



— BUREAU OF —
RECLAMATION

Environmental Assessment and Finding of No Significant Impact Pilot Rock Ditch Piping Project

Colorado River Basin Salinity Control Program

Upper Colorado Basin: Interior Region 7

Western Colorado Area Office



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 Pilot Rock Ditch Piping Project

**Bureau of Reclamation Colorado River Basin Salinity Control
Program**

Upper Colorado Basin: Interior Region 7

Western Colorado Area Office

Prepared for Reclamation by SGM, Inc., Grand Junction Office

Cover Photo: Representative project site conditions (SGM, May 2020).

FINDING OF NO SIGNIFICANT IMPACT

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

Pilot Rock Ditch 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 Pilot Rock Ditch Company's (PRDC) Pilot Rock Ditch Piping Project in Delta County, Colorado. Under the legislative authority of the Colorado River Basin Salinity Control Act, Reclamation will fund the Pilot Rock 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 PRDC Pilot Rock Ditch Piping Project.

Decision and Finding of No Significant Impact

Based upon a review of the EA and supporting documents, Reclamation and the Grand Mesa, Uncompahgre and Gunnison (GMUG) National Forest have 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 canal of the Pilot Rock Ditch in the Smith Fork drainage, along with a separate habitat site located on the North Fork of the Gunnison River. The affected locality is the vicinity of the Towns of Crawford and Paonia, and generally speaking includes southeast Delta County. Affected interests include Reclamation, the U.S. Forest Service, the U.S. Army Corps of Engineers, the Town of Paonia, PRDC, 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. The proposed action would impact resources as described in the EA. Mitigating measures were incorporated into the design of the action alternative to reduce impacts. The predicted short-term effects of the proposed action include temporary impacts to vegetation and soil, noise, and traffic associated with construction activity, along with temporary disturbance to wildlife habitat and utilization. The predicted long-term effects of the proposed action include the permanent loss of open water in the open ditch to be piped, along with the loss of a small amount of riparian habitat associated with the open ditch to be piped. Beneficial effects include a reduction of salt and selenium loading in the Colorado River basin, along with the completion of a habitat restoration project that is intended to replace the riparian losses created by the piping of the Pilot Rock Ditch

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 selected alternative will affect public health or safety or a minority or low-income population. The proposal will have no significant impacts on public health or safety. No minority or low-income populations would be disproportionately affected by the proposed action.

3. Unique characteristics of the geographic area. There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas that would be negatively affected by the proposal.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial. 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 predicted effects on the human environment that are considered highly uncertain or that involve unique or unknown risks.

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.

7. Whether the action is related to other actions which are individually insignificant but cumulatively significant. 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; however, significant cumulative effects are not predicted, as described in the EA in Section 3.0.

8. The degree to which the action may adversely affect sites, districts, buildings, structures, and objects listed in or eligible for listing in the National Register of Historic Places. The State Historic Preservation Officer has concurred with a determination of no adverse

effect to historic properties. Cultural compliance documentation for this consultation is included in Appendix C of the EA.

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. Reclamation consulted with U.S. Fish and Wildlife Service (FWS) regarding the effects on threatened or endangered species and critical habitat from the ditch piping component of the Proposed Action (FWS TAILS: 06E24100-2022-F-0064). FWS concurred that the Proposed Action may affect, and is likely to adversely affect, the four endangered Colorado River fishes. The fishes occur downstream of the Proposed Action Area in the Gunnison and/or Colorado River basins, and may be indirectly affected by historic water depletions caused by the consumptive use of water by the PRDC's ditch system. Consumptive loss of water in the Gunnison and Colorado River basins due to agricultural irrigation from the ditch system results in an average annual depletion of approximately 426 acre-feet from the Gunnison River watershed, which affects downstream critical habitat for the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bony tail. PRDC has executed a Recovery Agreement with FWS to ensure compliance with the Endangered Species Act for water depletions in the basin. The annual depletion rate is not expected to change as a result of the Proposed Action. Therefore, it is expected that the Proposed Action would not destroy or adversely modify designated critical habitat for the Colorado River endangered fishes.

Reclamation consulted with FWS regarding the effects on threatened or endangered species and critical habitat from the habitat replacement component of the Proposed Action (FWS TAILS: 06E24100-2022-004912). FWS concurred that the Proposed Action may affect but is not likely to adversely affect designated critical habitat for the western yellow-billed cuckoo.

Endangered Species Act compliance documentation for FWS consultation is included in Appendix B of the EA.

10. Whether the action threatens a violation of Federal, state, local, or tribal law, regulation or policy 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

The environmental commitments located in Section 4.0 of the Final EA will be implemented as part of the Proposed Action.

Approved by:



Ed Warner
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**ANTHONY
EDWARDS**

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CHAPTER 1 – INTRODUCTION

This Environmental Assessment (EA) has been prepared to disclose and evaluate the potential environmental effects of the Pilot Rock Ditch Company's proposed Pilot Rock Ditch Piping Project. The Federal action evaluated in this EA is whether the Bureau of Reclamation (Reclamation) would authorize the use of Federal funds to implement the Pilot Rock Ditch Piping Project. In addition, the USDA Forest Service (USFS) has a connected action of issuing a Temporary Construction Permit and Special Use Authorization to allow project activities on lands administered by the USFS.

This document has been prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ) NEPA regulations at 40 CFR Parts 1500 – 1508 (2020). After agency and public review of the Draft EA, no significant impacts have been identified. Reclamation and USFS have 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 includes two separate components, the Piping Project and the Habitat Replacement Project. These two Projects would occur on two disjunct areas, the Piping Project Area and the Habitat Replacement Project Area (Figure 1).

The Piping Project Area encompasses the portion of the Pilot Rock Ditch (PRD) to be piped, along with associated structures and access roads, and one staging area. The Pilot Rock Ditch Company (PRDC) is a non-profit corporation formed in 2019, and the corporation holds a 19.8 cfs direct flow water right from Little Coal Creek, tributary to the Smith Fork of the Gunnison River. The Piping Project Area is located approximately 4 miles east of Crawford, in Delta County, Colorado, in Sections 22 and 23, Township 15 South, Range 91 West, 6th Principal Meridian.

The Proposed Action would also include activities at a Habitat Replacement Project Area, to mitigate for habitat losses which would result from implementation of the Piping Project. The Habitat Replacement Project lies on private land owned by the Town of Paonia, located on the North Fork of the Gunnison River adjacent to the Town of Paonia's water treatment plant (WTP). The portion of the WTP property where the habitat mitigation activity would occur is referred to as "Section D", and is located approximately 10 miles north-northwest of the PRD. The Habitat Replacement Project is located in Section 12, Township 14 South, Range 92 West, 6th Principal Meridian, in Delta County, Colorado.

Throughout this document, the components of the Proposed Action that are located in the PRD and constitute the piping of a portion of the PRD are referred to as the "Piping Project." The surrounding vicinity that is included in the environmental analysis is referred to as the "Piping Project Area."

Throughout this document, the components of the Proposed Action that are located on the North Fork of the Gunnison River and constitute habitat replacement activities are referred to as either “Section D” or the “Habitat Replacement Project.” The surrounding vicinity that is included in the environmental analysis is referred to as the “Habitat Replacement Area.”

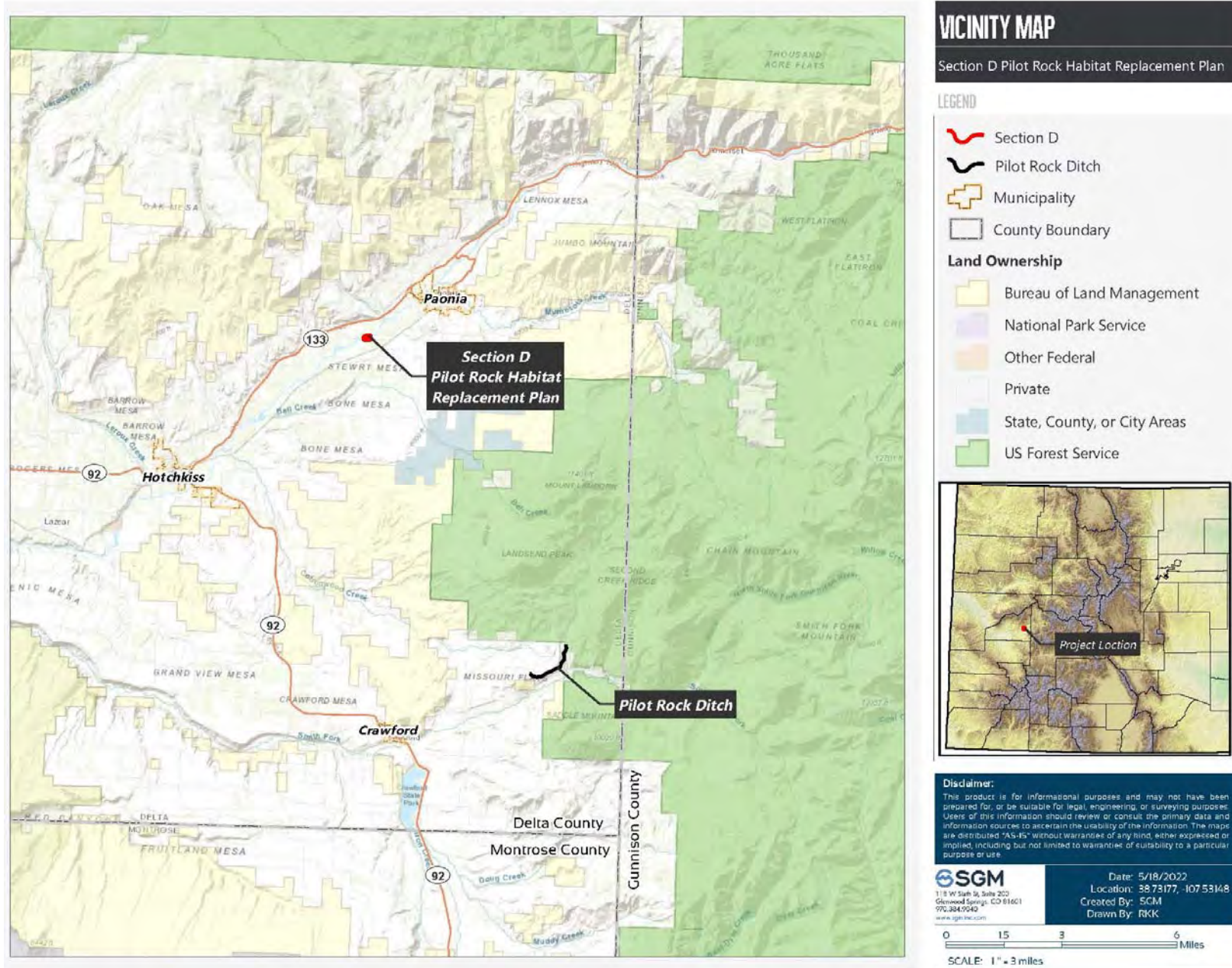
1.2 – Need for and Purpose of the Proposed Action

The need for the Proposed Action is to reduce salinity concentrations in the Colorado River Basin. The purpose of the Proposed Action is to comply with the Colorado River Basin Salinity Control Act (Act). The Proposed Action would comply with the Act by reducing infiltration and seepage from PRD into underlying saline formations through piping of the PRD.

The need for the connected action by the USFS is to allow for the necessary components of the Proposed Action to occur on USFS-managed lands. The purpose of the USFS action is to comply with the Forest’s Resource Management Plan and the analysis requirements of NEPA.

Improvements to the PRD would use best practices to reduce salinity and selenium in the Colorado River, supporting stewardship of both quantity and quality of local water resources. Reducing seepage losses and increasing the reliability of irrigation delivery systems supports the ability of local agriculture to remain resilient to increasingly varied fluctuations in water supply. The estimated salt reduction total for this project is 665 tons/year.

Figure 1: Map of Piping Project and Habitat Project



1.3 – Decision to be Made

Reclamation will decide whether to authorize the use of Federal funds for PRDC to implement the Proposed Action.

The USFS will decide whether to issue a temporary construction permit for use of the existing access, issue long term special use authorization of the existing access, and issue a special use authorization to include appurtenances related to the Proposed Action in the easement.

This EA has been prepared to evaluate adverse and beneficial effects of the Proposed Action and No Action alternatives, and to provide a basis for decisions by Reclamation on whether to fund the Proposed Action, which would be implemented by PRDC. Under the Proposed Action, Reclamation would authorize the use of federal funds to pipe the existing PRD for the purpose of salinity control in the Colorado River Basin. Once funded, PRDC would construct, operate, and maintain the pipeline on 8,200 linear feet of the Pilot Rock Ditch. A project life of 50 years has been identified for this project for the purpose of calculating a project cost per ton of salt controlled over a definite timeframe; however, the functional life of the piping project is expected to be longer than 50 years with proper operation and maintenance. If Reclamation decides not to authorize the use of federal funds to fund the proposed Project, the PRD would not be replaced with a pipeline, and the canal would continue to operate as an open canal.

1.4 – Background

The PRD has delivered irrigation water since 1888, although the PRDC was not officially incorporated until April 2019. The PRD consists of 1.5 miles of earthen ditch from the diversion on Little Coal Creek to the service area. Another 1.8 miles of earthen lateral ditches deliver water to users. In total, the PRD system consists of approximately 3.4 miles of earthen canals delivering irrigation & stock water to 12 users and 345 irrigated acres of grass pasture and hay production. PRD diverts directly from Little Coal Creek, a tributary to the Smith Fork. There is no upstream storage in this system.

PRDC was incorporated in response to a major canal failure along Needle Rock Road in the spring of 2019. PRDC incorporated, contracted with Colorado Water Conservation Board, and supervised repair of the ditch by a local contractor. 120 feet of 48” pipe and 500 feet of temporary liner was installed to repair the break in the main canal above Needle Rock Road. This experience motivated the water users to seek further funding to proactively plan for major improvements to their ditch.

The partnership between local irrigation companies and Reclamation to improve critical irrigation infrastructure puts Reclamation and Department of the Interior in a favorable, supportive role with the agricultural community in Delta County where 72% of the area is federally managed public lands. The proposed improvements to the PRD would help meet not only the goals of the Salinity Control Program, but also meet the following goals of the Colorado Water Plan:

- Supporting a vibrant agricultural economy
- Improving the efficiency of water delivery infrastructure; and

- Promoting a strong & healthy environment by improving water quality in the Colorado River, including aquatic habitat for the four endangered fish species.

1.5 – Relationship to Other Projects

1.5.1 – Salinity Control Program

Reclamation, under the authority of the Colorado River Basin Salinity Control Act, Public Law 93-320, provides funding through the Basinwide Salinity Control Program and the Basin States Program to implement cost-effective salinity control projects in the Colorado River Basin. Reclamation's Western Colorado Area Office has recently utilized Salinity Control Program funds for the following salinity control projects in the vicinity of the proposed Project Area (Figure 2):

- Bostwick Park Salinity Control Project
- C Ditch/Needle Rock Piping Project
- Cattleman's Ditches Pipeline Project Phases I and II
- Clipper Center Lateral Piping Project
- Eastside Laterals Piping Projects ("UVWUA Project 9")
- Fire Mountain Canal Piping Project
- Forked Tongue/Holman Ditch Salinity Control Project
- Gould Canal Improvement Projects A & B
- Grandview Canal Pipeline Project
- Lower and Upper Stewart Ditch Pipeline Projects
- Minnesota Canal & Reservoir Company Salinity Control Projects I and II
- Minnesota L75 Piping Project
- Needle Rock/Lone Rock Piping Project
- North Delta Irrigation Canal Salinity Control Project
- Orchard Ranch Piping Project
- Rogers Mesa WDA Slack & Patterson Laterals Piping
- Spurlin Mesa Lateral Piping Project ("Clipper Project 4")
- Turner/Lone Cabin Combination Piping Project
- Waterdog & Shinn Park Laterals Piping Project
- Zanni Lateral Piping Project

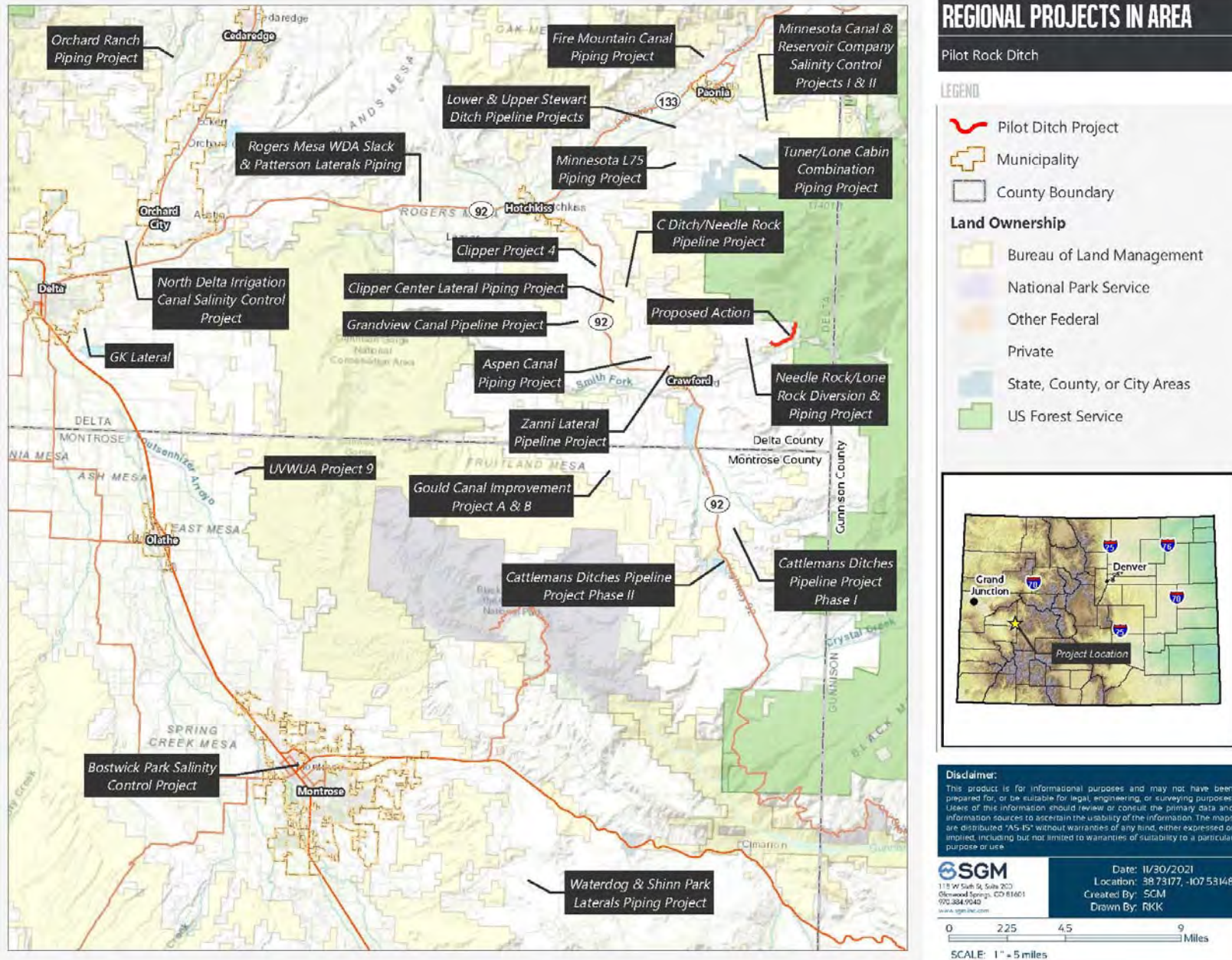
The Proposed Action would be consistent with, and function in concert with, these existing salinity reduction projects to address the need to reduce salinity concentrations in the Colorado River Basin.

