2022

Date SHPO/THPO letter accepting the proposal:

December 6, 2022

Mitigation kickoff meeting to discuss the proposal with the lead agency, proponent (including any contractors), and SHPO/THPO (must be within 30 days of proposal acceptance):

Progress meetings (must be within 6 months of kickoff meeting and occur at least every 6 months until a draft is submitted to the lead agency):

Date draft submitted to lead agency (30-day review):

Date revised draft final submitted to lead agency (15-day review):

Date draft submitted to SHPO/THPO (30-day review):

Date SHPO/THPO accepts mitigation product and mitigation is considered complete:

Please attach all appropriate supporting documents of the proposal (e.g. historic properties treatment plans, etc.) to this template with initial and final submission.

History Colorado

Mr. Ed Warner
Bureau of Reclamation
Western Colorado Area Office
445 West Gunnison Avenue, Suite 221
Grand Junction, Colorado 81501

RE: Proposed Short Ditch Piping Project, Salinity Control Program
Delta County, Colorado
History Colorado No. 81923

Dear Mr. Warner:

Thank you for your correspondence dated and received August 29, 2022, initiating consultation of the aforementioned project under Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC § 306108), and its implementing regulations, 36 CFR Part 800. Our office requested clarifying information on September 21, 2022, which your office provided on November 17, 2022.

We have reviewed all documentation submitted for this project and agree the defined area of potential effect (APE) and survey methodology are appropriate for the undertaking. It is our opinion additional research and documentation would be necessary to make a comprehensive determination of eligibility for the Short Ditch (5DT.1666), but such would exceed the scope and scale of the current undertaking. Thus, we agree *needs data* is the appropriate determination for the entire Short Ditch at this time. We understand your office will treat that Ditch as eligible for Section 106 purposes. We also concur with your recommendation that the identified segment of the Short Ditch, 5DT.1666.3, *supports* the integrity of that overall linear resource. And we concur 5DT.2879 and 5DT.2880 are *not eligible* for inclusion in the National Register of Historic Places.

Our office concurs the undertaking as described will result in an *adverse effect* to the Short Ditch. It is our understanding that your office plans to utilize Appendix B of the Water Control Features Programmatic Agreement (PA) executed in 2022 to resolve adverse effects for this undertaking. Given the nature of the present undertaking, we agree this course of action is appropriate. Accordingly, execution of a memorandum of agreement in accordance with 36 CFR § 800.6 is not necessary. We have reviewed the draft mitigation documentation and agree such is appropriate for the undertaking.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register eligibility criteria (36 CFR §60.4) in consultation with our office pursuant to 36 CFR §800.13. Also, should the consulted-upon scope of the work change, please contact our office for continued consultation under Section 106 of the National Historic Preservation Act.

History Colorado

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR §800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings. Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

Determinations of National Register eligibility subject to this letter were made in consultation pursuant to the implementing regulations of Section 106 of the National Historic Preservation Act, 36 CFR Part 800. Please note other Federal programs such as the National Register of Historic Places and the Federal Investment Tax Credit Program may have additional documentation and evaluation standards. Final determinations remain the responsibility of the Keeper of the National Register.

Thank you for the opportunity to comment. If we may be of further assistance, please contact Mitchell K. Schaefer, Section 106 Compliance Manager, at (303) 866-2673 or mitchell.schaefer@state.co.us.

Sincerely,

Patrick A. Eidman Digitally signed by Patrick A. Eidman
Date: 2022.12.06 16:12:50 -07'00'

Dawn DiPrince
State Historic Preservation Officer

Appendix E

E. Seed Mix Documentation

Western Native Seed

PO Box 188* Coaldale, CO 81222* 719-942-3935* info@westernnativeseed.com

High Plains/Foothills Riparian Seed Mix

25 % Elymus canadensis (Canada Wildrye)

20 % Deschampsia cespitosa (Tuffted Hairgrass)

15 % Andropogon gerardii (Big Bluestem)

15 % Panicum virgatum (Switchgrass)

15 % Sorghastrum nutans (Indian Grass)

5 % Juncus balticus (Baltic Rush)

2.5 % Eleocharis palustris (Spikerush)

2.5 % Sporobolus airoides (Alkali Sacaton)

High Plains/Foothills Wet Meadow Seed Mix

15 % Bolboschoenus maritimus (Alkali Bulrush)

15 % Elymus canadensis (Canada Wildrye)

15 % Panicum virgatum (Switchgrass)

10 % Eleocharis palustris (Spikerush)

5 % Carex praegracilis (Black Creeper Sedge)

5 % Carex nebrascencis (Nebraska Sedge)

5 % Deschampsia cespitosa (Tufted Hairgrass)

5 % Schoenoplectus acutus (Hard Stem Bulrush)

5 % Schoenoplectus tabernaemontani (Soft Stem Bulrush)

5 % Schoenoplectus americanus (Olney's Three-Square Bulrush)

5 % Juncus balticus (Baltic Rush)

5 % Sorghastrum nutans (Indian Grass)

4 % Spartina pectinata (Prairie Cordgrass)

1 % Carex microptera (Popcorn Sedge)