1.5.2 – Colorado River Storage Project Basin Funds Projects

Reclamation's Western Colorado Area Office recently utilized Colorado River Storage Project (CRSP) Basin Funds to implement the following piping projects on CRSP-participating projects in the vicinity of the proposed Project Area (Figure 2):

- Smith Fork Project: Aspen Canal Piping Project
- Uncompahgre Project: GK Lateral Piping Project

Figure 2: Regional Salinity Control Projects



1.5.3 – National Resources Conservation Service Regional Conservation Partnership Program Projects

The National Resources Conservation Service's (NRCS) Regional Conservation Partnership Program (RCPP) recently utilized RCPP funds to implement the following piping projects in the vicinity of the proposed Project Area (Figure 2):

- Needle Rock Diversion Project
- Grandview Canal Pipeline Project
- Crawford Clipper Ditch Master Plan Projects (various)

1.6 – Scoping & Public Comment

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 the potential environmental and human environment issues and concerns associated with implementation of the Proposed Action and No Action Alternatives:

- U.S. Forest Service (USFS), Grand Mesa, Uncompahgre, and Gunnison National Forest, Paonia Ranger District, Paonia, CO
- Colorado State Historic Preservation Office (SHPO), Denver, CO
- Colorado Parks and Wildlife (CPW), Gunnison, 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
- Southern Ute Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)

Coordination occurred via meetings, phone calls, and letters from April 2020 through May 2022.

In compliance with NEPA, a previous version of the Draft EA was made available for public comment for a 30-day period, in November 2021. The previous draft included a Habitat Replacement Plan that was subsequently determined to be unworkable. An Updated Draft EA was prepared that analyzed environmental impacts associated with the newly-developed Section D Habitat Replacement Plan in addition to impacts associated with the Piping Project.

Public comments received within the initial 30-day comment period were included as Appendix D to the Updated Draft EA and also incorporated into the document. In compliance with NEPA, the Updated Draft EA was made available for public comment for a supplementary 15-day period, in June 2022. Notice of the availability of the Updated Draft EA was distributed to private landowners adjacent to the Proposed Action, and the organizations and agencies listed in section 5.2.

No additional public comments were received during the supplementary public comment period.

CHAPTER 2 – PROPOSED ACTION AND ALTERNATIVES

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

2.1 – Alternatives Considered but Not Carried Forward

One other project alternative was considered by Reclamation but was eliminated from detailed analysis in accordance with 40 CFR 1502.14. This alternative initially considered included a project to combine the upper Pilot Rock and Gove ditches. This alternative was found to not be sustainable as critical landowner and water user support did not exist to pursue such a project.

As previously described (section 1.6), a previous version of this EA included analysis of a Habitat Replacement Plan that was subsequently found to be unworkable due to landowner concerns. Analysis of the original Habitat Replacement Plan has been removed from this EA and replaced with the Section D Habitat Replacement Plan that is currently proposed.

2.2 – No Action Alternative

Under the No Action Alternative, Reclamation would not provide funding for the piping of the PRD. The existing PRD would continue to be maintained as an open, unlined ditch. Maintenance activities would continue to include dredging of sediment; control of vegetation, invasive weeds, and rodents along the banks; and monitoring and control of seepage and leaks along the canal. The existing open canal and maintenance roads would continue to be used. The measured and estimated levels of seepage and salinity loading would continue. The Proposed Habitat Replacement Plan would not be implemented and conditions on Section D of the Paonia WTP would remain unchanged.

2.3 – Proposed Action

Under the Proposed Action, Reclamation would provide funding to the PRDC through the Salinity Control Program to support the Piping Project, including the upper 8,173 feet of the PRD (approximately 1.55 miles). Reclamation would also provide funding to support the completion of the associated Habitat Replacement Project.

Approximately 1200 feet of the PRD which is proposed for piping is located on public land administered by the USFS. Therefore, the USFS has a connected action of issuing special use authorizations for project activities on lands administered by the USFS not covered by existing authorizations.

The details and specific components of the Proposed Action are shown on Figure 3 (Piping Project Area Detail) and Figure 4 (Habitat Replacement Project Detail).

The total surface disturbance for the Proposed Action is summarized below (Table 1). The majority of the earthwork for the Piping Project would be completed with tracked equipment (track hoes and dozers). The Piping Project would require approximately 1,000 cubic yards of fill; the entirety of which would be obtained from the project area by excavation of the existing canal road. The Habitat Replacement Project does not involve any mechanized earthwork.

The Piping Project would occur largely within the existing disturbed area of the PRD, and would involve restoration of approximately 1.9 acres along the ditch alignment to reclaim the overburden on the buried pipeline, along with approximately 2 acres of staging area. The existing canal road, a poorly maintained ATV trail located on top of the downhill embankment (minimum of ~50 inches wide) would not be restored, and instead would be expanded and improved to allow for future maintenance activities. In addition, areas where structures are installed would not be restored (approximately 0.3 acre). All restored areas would be reshaped to blend with existing topography and revegetated following project construction.

The Habitat Replacement Project is located in the floodway of the North Fork of the Gunnison River, and the entire area receives surface scouring during spring high flows on most years. The project involves three primary activities: the construction of log dams, the hand-planting of riparian vegetation, and the treatment of noxious weeds. All of the activities would use motorized equipment for assistance (ATV/tracked Bobcat type), and would involve vegetation disturbance. However, no excavation or earthwork is proposed.

For all aspects of the Proposed Action, Best Management Practices (BMPs) would be used to minimize impacts of the project on the human and ecological environments. BMPs and other protective measures are incorporated as part of the Proposed Action and are described and analyzed as part of the Proposed Action in Chapter 3 (Affected Environment & Environmental Consequences), and are summarized in Chapter 4 (Environmental Commitments).

Table 1. Pilot Rock Ditch Piping Project Proposed Footprint.

Proposed Action Component	Total Acres of Impact	Acres to Restore/Revegetate
Existing Access Roads	0.0	0.0 ^[1]
Pipeline Overburden in existing trench (approximately 10-ft wide by 8200-ft long)	1.9	1.9
Excavated and Compacted Canal Road (approximately 10-ft wide by 8200-ft long)	1.9	0.0 ^[2]
Structure Construction	0.3	0.0 ^[3]
Staging Areas (one identified area)	2.0	2.0 ^[4]
Habitat Replacement Project	5.22 ^[5]	5.22 ^[5]
TOTAL	11.32	9.12

^[1] The existing access roads require maintenance (grading and vegetation trimming) but no new areas of disturbance are proposed

^[2] The canal road would be maintained free of weeds and vegetation for ongoing inspection and maintenance needs

^[3] The proposed structures are located within the existing disturbance footprint, and would be maintained free of weeds and vegetation for ongoing inspection and maintenance needs

^[4] The staging area is located entirely on an existing irrigated pasture. Restoration would be limited to repairing impacts to the pasture vegetation

^[5] The restoration activities are distributed throughout the Section D parcel.

2.3.1 – Pipeline Construction in Existing Ditch

Under the Piping Project component of the Proposed Action, approximately 1.55 miles of open canal would be converted into buried pipeline. Prior to construction, pipe and other materials would be transported to the staging area and stockpiled. The pipe would be transported to the PRD and set in place within the construction corridor. Large trees and brush within the disturbance corridor would either be removed or mulched on-site and added to the top layer of fill over the pipeline.

The existing canal bed is already below grade, therefore the canal bed would be excavated only to the extent necessary to reach a firm subgrade. The width of temporary disturbance across the corridor would generally be 20 feet to remain within the ditch easement. Where possible, the top layer of soil would be separated from subsurface fill, set aside, and used for restoring the disturbed ground. Subsurface materials would be separated into fines and larger material, with fines used for bedding and backfill.

The initial 384 feet of the pipe is 27” PVC pipe, reduced to 24” PVC for the remainder of the alignment. Following placement and welding of the PVC pipe within the trench, clean native fill acquired from excavation of the canal road would be placed around the pipe. Loose bedding material would be placed to line the subgrade, and the pipe would be lowered into the trench. The pipe would be buried in native backfill, compacted around the pipe itself. Sufficient backfill would be placed to provide 2 feet of overburden, with the overburden compacted by bucket only. Fittings would be installed similarly, but with slightly-increased depth of compacted backfill. Backfill details are given in the project plans. Salvaged topsoil would be placed on top of the overburden to achieve final grade. Reserved topsoil would be replaced on the prepared surface using a trackhoe, without back-dragging the blade (i.e., without smoothing), to create microtopography for reseeding. Sufficient fill for the project is expected to be produced by excavation of the canal road.

Environmental commitments, including appropriate dust suppression, flagging, and signage, would be followed to minimize effects on the natural and human environment during construction (see Chapter 4).

2.3.2 – Structure Construction

The Piping Project would include several structures in addition to the welded PVC pipe. All structures except the transition manhole and tie-in to the existing turnout are located within the first 200 linear feet of the PRD, on USFS-managed lands. All new structures would be confined to the existing 20-foot wide easement.

The following proposed structures are located on USFS-managed lands, in close proximity to each other:

- A new headgate replacing the existing headgate at the same diversion point on Little Coal Creek, including an improved overflow spillway, sediment flush, and trash rack. This structure would be constructed of pre-fabricated components and cast concrete, set on

class 6 roadbase. 48" HP Storm pipe would exit the headgate and discharge to the settling basin.

- A new 75-foot-long by 3-6-foot-wide settling basin at the pipe inlet, lined per Reclamation requirements. The settling basin would be excavated within the existing ditch prism, and lined with geotextile fabric overlain by shotcrete.
- The outlet of the settling basin would incorporate a new measuring flume with a stilling well and data logger, and the 27" PVC pipe would tie into the discharge point of the flume. The 27" PVC pipe would continue down 384 linear feet, then connect via reducer to 24" PVC pipe which would be laid in the remainder of the ditch alignment.

At the western terminus of the Piping Project, the 24" PVC pipe would tie into a 72" diameter pre-cast transition structure with manhole access. 48" HP Storm pipe would exit the transition manhole structure outlet and would tie directly into the existing Turnout #1 structure.

2.3.3 – Restoration

The Piping Project would create an estimated 6.1 acres of surface disturbance, generally on areas of existing disturbance. Only 3.9 acres require restoration (Table 1). The extent of necessary soil and vegetation restoration for the Piping Project has been minimized by the use of existing access roads and the confinement of the pipeline to the existing ditch easement and corridor. The majority of the construction corridor would be used as an access and inspection road after construction, and would be permanently maintained sufficiently free of woody vegetation to allow the passage of vehicles for routine inspection and maintenance. Vegetation restoration needs are limited in the temporary staging area because the staging area is located in an irrigated pasture and no excavation or subsurface disturbance is proposed. The existing pasture vegetation is expected to recover from the temporary impact of material storage within one season. The staging area (2.0 acres) would be reseeded with pasture grass if necessary. Significant vegetation restoration efforts would be needed only on the overburden of the pipeline itself, comprising 1.9 acres.

Following pipeline construction, the overburden of the pipe would be covered by salvaged topsoil, and revegetated for stability and erosion resistance. The revegetation would take place across the several distinct vegetative communities traversed by the PRD, including mixed mountain shrub within the Little Coal Creek drainage area, pinyon-juniper woodlands along the majority of the Project area, and non-irrigated pasture at the western end of the pipeline. In consultation with USFS, an upland seed mix has been selected that is appropriate for use on the USFS-managed lands and the entirety of the Piping Project overburden restoration area. The seed mix includes 25% slender wheatgrass (*Elymus trachycaulus* ssp. *trachycaulus*), 25% western wheatgrass (*Pascopyrum smithii*), 40% Sandberg bluegrass (*Poa secunda* ssp. *sandbergii*), and 10% muttongrass (*Poa fendleriana*). See Environmental Commitment 25 (Chapter 4).

Revegetation would follow each construction phase as appropriate and at the most effective season for soil stabilization and seeding success. Reclamation seeding would preferentially occur as late as possible during the fall season, preferably on snow, to maximize seed germination rates. PRDC would be responsible for complying with the reclamation standards established for the Proposed Action, including monitoring and continued revegetation efforts as needed following project construction.

The overburden on the pipeline would be graded to a 2% slope on top, and a 1.5:1 slope on the side, with salvaged topsoil placed last. The specified upland seed mix would be used at a rate of 40 seeds per square foot (see Environmental Commitment 26, Chapter 4). Methods for ensuring vegetation success include planting at the appropriate time for germination with broadcast seeding methods and watering, as well as mulch to conserve moisture as necessary. All reclamation activity would be performed from the surface of the adjacent access road. As necessary, to ensure replanted vegetation is not overtopped by weeds, a broadleaf spray would be applied at key times by the PRDC, in the course of weed control efforts on the ditch road as well. PRDC would continue to be responsible for complying with the Colorado Noxious Weed Act, including obtaining appropriate pesticide use permits or hiring contractors with appropriate permits, and for managing listed weed species within the ditch easement.

The staging areas would be revegetated following construction, if necessary. Given that no excavation is proposed in the staging area, and that the surface is currently stabilized by a dense growth of agricultural pasture grass, the vegetation is expected to recover quickly after the staged equipment and materials are removed, and only limited reclamation efforts are anticipated to be required. Reclamation efforts could include, but are not limited to, coordinating with the landowner on desired seeding throughout the staging area.

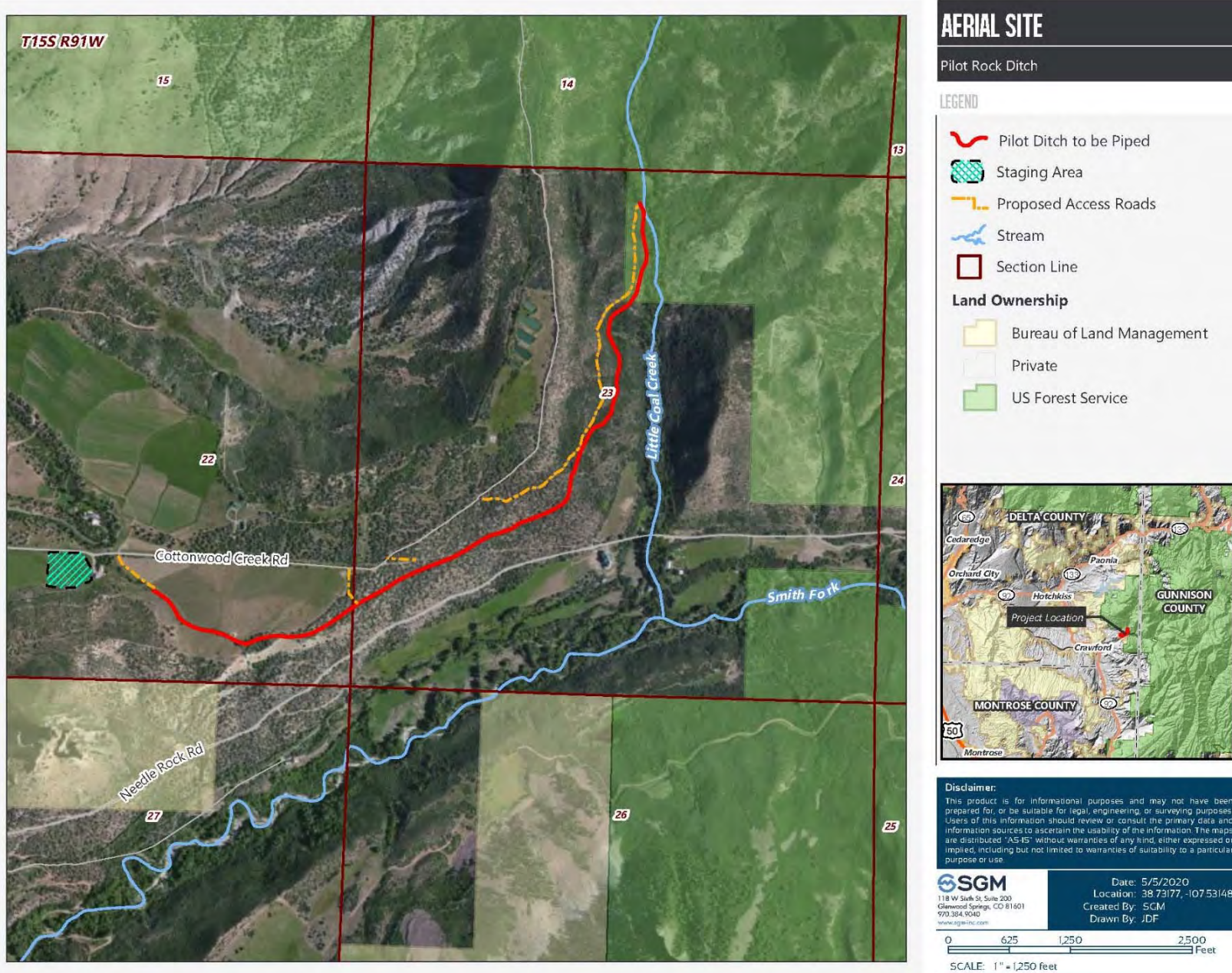
To the minimal extent necessary, the surface would be graded to eliminate minor rutting and to match the surrounding ground surface. The impacted areas would be seeded using an agricultural pasture seed mix selected by the private landowners. Weed control efforts would extend to these areas, although the limited disturbance and robust existing pasture grass vegetation is expected to largely exclude adventitious weed species.

2.3.4 – Right-of-Way and Land Ownership

PRDC is a privately-owned ditch company. No realignments are planned; the ditch would remain in the existing alignment throughout. All lands are private except for the first 1,100 linear feet, which are located in the Gunnison National Forest, managed by the USFS Paonia Ranger District. The portion of the PRD located on the National Forest is within a 20-foot wide ditch easement and the work would remain within that easement.

The Habitat Replacement Project is located entirely on lands belonging to the Town of Paonia, which has been a partner in developing the habitat plan. A license agreement between the Turner Ditch Company, the Pilot Rock Ditch Company, and the Town of Paonia has been negotiated that allows for the hosting of habitat projects on Town property, protects the habitat enhancements in perpetuity and provides the right and obligation for maintenance to the Pilot Rock Ditch Company. This agreement has been signed by PRDC and the Town, and is included in the Habitat Replacement Plan (ERO 2022).

Figure 3: Piping Project Detail



2.3.5 – Habitat Replacement

As part of the Proposed Action, improvements to habitat would occur on Section D of the Town of Paonia's Water Treatment Plant, located on private property approximately 10 miles north-northwest of PRD and the Piping Project Area (Figure 4).

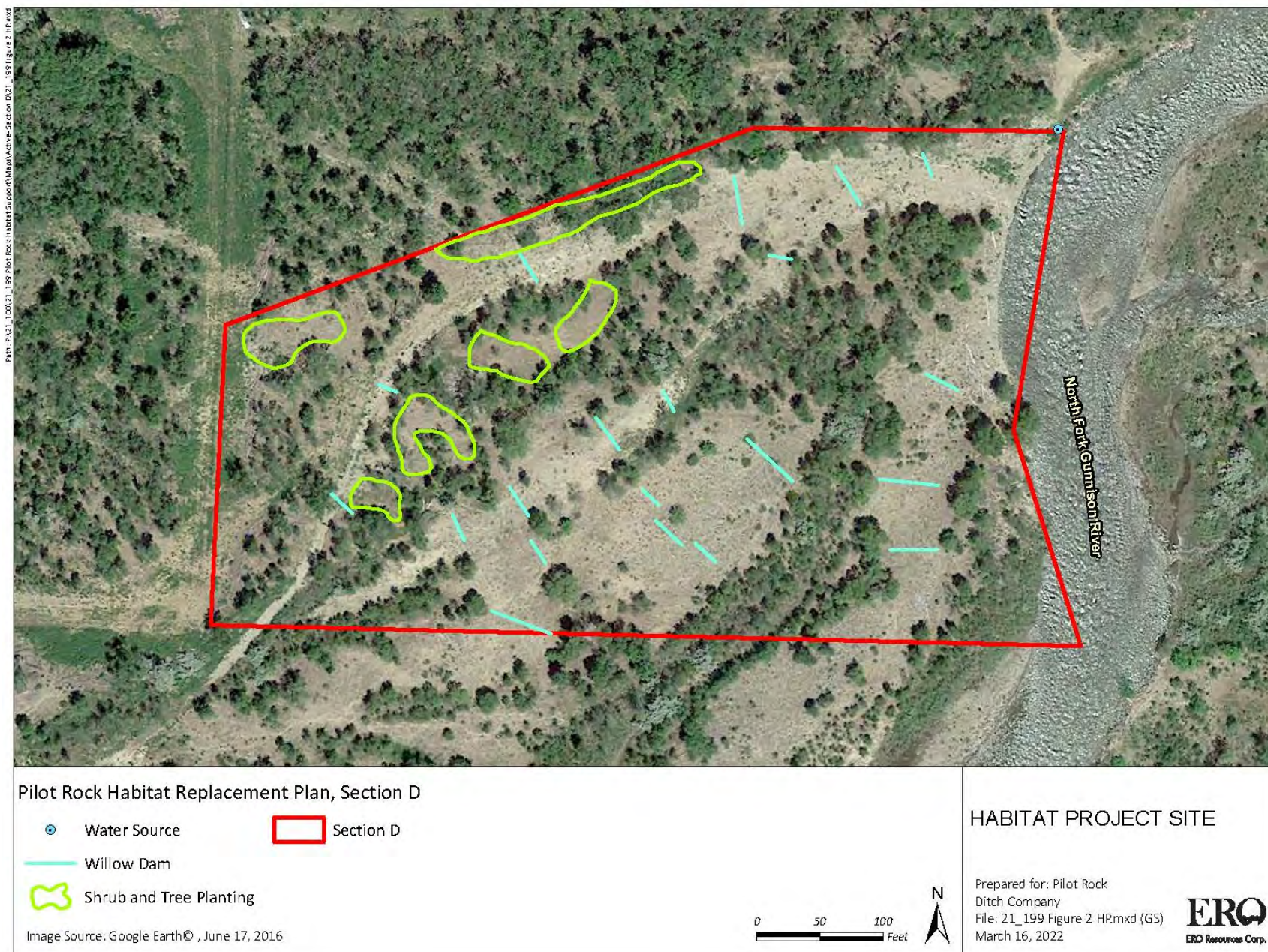
Habitat replacement activities would compensate for the 16.99 habitat units that are expected to be lost due to the cessation of canal seepage after pipeline installation (see Habitat Replacement Plan, ERO 2022). Standard habitat replacement assessment procedures (Reclamation 2018) were used to calculate replacement credits within the 5.22-acre Section D property. As part of the Habitat Replacement Project, log dams would be installed to capture sediment and retain floodwaters, woody riparian vegetation would be planted to increase habitat diversity and function, and noxious weeds would be controlled. An estimated 20.9 credits would be provided by the habitat replacement project.

Approximately 20 log dams would be placed in Section D, using dead cottonwood sourced from other portions of the WTP property. Willow bundles would be used to fill in the channel behind the logs. In general, three logs would be installed in each dam, with the logs tied into the banks of the scoured channels on either side. Trees and shrubs would be planted in suitable locations, based on soil, elevation and water availability. Approximate dam locations and planting areas are shown on Figure 4.

Russian olive, tamarisk, Russian knapweed, and Canada thistle are the most abundant noxious weeds in Section D and control efforts would focus on these weed species. Hand crews with chainsaws or a rubber-tracked trackhoe with thumb would remove larger trees. Smaller tamarisk and Russian olive would be removed with a rubber-tracked skid steer with a mulching head, which would be used to grind the material into a fine mulch. The mulch would be spread over the existing understory. The stumps would be treated with a mixture of Garlon 4 Ultra and Modified Vegetable Oil (or other acceptable herbicides) after they have been cut. Regrowth of Russian olive and tamarisk shoots would require follow-up herbicide treatments. All staging areas needed for temporary storage of the equipment and materials would be located on scoured, non-vegetated cobble beds within Section D.

See the complete Habitat Replacement Plan (ERO, 2022) for further details of the proposed habitat work.

Figure 4: Habitat Replacement Project Detail



2.4 – Construction

2.4.1 – Manpower and Equipment

Equipment used for the Piping Project would likely include:

- Up to 3 tracked excavators for excavation, backfill and moving pipe
- Two front end loaders for loading dump trucks and moving smaller pipe
- Two tandem dump trucks
- One mobile rock crusher may be used for backfilling
- A small bulldozer for rough grading and maintenance of a portion of the site access road

Approximately 3-6 persons would be on-site during the work season. Work would generally be completed during the work week. Heavy equipment trips would be made daily for 3-4 days to transport concrete to the headgate location. All other heavy equipment would make a single trip to the construction site and remain onsite for the duration. Work truck traffic to site would continue on a daily basis during the work week, for approximately 2 weeks assuming the rate of pipeline construction may be 200 to 400 feet per day. Approximately two persons would be on-site periodically between April and August for two summer seasons after construction completion to accomplish revegetation and restoration work. Work would be completed during the work week, and consist of grading/seed spreading, monitoring, and watering activities.

2.4.2 – Access

During construction, access to the Piping Project Area would be from Cottonwood Creek Road, a graded county road. The staging area would be accessed directly off of Cottonwood Creek Road. As shown in Figure 4, four separate access roads extend from Cottonwood Creek Road to the PRD. No additional access roads are planned, and no upgrades beyond routine maintenance are planned for the existing access roads with one exception:

The longest access road, which extends from Cottonwood Creek Road to the headgate (as shown in Figure 4) has developed an excessively rough and rocky travel surface due to erosion, particularly in the southernmost 1200 linear feet (extending from Cottonwood Creek Road down to the elevation of the PRD). This access road is currently suitable for ATV and 4x4 truck access but would not accommodate concrete trucks. The small bulldozer would be used to blade the road and clear large rocks from the travel surface, restoring it to original conditions. Overhanging and otherwise impinging brush would also be cleared from the travel corridor. There would be no cut or fill other than incidentally due to the blading of the road surface. No culverts or road surfacing material would be installed. No alteration of the alignment or expansion of the road corridor is proposed. The remainder of the access roads, including the road on USFS land, would receive routine maintenance limited to running the blade in the road to remove rocks. No new disturbance areas would be created as a result of the road maintenance.

The canal road along the ditch alignment would provide the access for the pipeline construction, operation, and maintenance. The existing canal road would be excavated to provide necessary fill for the pipeline backfill. The new level of the canal road would be flattened and compacted to create an inspection access road, which would occupy the same area as the current road.

Access to the Habitat Replacement Project Area is provided by an existing 2-track road that reaches Section D from the Water Treatment Plant. No upgrades or changes to this road are proposed.

2.4.3 – Staging and Borrow Areas

A primary staging area for the Piping Project would be established at a location approximately 625 feet west of the western point of the PRD shown in Figure 4 (approximately 2 acres). The staging area is located entirely within the boundaries of an existing irrigated field.

Pipe welding would occur at locations determined by the contractor, within the construction corridor or at the staging area.

The minor staging areas needed for the planting, dam construction, and weed treatment in the Habitat Replacement Project would be located on existing disturbed ground, which is abundant throughout Section D as scoured river cobble high-flow channels.

No local borrow areas are included as part of the Proposed Action. It is expected that the necessary backfill for the pipeline would be generated by excavating the existing canal road and embankment.

2.4.4 – Construction Timeframe

Construction would take place during one season, outside of the irrigation season. This is likely to include the last half of the calendar year and the first half of the following calendar year. Regrading, reclamation, and monitoring activities would extend into the subsequent irrigation season.

- **Phase I: Fall-Spring (August through April)**
 - Site preparation including flagging construction limits as needed
 - Vegetation clearing (outside the migratory bird nesting season)
 - Pipeline installation, including trenching, welding, and laying all pipe
 - Restoration/replanting of disturbed areas in the Smith Fork Creek drainage
 - Decommissioning of existing siphon and structures
 - Habitat mitigation tasks
- **Phase II: Summer-Fall (May through November)**
 - Grading, restoration and reseeding along new pipeline alignment, including piped corridor, facility areas, and staging area
 - Monitoring and weed management of reseeded areas.
 - Habitat mitigation tasks, continued

2.4.5 – Operation and Maintenance of the Pipeline and Habitat Mitigation

The Piping Project relies on the impermeable pipeline to achieve the salinity control benefits over a 50-year period. Maintenance costs associated with the proposed pipeline are expected to be minimal

in comparison to the current and ongoing obligation of cleaning and repairing the open channel of the PRD, and would primarily consist of removing any debris from the pipeline headgate. This work would be performed by PRDC as part of routine member duties. The pipeline system would be simple to operate with no special training required on the part of the water users. Water entering the Little Coal Creek pipeline would be measured and controlled using the proposed measuring flume and logger.

Maintenance associated with the Habitat Replacement Project consists of weed monitoring and follow-up treatments, along with annual monitoring of the site to ensure progress towards and maintenance of the habitat conditions specified in the Habitat Replacement Plan. After 5 years, if the Habitat Replacement Project is achieving the targets, monitoring would drop to a 3-year or 5-year interval, with the concurrence of Reclamation. PRDC is ultimately responsible for the success of the Habitat Replacement Project.

2.5 – Permits and Authorizations

2.5.1 – Agreements & Authorizations

If the Proposed Action is approved, the following interagency agreements or permits would be required prior to project implementation:

- Recovery Agreement executed between FWS and PRDC (already completed).
- 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.”).

2.5.2 – Construction Permits & Plans

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

- Stormwater Management Plan, to be submitted to Colorado Department of Public Health & Environment (CDPHE) by the construction contractor prior to construction disturbance.
- 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 construction disturbance (regardless of whether dewatering would take place during construction).
- Certification under CDPHE Water Quality Division Construction Dewatering Discharges Permit COG070000 (if any dewatering is to take place during construction).
- Spill Response Plan, to be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.

- A Truck Route Plan coordinated by PRDC with Delta County Planning Department.
- Access Permits as necessary to authorize all access points associated with the Piping Project, coordinated by PRDC with Delta County.

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

2.5.3 – Natural Resource Protection Laws

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

2.5.4 – Cultural Resource Laws

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

2.5.5 – Paleontological Resource Laws

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

CHAPTER 3 – AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

3.1 - Introduction

This chapter discusses resources that may be affected by the Proposed Action Alternative and the No Action Alternative. For each resource, the potentially affected area and/or interests are identified, existing conditions described, and potential impacts predicted under the No Action and Proposed Action Alternatives. Resources are grouped and addressed sequentially within the following resource categories:

- Physical Resources: Air Quality, Noise, Surface Water, Visual Resources, and Water Quality
- Biological Resources: Agricultural Resources and Soils, Noxious Weeds, Vegetation, Wildlife & Special Status Species
- Social Resources: Cultural Resources, Transportation/Public Safety/Public Access, and Water Rights & Use

This section is concluded with a summary of impacts.

3.2 – Affected Environment and Environmental Consequences

3.2.1 – Environmental Resources Considered but Excluded from Analysis

In order to streamline this EA for the reader, some resources were considered but are not analyzed further due to a lack of foreseeable impacts. Issues determined to be of potential significance, and therefore appropriate for further impact analysis under this EA, are discussed in more detail in this Chapter.

The following issues were determined to be not present or not affected, and are not analyzed in greater detail within this document. The rationale for excluding the resources from further analysis is as follows:

- **Recreation.** There is minor recreational use of the Cottonwood Creek Road adjacent to the PRD, primarily by recreationalists traveling the road to reach public land access points on the Gunnison National Forest. This level of use would not be impacted by the construction process. There is no significant recreation use of the USFS lands in proximity to the ditch easement, due to a lack of nearby public access. The access roads and canal road are not open for public access and use. There is no public access or public use of the Section D Habitat Project Area. The Proposed Action is not expected to have a discernible effect on recreation and, therefore, this resource is not carried forward for further analysis.

- **Tribal Concerns.** The Proposed Action contains land that was occupied by the Ute Tribe, which migrated to the area in the 1600s and occupied the region until expulsion to reservations in 1881 (McDonald 2020). No Indian trust assets have been identified within the Proposed Action Area. No Native American sacred sites are known within the Proposed Action Area. Neither the No Action Alternative, nor the Proposed Action, will have an effect on Indian trust assets or Native American sacred sites. To confirm this finding, Reclamation consulted with the Ute tribes with historic presence in the region. Reclamation provided the tribes with a description of the Proposed Action and a written request for comments regarding any potential effects on Indian trust assets or Native American sacred sites as a result of the Proposed Action. No comments were received.
- **Socioeconomic Effects.** Socioeconomic impact analyses are intended to analyze population-scale, measurable changes in economic assets. The economic asset associated with the Proposed Action is water. Piping the PRD would not result in a change in value of the canal water and, without a measurable change, there are no effects to analyze.
- **Environmental Justice.** The CEQ has provided guidance on addressing environmental justice under NEPA (CEQ 1997) and subsequent interim implementation guidance (OMB 2021). Under the guidance, minority populations are identified where the percentage of minorities in the affected area exceeds 50 percent, or where the minority population percentage of the affected area is meaningfully greater than the minority population percentage of a much broader area. Within the greater Project area, portions of the population are a minority race and/or Hispanic or Latino. The communities, however, would not constitute Executive Order (EO) 12898 populations as the Hispanic or Latino and non-White populations do not exceed 50 percent of the total population and are not meaningfully greater than Colorado's non-White and Hispanic or Latino populations. Non-white minority populations in Crawford and Hotchkiss are below or comparable to Colorado's and Delta County's non-White minority populations (U.S. Census Bureau 2020). Because there are no environmental justice populations presents within or near the Proposed Action Area, effects on environmental justice populations are not expected as a result of this project. Therefore, this resource is not carried forward for further analysis.

All other resources considered and analyzed are presented in the remainder of this chapter. Environmental commitments necessary to mitigate the effects of the project on the human and natural environment are discussed in Chapter 4.

3.2.2 – Air Quality

According to National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency, Delta County meets the requirements for an attainment area, meaning all criteria pollutants are at safe levels. Regulated air pollutants in the County, including carbon monoxide, particulate matter (PM 10 and 2.5), ozone, sulfur dioxide, lead, and nitrogen, are below specific limits set for criteria air pollutants under the Clean Air Act (EPA 2021). Delta County is consistently in attainment although regional air quality is increasingly degraded on a discrete and seasonal basis due to wildfire activity.

No Action Alternative: Under the No Action Alternative, there would be no change in the existing level of air quality at the Piping Project Area or at the Habitat Replacement Site.

Proposed Action: During the construction phase of the Piping Project, trenching, excavation, and dirt work would result in particulate emissions and diesel emissions; however, releases would be minor (two to four pieces of heavy equipment operating at the same time, at most, during the construction phase). This is not significantly different from occasional local air quality impacts associated with ranching activities that require heavy equipment. Once construction is complete, there are no emissions associated with the Piping Project and air quality at the Piping Project Area would return to pre-construction levels.

At the Habitat Replacement Project, there would be minor air quality impacts during the installation of the habitat components. These impacts would include particulate emissions and diesel emissions. The equipment needed to complete the work is limited to a rubber-tracked trackhoe for woody vegetation removal, and pickup truck traffic for personnel transport and planting material. There is no earthwork proposed as part of the Habitat Replacement Project, but the woody vegetation treatment is expected to mobilize particulate matter (PM10 or larger) as a result of the surface disturbance during the treatment. This particulate matter, along with the minor emissions associated with the mobile equipment, is not significantly different from occasional local air quality impacts associated with ranching and farming activities on adjacent properties, which require heavy equipment and significant surface disturbance. After construction is complete, the air quality at the Habitat Replacement Project would return to pre-construction levels. There would be no impacts associated with the ongoing monitoring and follow-up treatment activities.

The Proposed Action would not contribute to a regional trend in air quality, due to the general absence of long-term impacts to the resource.

3.2.3 – Noise

Anthropogenic noise in the Piping Project Area is present at detectable levels due to normal farm activity and machinery operation, traffic on the adjacent Cottonwood Creek Road and the Needle Rock Road, and intermittent heavy machinery operation for road maintenance. These noise levels are relatively consistent year-to-year. The heavy equipment traffic associated with maintenance of the canal occurs throughout the project area during annual maintenance and periodic repairs. Noise levels at the Habitat Replacement Project Area are lower, due to its distance from public roads, and are dominated by noise from the adjacent river channel and occasional/seasonal agricultural machinery on adjacent private properties.

No Action Alternative: Under the No Action Alternative, there would be no change in the existing level of anthropogenic noise at the Piping Project Area or at the Habitat Replacement Project Area.

Proposed Action: Under the Proposed Action, there would be additional noise introduced in the Piping Project Area, primarily due to the operation of heavy equipment during construction. The noise associated with the heavy equipment would be limited to the construction phase and would be largely attenuated and mitigated by the presence of heavy vegetation surrounding the Piping Project Area. The closest residential building is the Linford property at the west end of the Piping Project Area, located approximately 500 feet from the construction area. After construction is complete, the noise level at the Piping Project Area would return to pre-construction levels.

At the Habitat Replacement Project, there would be temporary and minor noise increases during the construction of log dams and removal of Russian olive. The equipment needed to complete the work is limited to ATV, chainsaw, and small trackhoe/bobcat type equipment. After construction is

complete, the noise level at the Habitat Replacement Project would return to pre-construction levels. Follow-up weed treatments and monitoring would not generate appreciable noise, given that activity would be limited to hand-treating weed regrowth.

The Proposed Action would not contribute to any regional trend in noise levels, due to the general absence of long-term impacts to the resource.

3.2.4 – Surface Water

Surface water features in the Piping Project Area include the open canal of PRD itself and Little Coal Creek, a perennial drainage at the east end of the project area that PRD diverts from. There are no other drainages that are shown or named on U.S. Geological Survey (USGS) maps, and no swales or other minor features that exhibit bed and bank channel morphology. The North Fork of the Gunnison River is a perennial drainage and the defining feature of the proposed Habitat Replacement Project location.

Water for irrigation conveyed by the PRD is obtained within the Upper Gunnison watershed (HUC 14020002), and then spread onto farms and fields. A portion of the irrigation water is returned to the North Fork Gunnison watershed (HUC 1402004) via irrigation percolation and surface tailwater return flows. However, the Project Area itself is confined to the Upper Gunnison watershed; all potential impacts related to loss of surface water and curtailment of seepage are confined to that watershed. The PRD is decreed up to a 19.8 cfs diversion from Little Coal Creek, although the actual average diversion amount is 17.3 cfs during normal conditions (CDSS 2021).

Water delivery loss along the canal due to evaporation and seepage in the Piping Project Area is estimated to be about 35% for the 1.55 mile stretch of canal included in the Proposed Action (SGM 2021b). Based on this measurement, around 415 acre-feet of water is lost annually from the Project area.

In the surrounding region, open canals such as PRD are common for irrigation water delivery, and there is currently a significant amount of loss due to evaporation and seepage. Reclamation's Salinity Control Program funds ongoing efforts to control seepage by identifying ditch segments that are suitable for piping or lining, and there is a regional trend towards the conversion of open ditches to closed pipe. These piping projects have established a trend to control evaporation losses from earthen ditches, and the Proposed Action would contribute to this trend.

No Action Alternative: Under the No Action alternative, there would be no change to the existing system. Water delivery would continue from the PRD using the existing open ditch. Water loss from evaporation and seepage would continue. Routine maintenance of the canal would continue. There would be no change to other waters in the Piping Project Area, including Little Coal Creek. There would be no change to waters in the Habitat Replacement Project Area, including the North Fork of the Gunnison River.

Proposed Action: Under the Proposed Action, 1.55 linear miles of existing open canal would no longer be a surface water feature. Based on review of existing Clean Water Act regulations, a written request was submitted to the USACE, asking for concurrence that the project is eligible for permitting under the Clean Water Act, Section 404 through the use of Regional General Permit 5 – Ditch Related Activities in the State of Colorado (RGP-5). The USACE concurred that (a) RGP-5 can be used to permit the impacts to regulated waters, (b) that habitat replacement activities are also

covered by RGP-5, and (c) that no separate pre-construction notification is required. RGP-5 requires a submittal of project documentation to the USACE at least 30 days prior to commencing construction.

Under the Proposed Action, the current open ditch conditions on PRD would be converted to a pipe. This represents the loss of this open water resource. There would be minor impacts to the channel of Little Coal Creek at the location of the PRD headgate associated with the construction of the new headgate structure. These impacts would be within the existing disturbance footprint of the existing gate, would not alter channel morphology or downstream water flow, and would be completed during periods of low flow.

There would be no direct impacts to the surface water of the North Fork of the Gunnison River, as all project activities are outside the active channel of the River. The habitat replacement activities, specifically the construction of the log dams, are intended to capture sediment and occasional floodwaters, and would contribute to a minor increase in the amount of water that is retained on the floodplain after flood events.

The Proposed Action would contribute to regional ditch piping efforts, which are reducing the extent of open waters but are also reducing the amount of surface water lost to evaporation and seepage.

3.2.5 – Visual Resources

The viewshed along the PRD includes irrigated farm fields interspersed with native woodland vegetation on Missouri Flats, and the viewshed along the steep slopes and within the National Forest boundaries is dominated by native vegetation. Vegetation directly adjacent to the canal is the dominant visual component for the majority of the Piping Project Area, and consists of native woodland and mixed mountain shrub. The portion of the Piping Project on USFS-managed lands is currently managed under the existing 1983 Forest Plan, as amended (USFS, 1983). The 1983 Forest Plan does not contain specific management restrictions for this area to protect visual resources, in recognition of the relatively high level of existing visual impact created by surrounding infrastructure and access roads, including the PRD infrastructure. These impacts are primarily on private lands and there is no trend or reasonably-foreseeable future action that would significantly change the level of visual impact in the area.

The viewshed within the Habitat Replacement Area is entirely dominated by mixed woodland/riparian vegetation. The site is flat, with minimal surrounding topography, and screened on all sides by the riparian woody vegetation growing in the floodplain. The viewshed is limited to the viewer's immediate vicinity.

No Action Alternative: The No Action Alternative would have no effect on visual resources on private or USFS lands. Visual resources would remain unchanged.

Proposed Action: Under the Proposed Action, the level of change to the visual characteristics of the landscape in and around the Piping Project Area during construction would be moderate, and the level of change after construction would be low.

During the period between trenching and successful reclamation/reseeding, a linear scar along the pipeline could be visible intermittently along Needle Rock Road. Heavy equipment and

construction traffic would be present in localized areas over the short term. Construction equipment and construction operations in the Little Coal Creek drainage on USFS ground would be completely hidden from public view by surrounding vegetation and topography.

The short- and long-term visual changes on the USFS-managed lands would be compatible with current management guidance. Generally, the Piping Project would create a moderate visual change during construction, and after construction the PRD would be substantially unnoticeable and not significantly different from current conditions.

No portion of the Habitat Replacement Project occurs on public lands or would affect visual resources on public lands. The installation of the log dams would be unnoticeable even from adjacent properties. The riparian plantings would moderately increase the level of woody vegetation in the Section D property, which is already dominated by woody vegetation and screened from view from all accessible points by intervening topography and vegetation.

The Proposed Action would not contribute to a regional trend in visual resource impacts, due to the absence of long-term effects.

3.2.6 – Water Quality

Irrigation practices in the region which result in deep water percolation through Mancos Shale contribute to downstream selenium and salinity levels, adversely affecting the water quality of the Colorado River Basin. Concentrations of selenium in the North Fork of the Gunnison River account for about eight percent of the selenium load in the Lower Gunnison River Basin (CDPHE 2011). Regionally, the extensive irrigation infrastructure contributes incrementally to salinity/selenium loads in downstream waters.

The effects of percolation and selenium loading are felt in waters directly impacted by the Proposed Action. All streams and waterbodies in the Piping Project Area are listed as Fully Supporting all uses per CDPHE 305(b) standards. However, the North Fork of the Gunnison River is directly adjacent to the Habitat Replacement Area, and is listed as 303(d) Impaired for dissolved Manganese and Temperature, affecting its ability to support Water Supply Use, and Aquatic Life Use, respectively.

Note that PRD supports irrigation which results in percolation and tailwater discharges to Cottonwood Creek, below the north side of Missouri Flats. Cottonwood Creek has been classified as impaired waters in accordance with Section 303(d) of the Clean Water Act, due to the effects of selenium on aquatic life (CDPHE 2016). In 2008, 2010, and 2012, Cottonwood Creek was assessed as Impaired for Aquatic Life usage, although the most recent assessment in 2016 upgraded the Aquatic Life status to Good (CDPHE 2021). However, no portion of the Piping Project occurs in the portion of the PRD service area that discharges to Cottonwood Creek. The Piping Project Area is located entirely within the Smith Fork drainage, which is not 303(d) impaired and is Fully Supporting for all uses.

No Action Alternative: Under the No Action alternative, irrigation practices would continue, with seepage from the canal contributing an estimated 665 tons of salt to the Smith Fork drainage and downstream waters, along with an unquantified amount of selenium.

Proposed Action: Under the Proposed Action, replacing the open ditch with pipe would eliminate seepage from the piped section of the ditch system, and therefore is estimated to remove 655 tons

of salt loading into the Smith Fork and the downstream Colorado River basin on an annual basis. In addition, an unquantified amount of selenium would be prevented from entering the Smith Fork and eventually the Colorado River watershed.

There would be no change in the salt or selenium loading occurring in the 303(d) impaired water of Cottonwood Creek, since the Proposed Action would not alter the amount or schedule of irrigation that is providing percolation and tailwater flows to this drainage.

The Habitat Replacement Project would not directly alter water quality in North Fork of the Gunnison River, although the sediment capture provided by the log dams may contribute to an incremental decrease in sediment loading in the River during flood events. However, the proposed habitat treatments include vegetation treatments that are intended to result in a greater abundance of riparian vegetation, and there is a potential for a long-term indirect benefit to the temperature of the River due to additional shading provided by the planted vegetation.

The Piping Project would contribute to the regional ditch piping efforts, which are incrementally reducing the salinity and selenium loads in the downstream major rivers (see section 1.5 for related projects in the region). The Habitat Replacement Project would contribute to regional efforts to improve riparian habitat conditions, which are likely to generate minor improvements in regional water quality trends.

3.2.7 – Agricultural Resources and Soils

It is the policy of the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) to “maintain and keep 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). NRCS identifies categories of farmlands of national and statewide importance in the region, based on soil types and irrigation status. The Project Area contains one type of farmland of national and statewide importance. Appendix A contains a detailed soil map for the Project Area and Habitat Area.

The western end of the Piping Project, including approximately 1,100 linear feet of the total 8,200 linear feet of piping, crosses Cerro Loam soils. Cerro Loam has been classified as Prime farmland if irrigated, however the area is not currently irrigated (USDA 2021).

The major mapped soil units found in the Piping Project Area and traversed by the PRD are cobbly stony outwash alluvium deriving from basalt. These overlay soil types derived from Mancos Shale, which formed in a marine environment that now contribute salinity and selenium loading in the Colorado River basin.

The Habitat Replacement Project is located within the floodplain of the North Fork of the Gunnison River, and is entirely underlain by unclassified Flooded Fluvents, consisting of alluvium derived from the surrounding sedimentary rock hillsides and upstream igneous intrusions. This soil type is not classified as farmland of national or statewide importance.

No Action Alternative: The No Action Alternative would have no effect on Prime Farmlands, Unique Farmlands, or Farmlands of Statewide Importance. Farmlands in the Project Area would continue to

produce as in the past. Salinity loading from irrigation water contact with Mancos Shale-derived soils in the current irrigation ditch system would continue as it has in the past.

Proposed Action: Under the Proposed Action Alternative, installation of the buried pipe would cause temporary disturbance to soils that are not in irrigated agricultural production and not designated as agriculturally significant by NRCS. No farmlands would be permanently removed from production as a result of the Proposed Action. The PRD conveys irrigation water to agriculturally significant lands including irrigated Cerro Loam areas. However, no change in the configuration of PRD-irrigated lands would occur as a result of the Proposed Action and no interruption to agricultural production would occur. No part of the irrigation season is expected to be lost during implementation of the Proposed Action, and the Proposed Action would not contribute to a regional trend in soil impacts.

To minimize soil erosion during implementation of the Proposed Action, any topsoil would be reserved prior to excavation, replaced on the overburden surface following pipe installation, then reseeded with the USFS-selected drought-tolerant seed mix (see Environmental Commitment 25).

The Habitat Replacement Project would have no direct effect to any soils, being located on scoured fluvaquents. It would have no indirect effect on the surrounding soils, since the activity is unrelated to irrigation, excavation, or other soil-impacting activities.

3.2.8 – Noxious Weeds

The Colorado Noxious Weed Act designates undesirable plants that are considered a threat to Colorado's natural resources. PRDC is responsible for complying with the Colorado Noxious Weed Act at the Piping Project Area and at the Habitat Replacement Project. Impacts from weed infestations include the loss of forage for wildlife and livestock, decreased availability of habitat for wildlife, and a loss of biodiversity relative to undisturbed areas.

The vicinities of both the Piping Project and the Habitat Replacement Project contain weed species occurring in typical background concentrations. Human activity on private and public lands continues to create disturbed areas that are vulnerable to weed infestation, and human activity provides transport vectors that allow weeds to reach and colonize those areas. However, the Piping Project Area itself was found to contain only two State/County listed weed species (CDA 2021, Delta County 2020) during site evaluations performed in May 2020.

- Musk thistle (*Carduus nutans*) – List B: this species occurs in sporadic patches along the canal road, with a single notable infestation. List B weeds must be managed to stop continued spread.
- Common mullein (*Verbascum thapsus*) – List C: this species occurs in sporadic low densities, primarily on USFS lands near the diversion headgate. List C species are so widespread they are not currently subject to requirements for eradication.

The Habitat Replacement Project was specifically designed to include areas where Russian olive (*Eleagnus angustifolia*, List B), Russian knapweed (*Acroptilon repens*, List B), and Canada thistle (*Cirsium arvense*, List B) had degraded the riparian corridor.

No Action Alternative: Under the No Action alternative, there would be no change to invasive species in the Piping Project Area or Habitat Replacement Project Area. Weeds would continue to exist at

current levels along the canal road and access roads, and along riparian corridors. The existing abundance of musk thistle presents a small potential for infestation along the canal road. The weed abundance at Section D would remain.

Proposed Action: Under the Proposed Action, weeds may be spread to the Piping Project Area during the construction phase from tracked equipment, and existing weeds may be spread within the disturbed construction corridor. No imported fill is proposed, so it is unlikely that new weed species currently absent in the surrounding area would become established.

PRDC would continue to be responsible for complying with the Colorado Noxious Weed Act, including obtaining appropriate pesticide use permits and managing listed weed species within the ditch easement.

Risk of expanded weed presence as a result of the Proposed Action would be mitigated by power-washing construction equipment to be sure it is free of soil and debris prior to entering the construction site, by timely weed treatment, and by re-establishing drought-tolerant, non-invasive vegetation within the portion of the disturbed corridor. These mitigation measures have been incorporated into the Environmental Commitments (Chapter 4, items 11-13, 18, 19).

The Habitat Replacement Area would experience beneficial effects over the long term, since restoration seeding and riparian shrub planting is proposed for the area of weed infestation, in concert with ongoing weed monitoring and treatment. The weed infestation areas would be treated by mechanical removal and chemical herbicide (Russian olive), and biological control (Russian knapweed and Canada thistle). The target outcome of the Habitat Replacement Plan is to reduce total coverage of weeds in Section D to less than 5% from the current 15% coverage.

The Proposed Action has the potential to contribute to the ongoing persistence of weeds in the region, but the control efforts incorporated into the Environmental Commitments would mitigate the impacts, and the Habitat Replacement Project is specifically designed to control weeds in the local area.

3.2.9 – Vegetation

Piping Project Area: The PRD traverses several vegetation community types and carries irrigation water seasonally from mid-April through October. The open water and fringe seepage from the canal supports a narrow and discontinuous riparian fringe habitat along the canal, primarily coyote willow (*Salix exigua*). An access road parallels the canal; this canal road is only occasionally maintained, and supports a patchy vegetation of ruderal herbaceous species.

The portion of the PRD included in the Piping Project Area is predominantly excavated into a steep hillside. The downhill embankment is steep and heavily vegetated, and some portions of the Piping Project Area show minor evidence of seepage through the embankment to support riparian vegetation on the top of the embankment slope. Without exception, riparian vegetation does not extend down the embankment more than 20-30 feet. The uphill embankment is sufficiently steep and elevated above the level of the canal that there is no discernible impact of the canal water on the habitat on the uphill side. In general, the surrounding mesic woodland extends to the edge of the PRD on the uphill side, although short access roads do reach the PRD on the uphill side in two locations.

The PRD is surrounded by woodland and mixed mountain shrub typical of mid-elevation habitats in western Colorado. Vegetation conditions along the PRD in the Piping Project Area can be described as three distinct linear habitat types, which extend in parallel for the length of the Piping Project, and taken as a whole comprise the representative vegetation for the Piping Project Area.

- Within the channel of the PRD itself, the upper 700 linear feet are bare mineral soil. The remainder of the PRD canal supports a coyote willow population, which increases in density with distance from the headgate, but is generally a single line of plants approximately 5 feet wide. Truly aquatic/emergent vegetation is nearly absent from the PRD, due to the seasonal nature of flows which expose the channel bottom for long periods of the year, and is limited to a few small patches of broadleaf cattail (*Typha latifolia*) with minimal habitat value.
- On the top of the downhill embankment, vegetation is dominated by ruderal adventitious herbaceous species and saplings of oakbrush (*Quercus gambelii*) and serviceberry (*Symphoricarpos rotundifolius*). Occasional but repeated disturbance on the top of the embankment occurs through clearing of the inspection trail, and this limits the establishment of more diverse or mature vegetation.
- On the downhill slope of the lower embankment, there is a discontinuous strip of narrowleaf cottonwood (*Populus angustifolia*), predominantly located just below the crest of the embankment on the downhill side. The cottonwood strip intergrades rapidly into native woodland and mountain shrub vegetation on the downhill embankment.

The landscape surrounding the Piping Project Area is undeveloped mid-elevation woodland, transitioning from mixed mountain shrub and oakbrush to pinyon-juniper. There are no reasonably-foreseeable actions planned for the region that would contribute to a changing trend in vegetation characteristics. Ranch activity is ongoing, and the portions of the National Forest within and adjacent to the Piping Project Area do not contain valuable timber that would be likely to be offered in a timber lease.

Reclamation's April 2018 *Basinwide Salinity Control Program: Procedures for Habitat Replacement* were applied in the Piping Project Area to quantify the existing habitat value of the wetland and riparian habitat that has the potential to be lost due to the loss of canal seepage following project construction. The existing wetland and riparian habitat with the potential to be lost has a value of 16.99 habitat units (SGM 2021a).

Habitat Replacement Area:

Riparian and wetland vegetation within the habitat site is relatively sparse due to flooding and scouring in the spring; diversity is also relatively low. Native riparian vegetation includes primarily cottonwoods (*Populus* spp.), coyote willow (*Salix exigua*), and limited grasses and forbs. At least 40 percent of the vegetation is stressed by lack of water, or damaged by springtime flooding. Weeds cover about 15 percent of this area, and include Russian olive, Russian knapweed, and Canada thistle.

No Action Alternative: Under the No Action Alternative, there would be no impact to vegetation. Minor ongoing maintenance, vegetation clearing, and weed treatment would continue along the PRD. No impacts to the current vegetation at the Habitat Replacement Area would occur.

Proposed Action: At the Piping Project Area, most impacts would be confined to the ditch prism and associated canal road. Fringe riparian habitat would be lost due to disturbance from construction and due to loss of water seepage from the canal. There is no permanent impact or loss of vegetation outside the Piping Project Area, due to the use of existing access roads and the confinement of construction activity to the ditch alignment itself.

Consistent with the Colorado River Basin Salinity Control Act, to compensate for the loss of habitat values that would result from implementation of the Proposed Action, PRDC developed a Habitat Replacement Plan (HRP) (ERO 2022). The HRP details how PRDC will implement the habitat replacement project component of the Proposed Action. The habitat replacement project is anticipated to produce 20.9 habitat credits to offset the 16.99 habitat units lost due to project implementation. In addition to the log dam construction barrier and the beneficial retention of sediment and floodwaters, there would be beneficial changes to the riparian vegetation along the North Fork of the Gunnison River as a result of the HRP, which includes restoration planting and weed management in degraded riparian areas.

Vegetation conditions at the Habitat Replacement Project Area are expected to improve in the future due to active management on the part of the PRDC, including riparian woody vegetation plantings, sediment and water capture by the log dams, and ongoing weed removal and suppression. These factors would be expected to increase the coverage, diversity, and vitality of native vegetation communities while reducing the extent of bare ground and weeds.

The Piping Project is not expected to contribute to regional trends in vegetation, given the minor amount of vegetation removal on existing disturbance, and the absence of an identifiable long-term trend in the area. The Habitat Replacement Project is expected to contribute to the regional efforts of a large and informal coalition of actors to improve riparian vegetation diversity and abundance through active management.

3.2.10 – Wildlife & Special Status Species

The Little Coal Creek drainage area and the Piping Project Area in general are heavily vegetated, primarily with a dense pinyon-juniper woodland as described in section 3.2.9 Vegetation. Wildlife present in the area likely includes the entire suite of western Colorado mammal fauna, including elk, deer, fox, coyote, mountain lion, bear, and a wide range of small mammals. Migratory birds frequent the area, attracted by the perennial water sources and the diversity of vegetation types. Fish are present in Little Coal Creek (primarily brown trout and brook trout).

The Piping Project Area, especially the western portion located on the steep south-facing slopes and mesa top of Missouri flats, is mapped as mule deer and elk severe winter range (CPW 2021, Appendix A). This is due to its proximity to water sources and favored summer habitats, while offering lower winter snowpack depths and a variety of vegetation types for cover and browse. The landscape is partially fragmented by the public Cottonwood Creek Road and private access roads and driveways. However, the predominant cause of fragmentation is the abundant irrigated and unirrigated pasture lands. In the Piping Project Area vicinity, approximately 50% of the land area has been cleared for agriculture. These pastures offer foraging opportunities for wildlife, but provide minimal cover or vegetative diversity, and the abundant fences create barriers to free dispersal and habitat utilization.

It is likely that deer and elk migrate through the Piping Project Area for foraging in winter, and some amount of bedding occurs in the denser vegetation. However, livestock fences are frequent barriers to natural movement throughout the area. In general, the Piping Project Area itself is subject to a significant level of existing disturbance, due to canal operation and maintenance including routine weed spraying, system monitoring and operation, and annual ditch cleaning with heavy equipment (typically occurring in the late winter). In the larger vicinity of the Piping Project Area on Missouri Flats, farming activity, residential development and roads present a year-round, persistent disturbance to wildlife.

The Habitat Replacement Area supports a wider riparian corridor and active floodplain associated with the North Fork of the Gunnison River. Vegetation is sparse and dominated by cottonwoods and willows with a significant Russian olive component and a scoured understory, as described in section 3.2.9 Vegetation.

The Habitat Replacement Area is mapped as Severe Winter Range for elk and mule deer (CPW 2021, Appendix A), given its location in the low-elevation valley surrounded by higher terrain. The landscape surrounding the Habitat Replacement Project is highly impacted and fragmented by roads, agriculture, and rural residential areas. It is likely that deer and elk migrate through the area in winter, and some deer are likely to be seasonally resident in the area during winter. It is unlikely that elk are ever resident on the Habitat Replacement Area itself, given the lack of herbaceous vegetation for grazing. The site is more suitable for browse foraging, and therefore more attractive to deer than elk.

A Biological Memo Report has been prepared that provides an assessment of Special Status Species, including ESA-listed species, USFS Sensitive Species, and migratory birds including raptors within the Piping Project Area (SGM 2021b). A Biological Memo Addendum has been prepared that provides an additional assessment of Special Status Species within the Section D Habitat Replacement Area (SGM 2022). The assessed species were selected based on the USFWS IPaC database (USFWS 2021, 2022). The assessments jointly included nine ESA-listed species (Canada lynx, gray wolf, Gunnison sage-grouse, Mexican spotted owl, yellow-billed cuckoo, Colorado pikeminnow, razorback sucker, humpback chub, bonytail), one Candidate species (monarch butterfly), and one USFS Sensitive Species (northern goshawk). The USFS Sensitive Species was selected from the Region 2 sensitive species list in consultation with USFS staff. Of the evaluated species, only the Candidate monarch butterfly, the Threatened yellow-billed cuckoo, and the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail are either potentially present in the Proposed Action area or have critical habitat which has the potential to be affected by the Proposed Action.

A nesting raptor survey was completed for the Piping Project Area. No raptor nests were located, and no territorial displays were incited, during the comprehensive call-playback survey (SGM 2021b). The Habitat Replacement Project Area was not formally surveyed for nesting raptors, due to the minimal disruption posed by the nature and extent of the work, the sparse vegetation present, and the absence of vegetation suitable for supporting nesting raptors. No raptor nests or territorial displays have been observed at the Habitat Replacement Project during repeated visits to the site.

No Action Alternative: Under the No Action Alternative, there would be no new effects on wildlife or special status species. The PRD would continue to operate as it has historically. Salinity and selenium discharges to downstream waters would continue to contribute to degradation of aquatic habitat in the Colorado River Basin.

Proposed Action: Under the Proposed Action Alternative, a small amount of vegetation would be removed from the Piping Project Area during the construction phase. A temporary increase in construction noise, dust, emissions, and a general increase in human activity would occur throughout the Piping Project Area over the winter construction season. Wildlife could be displaced by the increased human presence, though not during critical breeding seasons for most wildlife. The area is within severe winter range for elk and deer established by the CPW, but the impacts are located at the edge of the designated habitat zone, and would be limited to the construction phase only. Once construction is complete, the conditions would be substantially similar to existing habitat conditions on a regional landscape scale. The implementation of the Proposed Action would not be expected to significantly degrade the habitat conditions that support winter elk and deer use, nor would the Proposed Action directly limit elk and deer use of the habitat during the winter. The Proposed Action would be expected to limit the utilization of the winter habitat in the Piping Project Area to some degree for a single season during construction. The Proposed Action would temporarily contribute to the regional trend in wildlife habitat disruption due to increased human activity, but would not contribute to the trend after construction is complete.

The Proposed Action would result in the loss of a small amount of riparian habitat along the PRD which is valuable and limited in the local area. As described in section 2.3.5, the Colorado River Basin Salinity Control Act and related amendments require the replacement of fish and wildlife values lost from implementation of salinity control projects, and the Habitat Replacement Project would be implemented to replace these lost values.

The Proposed Action would result in improvement in riparian habitat conditions in the Habitat Replacement Project Area as a result of the planned woody vegetation planting and weed treatments in degraded riparian areas. Wildlife use of the area would likely be displaced during the construction process as a result of the significant and novel human presence and activity. Once construction is complete and vegetation treatments establish, wildlife usage of the Section D area may increase as a result of the improvement in vegetation cover, shade, and browsing resources.

The Biological Memo Report and Addendum (SGM 2021b, 2022) provide detailed discussion of potential impacts to Special Status Species associated with implementation of the Proposed Action. In summary, the potential impacts are:

- **Yellow-billed Cuckoo:** Based on informal consultation with USFWS (C. Clayton, Jan 2020), the habitat conditions on Little Coal Creek at the upstream end of the Piping Project are not consistent with the habitat needs of the cuckoo. A conservation measure prohibiting riparian vegetation removal during the cuckoo's breeding season (June 15 – August 15) is sufficient to avoid any potential impact to the species. There would be no effect to the species based on the implementation of this conservation measure (included in Chapter 4).

Based on informal consultation with USFWS (T. Ireland, Mar 2022), Section D and the Habitat Replacement Area are within designated Critical Habitat for the cuckoo. Actual habitat conditions on the site are not highly-suitable for cuckoo nesting or foraging, given the absence of dense riparian vegetation. However, the removal of Russian olive from the habitat site would temporarily degrade habitat suitability within the designated Critical Habitat unit. The degradation would be offset once the riparian vegetation plantings establish and mature (estimated within 5 years). A single visit to the site would be conducted by a permitted cuckoo surveyor to confirm absence during the 2022 breeding season. In

combination with a conservation measure prohibiting riparian vegetation removal in proximity to the cuckoo's breeding season (May 31 – September 1), there would be no effect to the species based on the implementation of these conservation measures (included in Chapter 4). For the Critical Habitat, a determination of may affect, not likely to adversely affect was reached based on the implementation of these conservation measures.

- **Colorado River Endangered Fish:** The Proposed Action Area does not lie within the ranges of the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. Based on previously issued programmatic biological opinions that all depletions within the Upper Colorado River Basin may adversely affect the four fishes, it is expected that the Proposed Action may affect, and is likely to adversely affect, the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. PRDC has executed a Recovery Agreement with USFWS to ensure their activities are covered under the Gunnison Basin PBO and in compliance with the ESA. The signed Recovery Agreement is included in Appendix B.
- **Colorado River Endangered Fishes Critical Habitat:** Consumptive loss of water in the Gunnison River basin due to PRDC's agricultural irrigation practices results in depletions from the Colorado River Basin, affecting downstream critical habitat for the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. The estimated historic average annual water depletions due to operation of the PRDC system is 426 acre-feet. This amount is not expected to change as a result of the proposed ditch piping. PRDC has executed a Recovery Agreement with USFWS to ensure their activities are covered under the Gunnison Basin PBO and in compliance with the ESA. Therefore, in accordance with the Gunnison Basin PBO, it is expected that the Proposed Action would not destroy or adversely modify the designated critical habitat for the Colorado River endangered fishes.

Due to the lack of raptor nests and other indicators of raptor presence, no protective buffers or timing restrictions on construction activities are recommended for the Piping Project Area. Because the Habitat Replacement Project Area was not formally surveyed for nesting raptors, a conservation measure prohibiting vegetation removal in this area during nesting season (April 1 – July 15) would be adhered to in order to avoid any potential impact to migratory birds. There would be no effect to the raptors or other migratory bird species based on the implementation of this conservation measure (included in Chapter 4).

3.2.11 – Cultural Resources

Cultural resources are defined as physical or other expressions of human activity or occupation. Such resources include culturally significant landscapes, prehistoric and historic archaeological sites, isolated artifacts or features, traditional cultural properties, Native American and other sacred places, and artifacts and documents of cultural and historical significance. In May 2020, Flattops Archaeological Consultants conducted a Class III cultural resource inventory of the Piping Project's Area of Potential Effect (APE), (McDonald 2020). The proposed pipe alignments, proposed construction disturbance areas, access roads, and the proposed staging area, were inventoried. In April 2022, Alpine Archaeological Consultants conducted a Class III cultural resource inventory of the Habitat Replacement Project's APE (Kliver 2022).

The inventory of the Piping Project Area resulted in the recordation of a segment of the PRD and a segment of the PRD maintenance road. The PRD and the PRD maintenance road are

recommended as not eligible for the National Register of Historic Places (NRHP). The inventory of the Habitat Replacement Area resulted in no findings at all, given the Habitat Replacement Project's location within the active erosional area of the North Fork of the Gunnison river. Reclamation has consulted with the State Historic Preservation Officer (SHPO) on the identified resources' eligibility determinations. SHPO has concurred with Reclamation's recommendation of eligibility, and the results of this consultation are included in Appendix C.

No Action Alternative: Under the No Action Alternative, there would be no changes to existing conditions, and no effect on cultural resources.

Proposed Action: The PRD and PRD maintenance road segments are not eligible for the NRHP. No other cultural resources were identified within the Proposed Action's two spatially-distinct APEs. There would be no adverse effects to historic properties as a result of implementing the Proposed Action. Reclamation has consulted with SHPO on the Proposed Action's effect determination and the results of this consultation are included in Appendix C.

3.2.12 – Transportation, Public Safety, & Public Access

The major transportation resources in the vicinity of the Proposed Action are Colorado State Highway 92 which runs north-south from the Town of Crawford towards Crawford Reservoir, and Colorado State Highway 133 which runs east-west between the Towns of Hotchkiss and Paonia. Local county roads including Dogwood Avenue, Needle Rock Road, and Cottonwood Creek Road would provide access to the Project Area. The Habitat Replacement Project would be accessed from the unnamed private road from Highway 133 to the Water Treatment Plant.

Private roads and county roads generally provide access and mobility for residents traveling in and out of the Proposed Action area, and county roads provide access to recreationists and other users of USFS lands east of the Piping Project Area. The Delta County Sheriff, the Delta County Ambulance District, and the Delta County Fire Protection District 5 cover the Piping Project Area. The Delta County Fire Protection District 2 covers the Habitat Replacement Area. For the last five years, the Proposed Action area has been growing in population at a rate of approximately 1% per year, which contributes to a minor increase in traffic volumes on local and county roads.

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

Proposed Action: Under the Proposed Action, construction traffic would access the Piping Project Area using the existing public Cottonwood Creek Road. There would be no need for construction of new access roads for the Piping Project, as construction access would use existing access roads to reach the PRD, and then the PRD easement would be used as the primary travel corridor. There are no known bridges with weight restrictions that would be used by construction vehicles. Implementation of the Proposed Action may cause brief delays for residents and the public using Cottonwood Creek Road due to construction vehicles entering and exiting the private access roads. Traffic on Cottonwood Creek Road is very light, and is not expected to be significantly impacted as a result of the Piping Project's construction phase. Once construction is complete, traffic and access conditions would return to their current state.

The Habitat Replacement Project is accessed using the existing private road to the Town of Paonia's Water Treatment Plant. Implementation of the Habitat Replacement Project is not expected to

cause any impacts to public access or transportation since project traffic is limited to standard sized vehicles, and all staging is located on a private road. Once construction is complete, the Habitat Replacement Project would be inspected annually by PRDC. No other project-derived traffic is expected.

The Proposed Action would not contribute to a regional trend in traffic levels, due to the absence of long-term needs for vehicle travel to either the Piping Project Area or the Habitat Replacement Project.

3.2.13 – Water Rights & Use

PRD is a private facility owned and operated by the PRDC. Currently, 19.8 cfs are decreed to the PRD for irrigation from the Little Coal Creek near Crawford, CO.

PRD's diversion is located on Little Coal Creek, approximately 0.8 miles above its confluence with the Smith Fork of the Gunnison River. The diversion supplies approximately 1.55 miles of earthen ditch to the service area, and another 1.8 miles of earthen lateral ditches deliver water to users via open splitter boxes. Water in the ditches flows generally west.

State records from 1970 through 2018 report that the PRD has a total average annual diversion of 1,282 acre-feet, with a maximum annual diversion of 2,182 acre-feet and a minimum annual diversion of 214 acre-feet. The maximum average monthly diversion flow rate is 17.3 cfs. (CDSS, 2021). The water is used in the vicinity of the Piping Project Area, generally on the elevated tableland above the Smith Fork referred to as Missouri Flats. The full decree is typically not available during drought years and flows are significantly reduced during times of drought (CDSS, 2021).

Water delivery loss along the canal due to evaporation and seepage in the Piping Project Area is estimated to be about 35% for the 1.55 mile stretch of canal included in the Proposed Action (SGM 2021b). Based on this measurement, around 415 acre-feet of water is lost annually from the Project area. There is an ongoing trend in the region towards the improvement of water delivery systems to increase efficiency and minimize losses (see section 1.5).

At the Habitat Replacement Project, the Town of Paonia's Water Treatment Plant currently discharges the treated effluent to the North Fork of the Gunnison River, immediately upstream of the Section D site. There are no water rights or uses on the Section D site itself.

No Action Alternative: Under the No Action alternative, the existing PRD would continue to operate as it has historically operated. Seepage and water loss due to evaporation would continue. Water would continue to be allocated as it is currently allocated. The Water Treatment Plant would continue to operate as it does currently.

Proposed Action: Under the Proposed Action, the PRDC would have the ability to better manage its allocation of water through efficiencies gained from piping the delivery system and eliminating seepage. A more reliable water delivery system would be in place for the delivery of existing water rights due to updates to the headgate and measuring flume.

The Habitat Replacement Project would not require any consumptive use of water. However, to secure a provisional water source for dry-season watering of the riparian plantings until establishment and maturity, the PRDC proposes to work with the town of Paonia to file for rights

to use the Water Treatment Plant effluent (approximately 0.25 cfs), and would install a water access valve on the piped effluent to channel or direct water into the scour area on an as-needed basis.

The Proposed Action would contribute to the regional ditch piping efforts, which are incrementally improving the efficiency of delivery of water rights to their holders (see section 1.5 for related projects in the region).

3.3 – Summary

Table 2 provides a summary of environmental consequences for the resources evaluated in this EA. Resource impacts are outlined for both the No Action and the Proposed Action Alternatives. Mitigation, if required, is also described.

Table 2. Summary of Impacts for the No Action Alternative and Proposed Action Alternative.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
Agricultural Resources and Soils	No Effect	No impacts to any areas of Prime Farmland. Approximately 1,100 linear feet of the Project Area is within Prime Farmland If Irrigated, but the area is not under irrigation. Not contributory to any trend in the region.
Air Quality	No Effect	Minor local impacts during construction phase. No permanent impacts to air quality. Not contributory to any trend in the region.
Cultural Resources	No Effect	There are no eligible cultural resources in the Piping Project Area or at the Habitat Replacement Project. Environmental commitments would mandate protective measures if undiscovered resources are encountered during construction. Consultation with SHPO has confirmed a finding of No Potential to Affect based on the cultural resource surveys (Appendix C)
Noise	No Effect	Increased noise during construction phase, largely screened by topography and vegetation. No permanent change in noise levels. Not contributory to any trend in the region.
Noxious Weeds	Continued weed pressure in the existing canal corridor and proposed Habitat Site due to annual maintenance/ground disturbance / weed pressure	Weed pressure would increase temporarily due to ground disturbance associated with construction. With revegetation efforts and weed mitigation, effects are expected to be short-term and minor, and would not contribute to regional weed abundance. In addition, weed and invasive species treatment would occur at the Habitat Replacement Project under the Proposed Action.
Surface Water	No change to surface water	Open water in the existing canal would become uplands. Approximately 1.55 linear miles of existing open canal would no longer be a surface water feature. The Proposed Action would contribute to the reduction of surface water in the region due to piping of open ditches to improve efficiency.
Transportation, Public Safety, & Public Access	No effect	Several daily trips on a public road between the staging area and the Piping Project Area. Effects to access, transportation and public safety have been mitigated by placing staging areas close to the project area. No post-construction traffic changes, and no contribution to long-term trends.
Vegetation	No effect; continued sporadic treatment and clearing of riparian vegetation along ditch	Approximately 6.1 acres of vegetation along the canal would be temporarily impacted during construction. Following construction, all disturbance areas would be revegetated. Loss of riparian vegetation would be offset through Reclamation's Habitat Replacement process, involving 5.22 acres of vegetation treatments intended to improve riparian conditions.
Visual Resources	No Effect	Temporary disruption to the local viewshed at the Piping Project due to localized heavy equipment use and ground scarring. No permanent impacts. The change is within USFS current visual management objectives.
Water Rights & Use	No effect	More efficient diversion and allocation of decreed water rights. The Proposed Action would contribute to the regional trend of updating and improving water delivery systems. A new junior water right for 0.25 cfs of discharge from the Paonia WTP would be dedicated to supporting riparian vegetation at the Habitat Replacement Project.
Water quality	Continued salt and selenium loading into the Colorado River Basin	Reduced salt loading into the Colorado River Basin. Approximately 655 tons of salt would be retained and would not enter the watershed, on an annual basis. An unknown amount of selenium would be retained and would not enter the watershed. The Proposed Action would contribute to regional efforts to reduce salinity loading through water infrastructure improvements.
Wildlife & Special Status Species	No changes to the existing levels of anthropogenic disturbance, including degradation to downstream aquatic habitats from salinity discharges.	Lost habitat values resulting from the Proposed Action would be replaced per the HRP. Temporary disturbance and displacement of wildlife at the Piping Project may occur during a single winter construction season. Timing restrictions would mitigate effects to nesting birds and yellow-billed cuckoo. Historical water depletions have been calculated and Recover Agreement is being executed with USFWS (Appendix B).

CHAPTER 4 – ENVIRONMENTAL COMMITMENTS

This section discusses the environmental commitments developed to protect resources and reduce unavoidable adverse impacts to a non-significant level. The environmental commitments would be implemented by PRDC if the Proposed Action is implemented. The environmental commitments would be included in the contractor bid specifications.

Table 3. Environmental Commitments

Environmental Commitment	Affected Resource	Authority
1. Environmental commitments will be discussed with the contractor at a pre-construction meeting.	General	National Environmental Policy Act
2. Environmental commitments will be discussed with new operators and contractors brought into the project during the construction period.	General	National Environmental Policy Act
3. A Storm Water Discharge application will be submitted for General Permit No. COR-030000 as provided by the Colorado Department of Public Health and Environment at least ten (10) days prior to the commencement of construction activities.	Water Quality and Surface Water	Clean Water Act, Colorado Water Quality Control Act
4. A Storm Water Management Plan will be developed and filed with the Colorado Department of Public Health and Environment. In accordance with the Storm Water Management Plan, Best Management Practices, including storm water drainage, erosion control, and sediment control will be implemented to prevent or reduce point source pollution during and following construction. A copy of this plan will be provided to Reclamation.	Water Quality and Surface Water	Clean Water Act, Colorado Water Quality Control Act
5. A Spill Response Plan will be prepared. As part of this plan, fuel storage, equipment, maintenance, and fueling procedures will be developed to minimize the risk of spills and impacts from these incidents, and will be located off of USFS lands. All employees and workers, including those under separate contracts, will be briefed on the plan. A copy of this plan will be provided to Reclamation.	Water Quality and Surface Water	Clean Water Act
6. Concrete pours will occur in forms to prevent discharge into waterways. Any wastewater from concrete batching, vehicle wash down, and aggregate processing will be contained and treated or removed for off-site disposal.	Water Quality and Surface Water	Clean Water Act, Colorado Water Quality Control Act
7. Equipment will be inspected daily and repaired as necessary to ensure equipment is free of petrochemical leaks.	Water Quality and Surface Water	Water Quality and Surface Water
8. Construction of the headgate in Little Coal Creek will occur during a period of low water flow (September 1 through February 15), and when no precipitation is anticipated.	Water Quality and Surface Water	Clean Water Act

Environmental Assessment
Pilot Rock Ditch Piping Project
Crawford, Delta County, Colorado

9. The pipeline will not interfere with water allocation, including winter stock water allocation, nor create any changes in allocation of water shares. Winter stock water would not be supplied during construction.	Water Rights & Use	Colorado Water Rights Protection Act
10. All construction activities will be confined to rights-of-way shown on the construction specifications. Staging will take place in areas shown on Figure 3 and Figure 4.	Access and Transportation	National Environmental Policy Act
11. PRDC will coordinate with Delta County Planning Department, County Engineering, and County Road & Bridge District #3 on any required documentation or permitting which may be required for use of County Roads during construction.	Access and Transportation	Delta County Land Use Code
12. PRDC will coordinate with Delta County Planning Department to obtain any necessary permits or easements to authorize all access locations.	Access and Transportation	Delta County Land Use Code
13. All construction equipment will be power-washed and free of soil and debris prior to entering the construction site to reduce the spread of noxious and invasive weeds.	Noxious Weeds	Colorado Noxious Weed Act
14. Timely and consistent weed treatment will occur within the Piping Project area. For example, pre-construction treatment (mowing) will be used to minimize weed spreading during construction.	Noxious Weeds	Colorado Noxious Weed Act
15. PRDC will continue to be responsible for complying with the Colorado Noxious Weed Act and will obtain appropriate pesticide use permits in accordance with Section 402 of the Clean Water Act.	Noxious Weeds	Colorado Noxious Weed Act, Clean Water Act
16. In the event that threatened or endangered species are discovered during construction, construction activities shall halt until consultation is completed with the U.S. Fish and Wildlife Service, and protection measures are implemented.	Wildlife & Special Status Species	Endangered Species Act
17. If a change in plans will require work outside of areas inventoried for threatened and endangered species, Reclamation will be consulted to determine if additional surveys are required.	Wildlife & Special Status Species	Endangered Species Act
18. Woody vegetation removal will not occur between April 1 and July 15 to avoid effects to raptors and migratory birds. Pre-construction raptor and migratory bird surveys will be required if any vegetation clearing activities are required between April 1 and July 15 due to project contingencies.	Wildlife & Special Status Species	Migratory Bird Treaty Act
19. Riparian vegetation removal will not occur in the Little Coal Creek drainage between June 15 and August 15 to avoid effects to federally-listed yellow-billed cuckoo. Riparian vegetation removal will not occur at the Section D Habitat Replacement Project between May 31 and September 1 to avoid effects to federally-listed yellow-billed cuckoo. A single pre-construction cuckoo survey will be conducted at the Section D site in June 2022 to confirm species absence. Additional, formal cuckoo surveys will be required if any riparian vegetation clearing activities are required during the timing restrictions, as a result of unforeseen project contingencies.	Wildlife & Special Status Species	Endangered Species Act

Environmental Assessment
Pilot Rock Ditch Piping Project
Crawford, Delta County, Colorado

20. Monitoring and continued revegetation would occur as soon as practical following project construction, to prevent the establishment and spread of noxious weed populations.	Vegetation, Noxious Weeds	Colorado Noxious Weed Act
21. To mitigate wildlife habitat disturbance and loss, the habitat replacement plan will be implemented, enhancing the habitat function and value on 5.22 acres of riparian habitat. Improvements include log dam construction, planting native riparian vegetation, and weed control.	Wildlife & Special Status Species, Vegetation, Noxious Weeds	Colorado River Basin Salinity Control Act
22. If previously 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. If the discovery is on USFS lands, USFS must be notified as well. In any event, the SHPO shall be consulted, and work shall not be resumed until consultation has been completed.	Cultural Resources	National Historic Preservation Act
23. Construction limits will be shown on plans provided to the contractors. Ground disturbance and vegetation removal will be limited to the smallest portion of the Proposed Action area necessary to safely implement the project.	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act
24. Existing access roads will be used to access construction, staging and stockpile areas. No new roads will be constructed.	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act
25. Topsoil will be stockpiled and re-distributed after construction, to facilitate revegetation success.	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act
26. Soil erosion will be minimized by using erosion control measures at the edges of ground disturbances.	Agricultural Resources and Soils; Vegetation	Colorado Water Quality Control Act
27. A non-invasive, drought-tolerant seed mix has been developed in coordination with USFS. It will be used to revegetate areas disturbed by the project that do not require maintenance in a vegetation-free state (inspection road, etc.). Seed Mix: 25% slender wheatgrass (<i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i>) 25% western wheatgrass (<i>Pascopyrum smithii</i>), 40% Sandberg bluegrass (<i>Poa secunda</i> ssp. <i>sandbergii</i>), 10% muttongrass (<i>Poa fendleriana</i>).	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act
28. Seeding application would be uniform across the 1.9 acres of pipe overburden: 40 seeds per square ft. Application timing would be as late in the year as possible, preferably on top of snow.	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act
29. Reserved topsoil would be replaced on the prepared surface using a trackhoe, without back-dragging the blade (i.e., without smoothing), to create microtopography for reseeding.	Agricultural Resources and Soils; Vegetation	National Environmental Policy Act

CHAPTER 5 – CONSULTATION AND 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

Notice of the public review period and availability of the Draft EA and Updated Draft EA was distributed to private landowners adjacent to the Proposed Action, and the organizations and agencies listed below. The Draft EA and Updated Draft EA were made available for public review on Reclamation’s website. Publicly-available electronic versions of the Draft EA and Updated Draft EA met the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the documents can be accessed by people with disabilities using accessibility software tools.

Name	Agency	Address
Amanda Ewing	Natural Resources Conservation Service	690 Industrial Blvd. Delta, Colorado 81416
Travis Morse	U.S. Army Corps of Engineers	400 Rood Avenue #224 Grand Junction, CO 81501
Creed Clayton	U.S. Fish and Wildlife Service	445 W. Gunnison Ave. Suite 124 Grand Junction, CO 81501
Eric Gardunio	Colorado Parks and Wildlife	2300 S. Townsend Avenue Montrose, CO 81401
Rebecca Mitchell	Colorado Water Conservation Board	1313 Sherman Street, Room 718 Denver, CO 80203
Michael Goolsby	Colorado Department of Transportation	606 S 9th Street Grand Junction, CO 81501
Matthew Marques	Colorado Dept. of Archaeology and Historic Preservation	1200 Broadway Denver, CO 81401
Dave Kanzer	Colorado River Water Conservation District	201 Centennial Drive Glenwood Springs, CO 81601
Carl P. Holm	Delta County Planning and Community Development	295 W. 6 th Street Delta, CO 81406
Kate Kelly	Delta County Planning and Community Development	295 W. 6 th Street Delta, CO 81406

Environmental Assessment
Pilot Rock Ditch Piping Project
Crawford, Delta County, Colorado

Name	Agency	Address
Jodi Wagner	Delta County Road and Bridge	560 Dodge Street Delta, CO 81406
Wendell Koontz	Delta County Commissioner, District 3	560 Dodge Street Delta, CO 81406
--	Citizens for a Healthy Community	211 Grand Avenue Paonia, CO 81428
--	Western Slope Conservation Center	204 Poplar Avenue Paonia, CO 81428
--	Fourteen Adjacent Private Landowners	--

CHAPTER 6 – PREPARERS

The following list contains the individuals who participated in the preparation of this EA.

Name	Agency	Title
Jennifer Ward	Bureau of Reclamation	Environmental Protection Specialist & Project Manager
Lesley McWhirter	Bureau of Reclamation (retired)	Environmental & Planning Group Chief
Niccole Mortenson	U.S. Forest Service	NEPA Specialist, Grand Mesa Gunnison & Uncompahgre National Forests
Alexander Nees	SGM, Inc	Senior Ecologist

CHAPTER 7 – REFERENCES

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CHAPTER 8 – ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Definition
APE	Area of Potential Effect
ATV	All-Terrain Vehicle
CDPHE	Colorado Department of Public Health and Environment
CDSS	Colorado Decision Support System
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CPW	Colorado Parks and Wildlife
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FONSI	Finding of No Significant Impact
HUC	Hydrologic Unit Code
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
pipe	PVC Plastic Irrigation Pipe
PM	Particulate Matter

Abbreviation or Acronym	Definition
PRD	Pilot Rock Ditch
PRDC	Pilot Rock Ditch Company
Reclamation	U.S. Bureau of Reclamation
RGP-5	Regional General Permit 5 – Ditch Related Activities in the State of Colorado
SHPO	State Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

APPENDIX A – PROJECT MAPS

ELK HABITAT


Pilot Rock Ditch

LEGEND

 Pilot Ditch to be Piped

 Township/Range

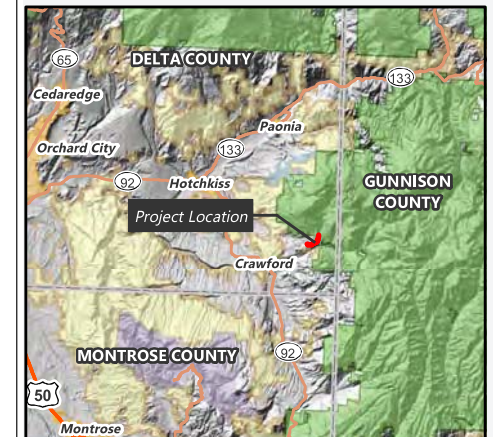
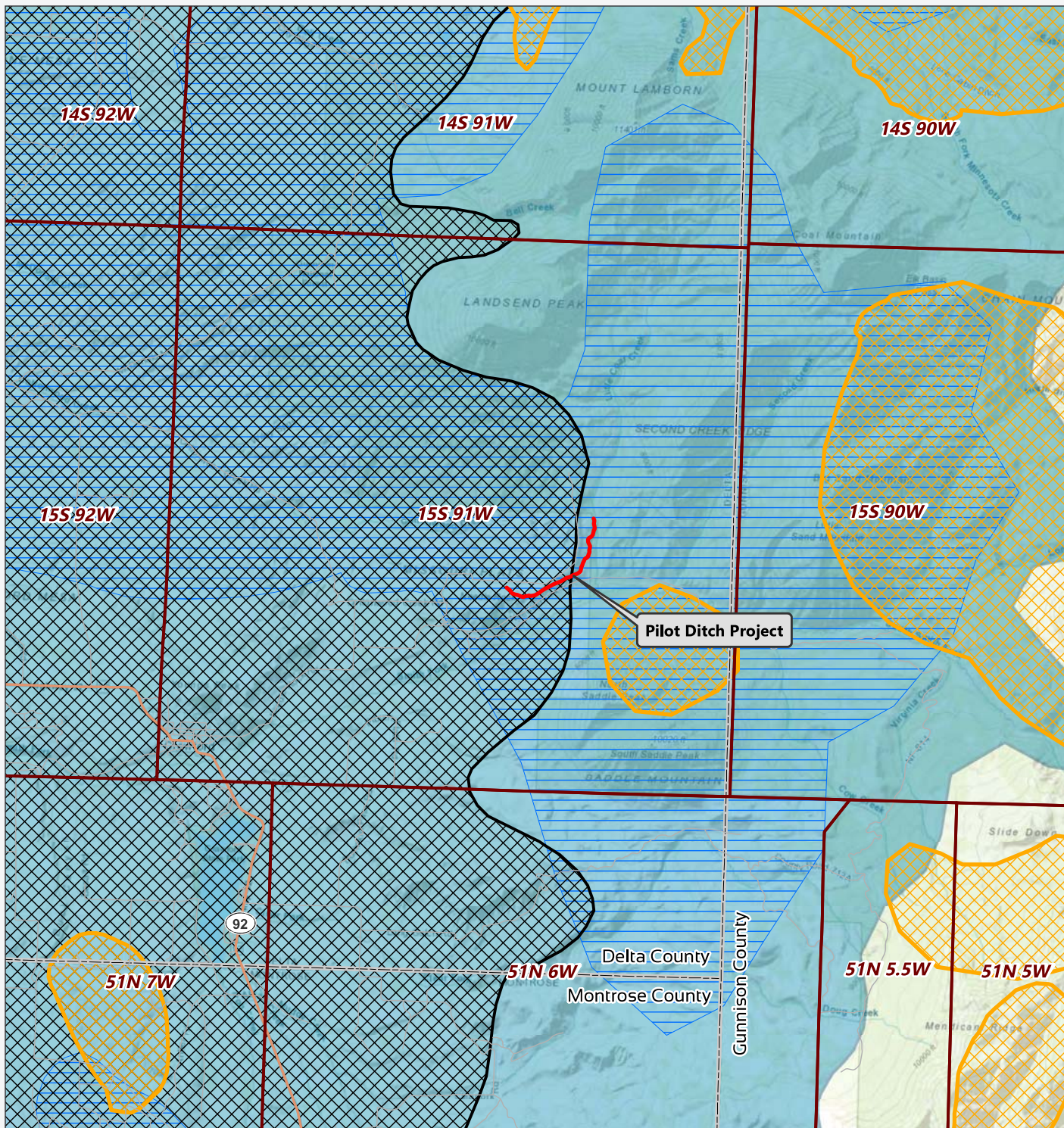
Colorado Parks and Wildlife Activity

 Elk Severe Winter Range

 Elk Production Area

 Elk Winter Concentration Area

 Elk Winter Range



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SGM
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Glenwood Springs, CO 81601
970.384.9040
www.sgmtinc.com

Date: 5/5/2020
Location: 38.73177, -107.53148
Created By: SGM
Drawn By: JDF


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SCALE: 1" = 2 miles

ELK HABITAT


Section D Pilot Rock Habitat Replacement Plan

LEGEND

 Section D

 Township/Range

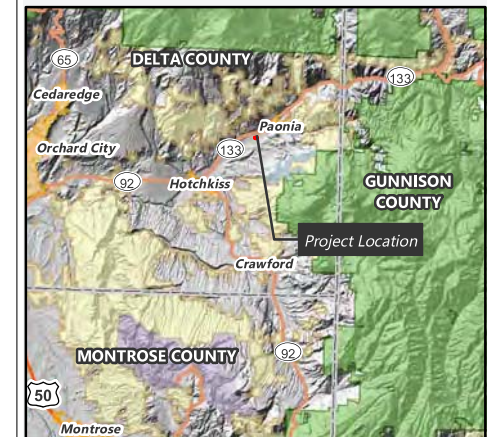
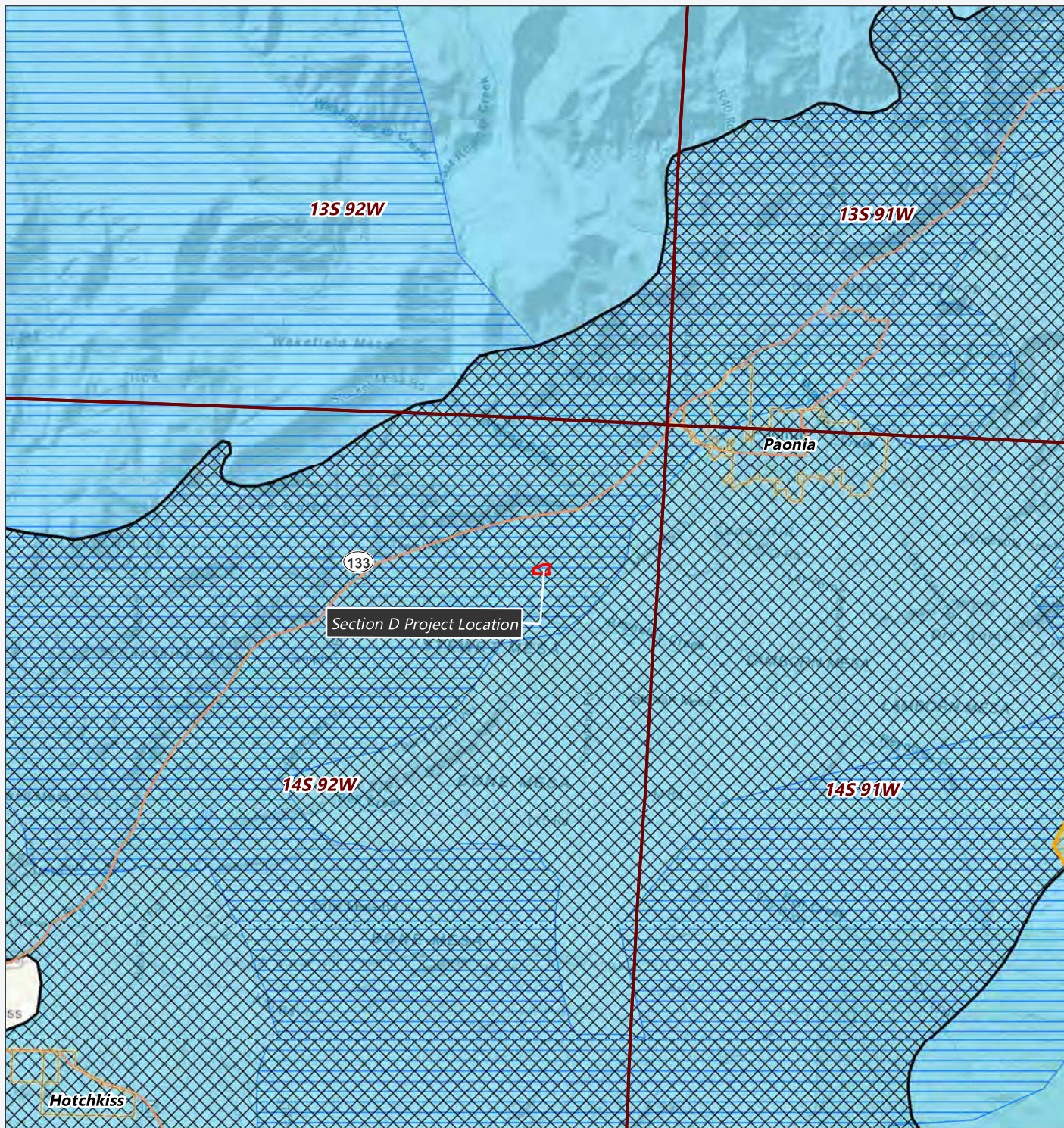
Colorado Parks and Wildlife Activity

 Elk Severe Winter Range

 Elk Production Area

 Elk Winter Concentration Area

 Elk Winter Range



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Date: 5/18/2022
Location: 38.73177, -107.53148
Created By: SGM
Drawn By: RKK

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SCALE: 1" = 1 miles

MULE DEER HABITAT

Pilot Rock Ditch


LEGEND


 Pilot Ditch to be Piped


 Township/Range

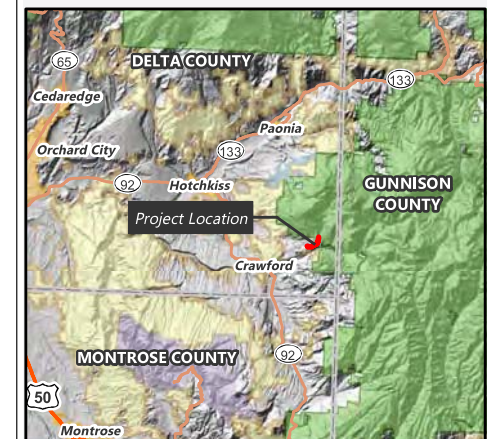
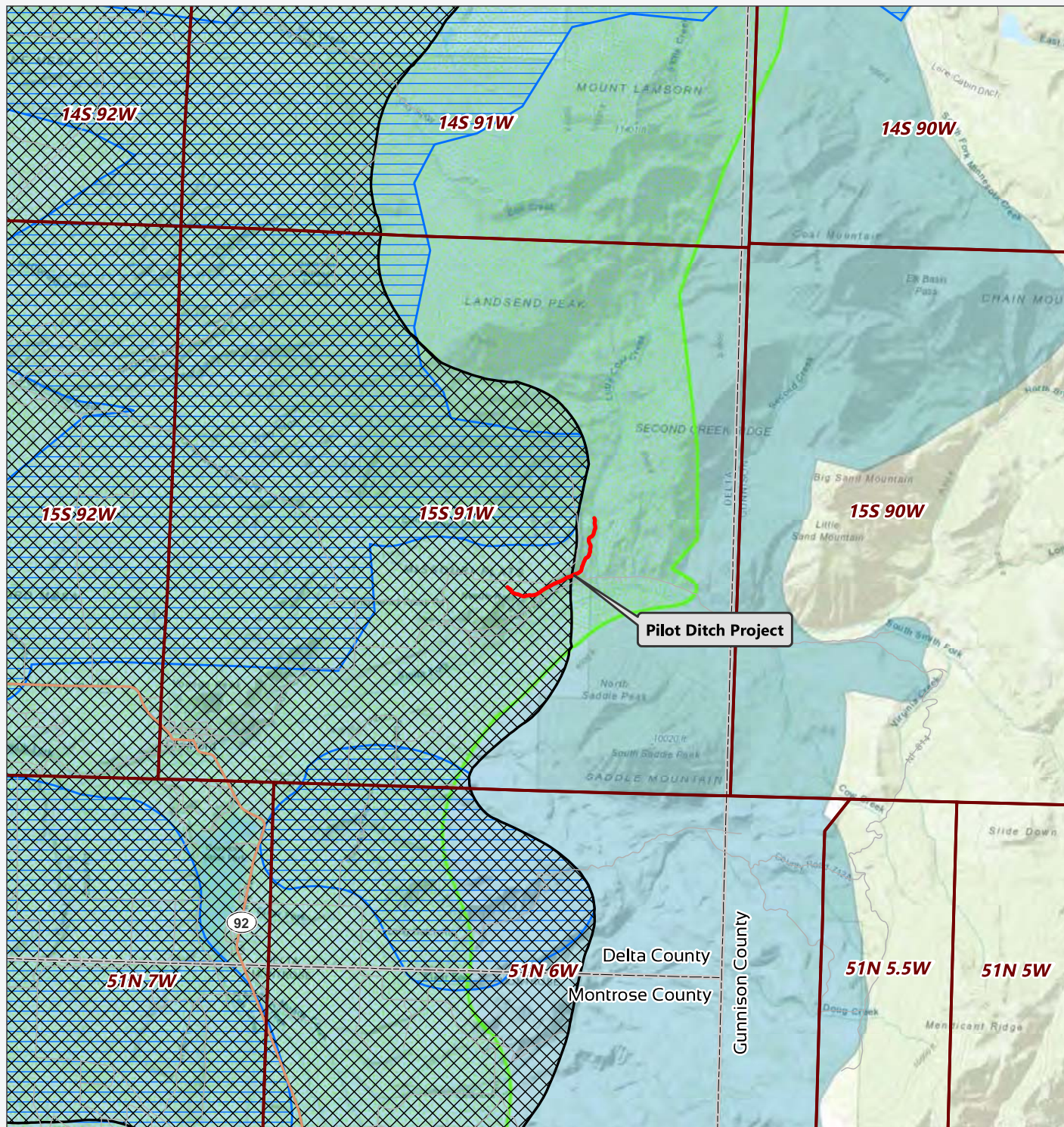
Colorado Parks and Wildlife Activity

 Mule Deer Severe Winter Range

 Mule Deer Resident Population Area

 Mule Deer Winter Concentration Area

 Mule Deer Winter Range



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SCALE: 1" = 2 miles

MULE DEER HABITAT

Section D Pilot Rock Habitat Replacement Plan


LEGEND


 Section D


 Township/Range

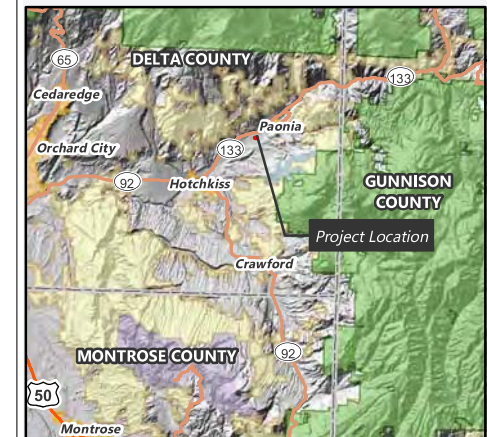
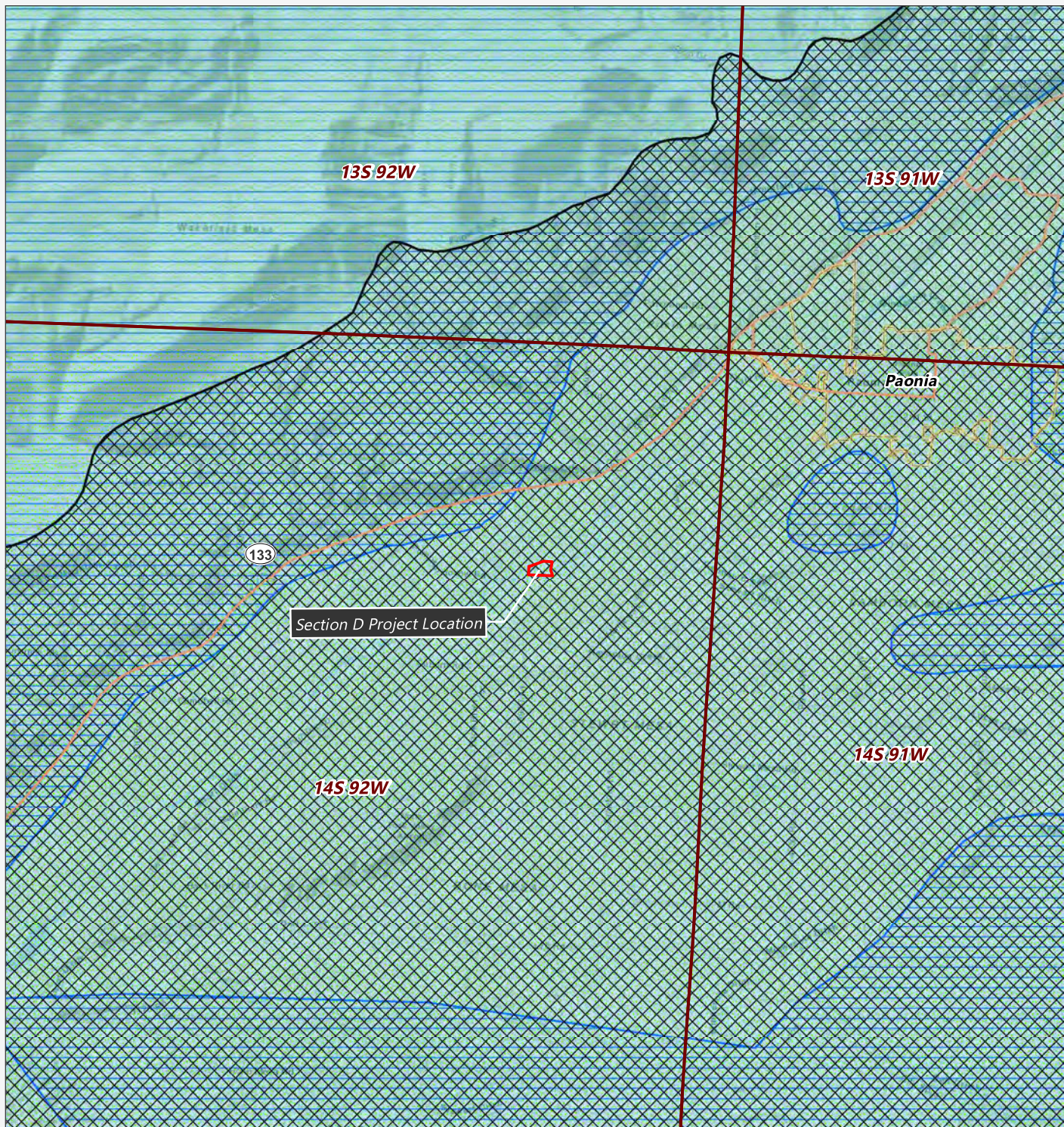
Colorado Parks and Wildlife Activity

 Mule Deer Severe Winter Range

 Mule Deer Resident Population Area

 Mule Deer Winter Concentration Area

 Mule Deer Winter Range



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Date: 5/18/2022
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0 0.375 0.75 1.5 Miles

SCALE: 1" = 1 miles
















SSURGO SOILS

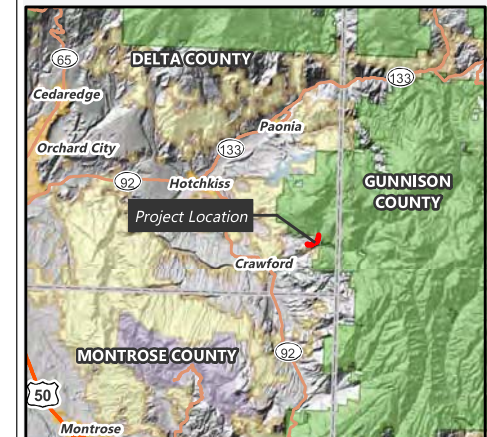
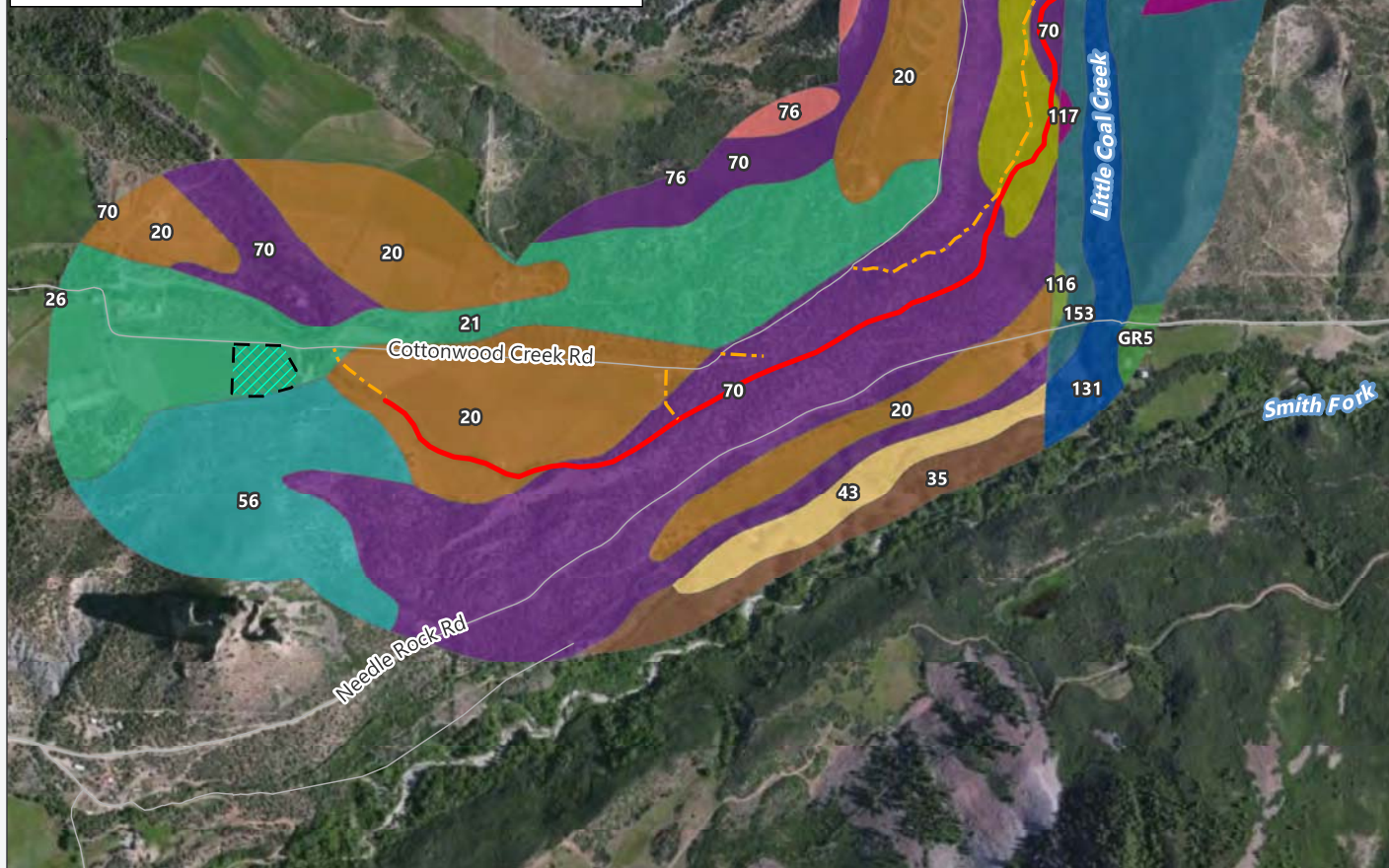
Pilot Rock Ditch

LEGEND

-  Pilot Ditch to be Piped
-  Staging Area
-  Proposed Access Roads
-  Stream
-  Section Line

Soil Type

-  116 - Cerro-Herm complex, 0-15% slopes
-  117 - Cerro-Herm complex, 15-40% slopes
-  131 - Cumulic Haploborolls, 1-3% slopes
-  153 - Haploborolls-Ustochrepts Rock outcrop complex, 40-99% slopes
-  192 - Torriorthents, cool-Rock outcrop, 35-90% slopes
-  20 - Cerro loam, 1-6% slopes
-  21 - Cerro loam, 6-12% slopes
-  22 - Cerro stony loam, 10-35% slopes
-  26 - Colona silty clay loam, 1-6% slopes
-  35 - Fluvaquents, flooded
-  43 - Glenton loam, 3-6% slopes
-  56 - Midway-Gaynor silty clay loams, 10-40% slopes
-  70 - Saraton-Agua Fria complex, 20-50% slopes
-  76 - Torriorthents-Rock outcrop, shale, complex
-  GR5 - Fughes-Fughes, very stony complex, cool, 5-25% slopes



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Date: 5/6/2020
Location: 38.73177, -107.53148
Created By: SGM
Drawn By: JDF


0 650 1,300 2,600
Feet

SCALE: 1" = 1,350 feet




SSURGO SOILS

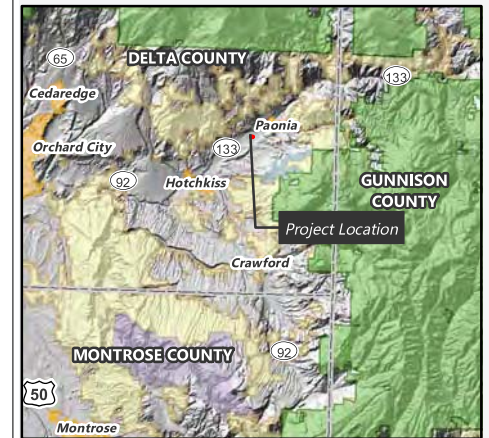
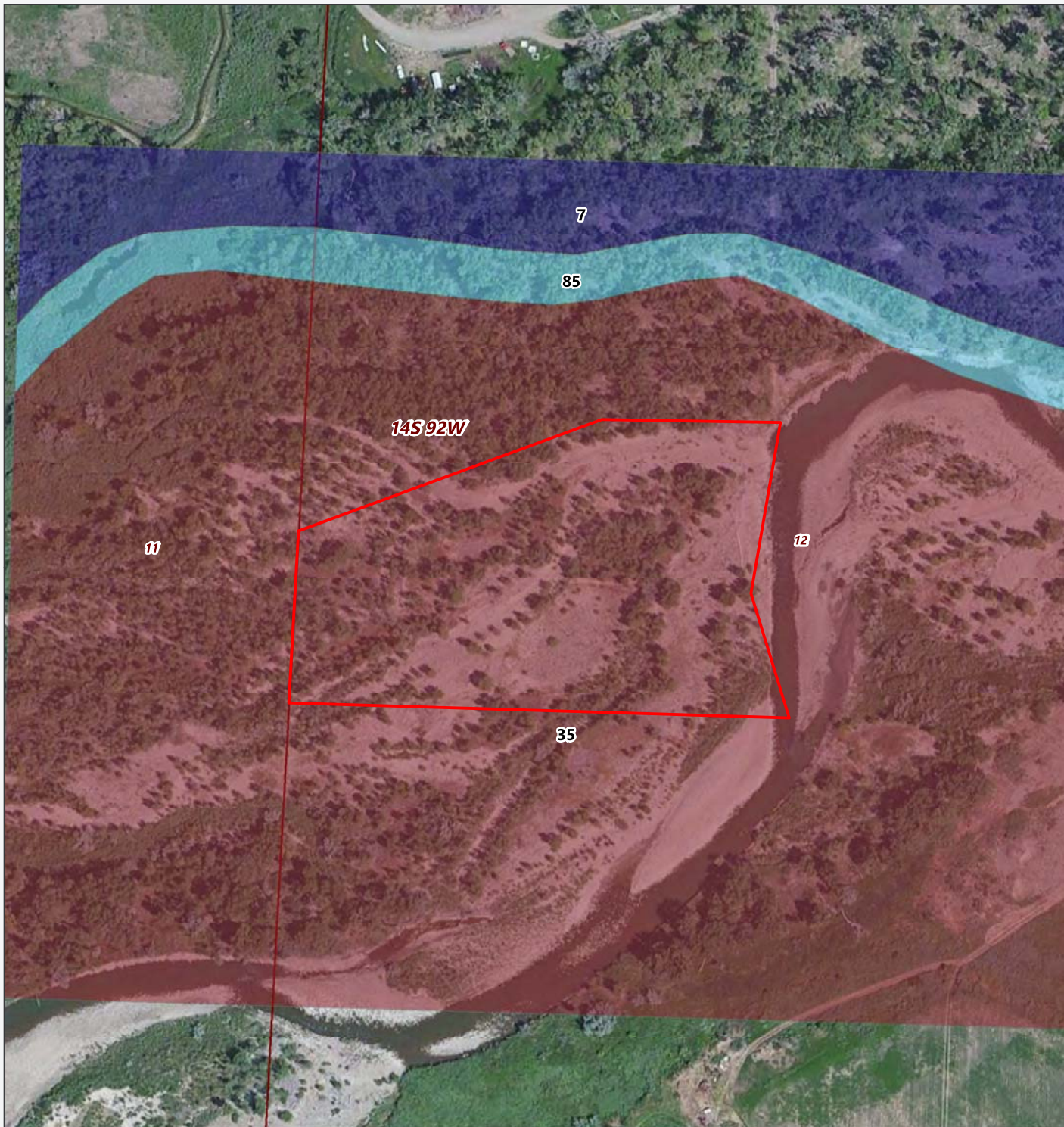
Section D Pilot Rock Habitat Replacement Plan

LEGEND

-  Section D
-  Section Line

Soil Types

-  7 - Aquic Natrargids, saline
-  85 - Water
-  35 - Fluvaquents, flooded



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Date: 5/18/2022
Location: 38.73177, -107.53148
Created By: SGM
Drawn By: RKK

0 100 200 400 Feet

SCALE: 1" = 200 feet

APPENDIX B – ENDANGERED SPECIES ACT COMPLIANCE



United States Department of the Interior



FISH AND WILDLIFE SERVICE
445 West Gunnison Ave, Suite 240
Grand Junction, Colorado 81501

IN REPLY REFER TO:
FWS/IR05/IR07

TAILS 06E24100-2022-F-0064

January 26, 2022

Memorandum

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

From: for Western Slope Supervisor, U.S. Fish and Wildlife Service, Ecological Services, Grand Junction, Colorado

Subject: Request for Consultation under Section 7 of the Endangered Species Act for the Pilot Rock Ditch Piping Project, Delta County, Colorado

Digitally signed by JOHN CLAYTON
Date: 2022.01.27
13:18:06 -07'00'

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) transmits this correspondence to serve as the final biological opinion (BO) for the Pilot Rock Ditch Piping Project in Delta County, Colorado.

We acknowledge your determination that the project would have no effect on the Canada lynx (*Lynx canadensis*); Gunnison Sage-grouse (*Centrocercus minimus*); Mexican spotted owl (*Strix occidentalis lucida*); and the Yellow-billed cuckoo (*Coccyzus americanus*). However, neither 7(a)(3) of the Act, nor implementing regulations under 7(a)(2) of the Act require the Service to review or concur with this determination; therefore the Service will not address these species further. We do however appreciate you informing us of your analysis for these species.

The subject project involves a historic average annual depletion estimated at 426 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.

INTERIOR REGION 5 MISSOURI BASIN

KANSAS, MONTANA*, NEBRASKA, NORTH DAKOTA,
SOUTH DAKOTA

*PARTIAL

INTERIOR REGION 7 UPPER COLORADO RIVER BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

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: <http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/GUPBO.pdf>). 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 conclusion of section 7 consultation. You have forwarded the Recovery Agreement signed by the Water User.
2. A fee to fund recovery actions will be submitted as described in the proposed action for new depletion projects greater than 100 acre-feet/year (AF/yr). The 2022 fee is \$22.80 per AF and is adjusted each year for inflation.
3. Reinitiation 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 by the Water User and the Service (attached). The depletions associated with this project are historic depletions which 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, reinitiation 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: <http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/consultation-list.html>. Also, in accordance with the 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 which 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: <http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/sufficient-progress-letters.html>.

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

Ed Warner, Area Manager, BOR

4

Attachment: Recovery Agreement

cc: FWS/UCREFRP, Lakewood; Email: Kevin_McAbee@fws.gov

GUNNISON BASIN RECOVERY AGREEMENT

This RECOVERY AGREEMENT is entered into this 8th day of December, 2021, by and between the United States Fish and Wildlife Service (Service) and the **Pilot Rock Ditch 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 **Pilot Rock Ditch Company** (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.


Water User Representative

8-12-2021
Date

JOHN
CLAYTON

Digitally signed by JOHN
CLAYTON
Date: 2022.02.02
12:01:48 -07'00'

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

Date



United States Department of the Interior

BUREAU OF RECLAMATION
Western Colorado Area Office
445 West Gunnison Avenue, Suite 221
Grand Junction, CO 81501




IN REPLY REFER TO:

WCG-JWard
2.2.1.06

VIA ELECTRONIC MAIL ONLY

Memorandum

for

	U.S. Fish and Wildlife Service 445 W Gunnison Ave, Suite 240 Grand Junction, CO 81501-5711	TAILS # 06E24100- 2022-004912
<input type="checkbox"/> NO CONCERNS		
<input checked="" type="checkbox"/> XX CONCUR NOT LIKELY TO ADVERSELY AFFECT		
<input type="checkbox"/> NO COMMENT		
JOHN CLAYTON		Digitally signed by JOHN CLAYTON Date: 2022.06.08 11:29:58 -06'00'
WESTERN SLOPE SUPERVISOR		DATE

To: Ann Timberman, Western Colorado Supervisor, Ecological Services
U.S. Fish and Wildlife Service, Grand Junction, Colorado

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

Subject: Reinitiating Consultation under Section 7 of the Endangered Species Act for the Pilot
Rock Ditch Piping Project

The Bureau of Reclamation (Reclamation) is requesting to reinitiate consultation pursuant to Section 7 of the Endangered Species Act for the Pilot Rock Ditch Piping Project (project). Our office originally initiated consultation in November 2021, and a biological opinion was issued on January 26, 2022 (TAILS 06E24100-2022-F-0064). Since our consultation, the project's habitat replacement plan had to be abandoned and a new habitat replacement plan has been identified. Reclamation is requesting to reinitiate consultation for effects related to the new habitat replacement plan.

The attached Addendum Biological Memo Report (Report) provides information regarding federally-listed species and critical habitat to support Reclamation's determinations of effect. Reclamation and SGM, Inc. have previously discussed this change in project scope and anticipated effects with Terry Ireland and Kathleen Gissing of your office.

The proposed Habitat Replacement Plan (hereafter "habitat project" or "proposed action") is located in Delta County, Colorado. The habitat project is located approximately 2 miles west of the town of Paonia (see map 1 in attached Report). The habitat project consists of the removal of Russian olives, installation of log dams, and planting of riparian vegetation in a scoured portion of the North Fork of the Gunnison River floodway, with the goal of collecting sediment and improving riparian habitat.

Based on the information contained in the attached Report and summarized below, Reclamation requests the Service's concurrence with the following effects determinations for the habitat project:

- 1) The proposed action may affect, but is not likely to adversely affect, the yellow-billed cuckoo's designated critical habitat. Based on a discussion with your office (T. Ireland), the present habitat is not highly-effective for yellow-billed cuckoo due to the sparse vegetation and scoured substrate. However, the removal of Russian olive from the habitat site will temporarily degrade habitat suitability within the designated Critical Habitat unit. The degradation will be offset once the riparian vegetation plantings establish and mature (estimated within 5 years). The habitat site contains all three Physical and Biological Features (PBF) of cuckoo critical habitat: PFB -1 riparian woodland, PBF 2 - adequate prey base, and PBF 3 – dynamic river processes. Russian olive removal will be balanced with the revegetation of desirable tree and shrub species to improve riparian species diversity, canopy structure and density. The existing prey base of large insect fauna will not be impacted and may increase once the desirable vegetation is established. The log dams will reduce scouring and enable healthier river processes to occur within the habitat site. The proposed action will not reduce the potential of the project area to maintain the PBFs and is expected to have a beneficial effect over the long term on all three PFBs. Therefore, the Habitat Project may affect, but is not likely to adversely affect, cuckoo habitat within the Critical Habitat unit.

Reclamation has also determined that the habitat project will have no effect on grey wolf, yellow-billed cuckoo, Colorado pikeminnow, razorback sucker, humpback chub, bonytail, or their critical habitats.

If you have any questions or need additional information, please contact Jenny Ward at (970) 248-0651 or by email at jward@usbr.gov. For the hearing impaired please contact the Federal Relay System at (800) 877-8339 (TTY).

Attachment

cc: MWernke@usbr.gov, JDunham@usbr.gov

APPENDIX C – CULTURAL COMPLIANCE



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

RE: Determination of Eligibility and Effect; Pilot Rock Ditch Piping Project, Colorado River Basin Salinity Control Program (R20AC00015), Colorado (HC# 80612)

Dear Mr. Warner,

Thank you for your correspondence dated and received by our office on November 5, 2021 requesting review of the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800.

After review of the provided documentation, we agree that 5DT.2443.1, 5DT.2444.1, and 5MN.12925.1 are not eligible for the National Register of Historic Places. Based on the documentation provided, we agree that your finding of no adverse effect [36 CFR 800.5(d)(1)] to historic properties is appropriate for the subject 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 NHPA.

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.

Thank you for the opportunity to comment. If you have any questions, please contact Matthew Marques, Section 106 Compliance Manager, at (303) 866-4678, or matthew.marques@state.co.us.

Sincerely,

Dr. Holly K Norton Digitally signed by Dr. Holly K Norton
Date: 2021.11.15 21:11:51 -07'00'

Dawn DiPrince
State Historic Preservation Officer

Note: On Tuesday, October 19, 2021, Governor Jared Polis appointed Dawn DiPrince as the new Colorado State Historic Preservation Officer. The State Historic Preservation Officer has the delegated authority to represent the State of Colorado in carrying out the responsibilities specified in the National Historic Preservation Act, and in the regulations and administrative requirements established for implementation of the NHPA. Please join us in welcoming Ms. DiPrince to this new capacity.



History Colorado

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

RE: Determination of Eligibility and Effect; Pilot Rock Ditch Piping Project, Colorado River Basin Salinity Control Program (R20AC00015), Colorado (HC# 80612)

Dear Mr. Warner,

Thank you for your correspondence received by our office on May 4, 2022 reinitiating consultation for the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800. Your May 2022 letter seeks to reinitiate consultation regarding the subject undertaking due to changes in the previously consulted upon scope of work.

The documentation notes that the changes to the previously consulted upon scope of work consist of the selection of new habitat replacement areas. Based on the documentation provided, we continue to agree that your finding of no adverse effect [36 CFR 800.5(d)(1)] to historic properties is appropriate for the subject 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 NHPA.

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.

Thank you for the opportunity to comment. If you have any questions, please contact Matthew Marques, Section 106 Compliance Manager, at (303) 866-4678, or matthew.marques@state.co.us.

Sincerely,

Patrick A. Eidman Digitally signed by Patrick A. Eidman
Date: 2022.05.05 12:08:46 -06'00'

Dawn DiPrince
State Historic Preservation Officer

APPENDIX D – INITIAL PUBLIC COMMENT PERIOD COMMENTS AND RESPONSES

Delta County Comment Letter Response

One comment document was received during the comment period containing 9 distinct, substantive comments. The comments questioned Reclamation's use of facts or analyses in determining salinity savings and resources analyzed. In compliance with 40 CFR 1503.4, possible responses to these comments include:

- Modifying the alternatives or developing and evaluating new alternatives
- Supplementing, improving, or modifying the analyses
- Making factual corrections

Reclamation reviewed each comment and classified them according to topic or comment category below. Summary comments and consolidated responses follow. Changes were made to supplement, improve, or modify the EA as a result of these comments and the reader is referred to the section of the EA where the changes occurred.

Category: Irrigatable Agricultural Land

Comment Numbers: 1, 2

Summary comment: Commenter is concerned that a staging area is located on existing irrigated pasture and the potential impacts to the character, integrity, and functionality of agricultural areas in Delta County. A concern was raised regarding the reclamation efforts to return the area back to agricultural production. The commenter questions how this staging area was chosen.

Response: A discussion on Agricultural Resources and Soils is included in Section 3.2.7 of the Draft EA. The Section indicates that no farmlands would be permanently removed from production as a result of the Proposed Action and no interruption to agricultural production would occur, as the staging area would be utilized during the non-irrigation season. A sentence has been added to Section 2.3.3 of the Final EA which describes potential reclamation efforts on the staging area. This staging area was chosen based on landowner permission, proximity to the project area, and the lack of associated environmental impacts.

Category: Transportation

Comment Numbers: 3, 4, 7

Summary comment: Commenter questioned if the statement in Section 2.4.1 that "heavy equipment trips would be made daily for 3-4 days to transport concrete to the headgate location" referred to the piping project area (Delta County) or the habitat replacement project area (formerly Montrose County). The commenter asked if the anticipated work truck traffic to the site would occur only on Cottonwood Creek Road or if the truck route would go through the Town of Crawford. The commenter indicated a Truck Route Plan would need to be submitted to the Delta County Planning Department.

Response: The heavy equipment trips described are associated with the Piping Project Area. The anticipated work truck traffic route from the concrete batch plant to the headgate construction site on Little Coal Creek has not been determined, and would be at the discretion of the contractor to develop. A sentence has been added to Section 2.5.2 of the updated Draft EA indicating the ditch company would coordinate with Delta County to obtain all necessary permits to authorize truck traffic associated with the proposed action. An environmental commitment

has been added to Section 4 of the updated Draft EA indicating the ditch company would work with the Delta County Planning Department, County Engineering and County Road & Bridge District #3 on any required documentation or permitting which may be required for use of County Roads during construction.

Category: Access Permits

Comment Numbers: 5, 6

Summary comment: Commenter indicated that permits are required for access off County Roads which have not been previously permitted, and said permits must be built to County standards. The commenter indicated that maintenance agreements and access easements between the ditch company and the landowners may need to put in place to permit access. The commenter questioned if the access road at Access Point #2 would need to be extended to reach the project site, and questioned if this access point is necessary for project construction.

Response: A sentence has been added to Section 2.5.2 of the updated Draft EA indicating the ditch company would coordinate with Delta County to obtain all necessary permits to authorize all access points associated with the proposed action. An environmental commitment has been added to Section 4 of the updated Draft EA indicating that the ditch company would coordinate with Delta County Planning Department to obtain any necessary permits or easements to authorize all access locations. The existing road at Access Point #2 is necessary for project construction and the existing road would not need to be extended, as it currently reaches the project area.

Category: Environmental Commitments

Comment Number: 8

Summary comment: The commenter submitted a list of environmental commitments to be added to the EA, including commitments regarding right-of-way, transportation, and access permits.

Response: Section 2.N .2 has been updated to indicate the ditch company would coordinate with Delta County to obtain all necessary permits to authorize all truck traffic and access points associated with the proposed action. Environmental commitments have been added to Section 4 of the updated Draft EA indicating that the ditch company would obtain all permits identified in Section 2.N .2 of the updated Draft EA prior to construction.

Category: Consultation and Coordination

Comment Number: 9

Summary comment: The commenter requested two contacts from Delta County Planning & Community Development be added to the public involvement contacts table.

Response: The two contacts have been added to the public involvement contacts table in the Updated Draft EA.



February 28, 2022

Jenny Ward
Bureau of Reclamation
Western Colorado Area Office
445 West Gunnison Ave, Suite 221
Grand Junction, CO 81501

RE: Draft Environmental Assessment Pilot Rock Ditch Piping Project
Bureau of Reclamation
Colorado River Basin Salinity Control Program

Ms. Ward:

The Delta County Planning & Community Development Department has reviewed the Draft Environmental Assessment for the Pilot Rock Ditch Piping Project in coordination with other County staff. We would like to offer the following comments:

2.3 – Proposed Action

The proposed action includes a staging area of approximately 2-acres located on the south side of Cottonwood Creek Road, approximately 3.39 miles easterly of Crawford, CO. County Assessor Records show this parcel to be owned by Darold Hawk (43440 Cottonwood Creek Road); this property has been classified as irrigated farmland by the Delta County Assessor's Office and NRCS mapping.

Table 1. *Pilot Rock Ditch Piping Project Proposed Footprint*, states that the staging area is located entirely on an existing irrigated pasture and that restoration would be limited to repairing impacts to the pasture vegetation. One of the goals of the Delta County Master Plan is to “maintain the character and integrity of agricultural land including irrigated and potentially irrigatable agricultural land, and the functionality of agricultural areas for agricultural business operations.” (Goal 2.1, Delta County Master Plan) Standards for development in the 2021 Land Use Code (LUC) are to avoid or minimize disturbance to, or development of, irrigated lands.

Comment 1

Delta County feels that this proposed staging area is an area of concern as it directly impacts currently irrigated pasture land (albeit temporary). When reviewing a project proposal, the County tries to determine the best areas for the proposed project to take place, without disrupting current agricultural lands. Can you please clarify how this area was chosen for staging purposes, and any alternative site available that would not impact irrigated lands? We understand that this area is in close proximity to the proposed access points for the project; however, it appears from aerial imagery that there are numerous locations along Cottonwood Creek Road that would be better suited as a staging area, not impacting irrigated agriculture.

2.3.3 – Restoration

In regards to revegetation, the proposal states, “Staging areas would be revegetated following construction, if necessary. Given that no excavation is proposed in the staging area, and that the



surface is currently stabilized by a dense growth of agricultural pasture grass, the vegetation is expected to recover quickly after the staged equipment and materials are removed, and only limited reclamation efforts are anticipated to be required.”

Comment 2

Delta County requires that reclamation efforts be made for all proposals that disturb land (albeit private), especially irrigated farmland (if no other option is available). We ask that if this project comes to fruition, a reclamation plan be submitted to the Delta County Planning Department for review as part of our Development Application process (required for all development).

2.4.1 Manpower and Equipment

Comment 3

The proposal states that heavy equipment trips would be made daily for 3-4 days to transport concrete to the headgate location. It is unclear of the specific location as there are two proposed project sites within this proposal. Please clarify if this headgate location is the Texas Gate (Montrose County).

Comment 4

The proposal then details that all other heavy equipment will make a single trip to the construction site and remain onsite for the duration. It also talks about how truck traffic to the site would continue on a daily basis during the work week, for approximately 2 weeks assuming the rate of pipeline construction to be 200 to 400 feet per day. Is all of this truck traffic occurring on Cottonwood Creek Road, only? Or, will a truck route be coming through the Town of Crawford out to the site?

Comment 5

Delta County requires Access Permits for any points of access to/from a County road. Based on the description, you would be intensifying the use of four existing access points included with this project (e.g. truck trips). A permit is required for any access that was not previously permitted, and that said access is built to County standards. (Also see “Access” discussion below)

2.4.2 – Access

Comment 6

The proposed access road for this project is listed as Cottonwood Creek Road, which is a County road until it leaves private property and enters the USFS managed lands directly north. The staging area is listed as being accessed directly off of Cottonwood Creek Road, but the proposal does not indicate a new access for the staging area. An Access Permit will be required for this staging area access and will need to be built to County Road Standards.

Access Point #1 for this project appears to be a field access of some sort. Delta County GIS finds no record of this access being permitted, so an Access Permit will need to be obtained for this point of access to the project before the project can begin construction.

Access Point #2 that is proposed is located at 43908 Cottonwood Creek Road and is a utility address for the Mad Dog Water Company - it appears there is some sort of water shed at this location. County GIS confirms that this point is permitted and is for the sole purpose of a utility address. Aerial images show that the access at this location does not go all the way through to the proposed project site. Is this an access that is intended to be constructed/extended to the project site? There are two access points in the middle of the project area. Is this access point necessary for the project? If yes, there are County Road & Bridge Standards that will be required to be met and approved by the Delta County Engineering Department.



Access Point #3 appears to be a well-traveled access “road” to the project location (top of bank). Delta County GIS finds no record of this access being permitted, so an Access Permit will be required for the use of this access road to the project site.

Access Point #4 appears to be a track road used to reach USFS lands. Delta County GIS finds no record of this access being permitted, so an Access Permit will be required for the use of this access to the project site. The proposal states that there will be no additional access roads planned and no upgrades beyond routine maintenance are planned for the existing access roads with one exception, being this access point (#4). The proposal states that this “road” has been determined to be a rough and rocky travel surface due to erosion, particularly in the southernmost 1200 linear feet (extending from Cottonwood Creek Road down to the elevation of the PRD). The proposal is that this access road will have a small bulldozer come in to blade the road and clear large rocks from the travel surface, restoring it to its original conditions. As the use for this access is being intensified for the purpose of this project, you will need to confirm with County Engineering the requirements for building this access road to meet County Standards, prior to construction. There is an existing easement in place for Access to & Maintenance of Pilot Rock Ditch & Headgate, per Jane F. Reed/US Bank National Association Boundary Adjustment (Reception #651406).

3.2.12 – Transportation, Public Safety, & Public Access

Truck traffic is proposed along the following County maintained roads: Dogwood Avenue, Needle Rock Road, and Cottonwood Creek Road. It appears that there are multiple smaller County Roads that could be affected by the truck traffic to and from the project sites (4200 Road & 4300 Road). A Truck Route Plan will need to be submitted to the Delta County Planning Department, County Engineering and County Road & Bridge District #3 for review, prior to project commencement, as part of the Development Application.

Comment 7

Chapter 4 – Environmental Commitments

Table 3. Environmental Commitments

#10. Construction Activity/Rights-of-Way

- A Right-of-Way Permit will be required for any work performed in County Right-of-Way.
- Access Permits for all proposed access locations that are not already permitted by Delta County will be required for this project.
- A Truck Route Plan will need to be submitted to the Delta County Planning Department for review by Planning Staff and County Engineering/Road & Bridge District #3.

Comment 8

#22. Existing Access Roads

- Three of the four proposed access points have not been permitted by Delta County. Access Permits will be required for all unpermitted access points for this project.
- The staging area will need its own access from Cottonwood Creek Road. This access will be required to be constructed to County road standards if approved by County Planning and County Engineering.



DELTA COUNTY

PLANNING & COMMUNITY DEVELOPMENT

Kate Kelly
County Planner - I

Chapter 5 – Consultation and Coordination

5.2 – Public Involvement

The contact's name for Delta County Planning & Community Development is missing from this list. The Planning Contact information is as follows:

Comment 9

- Carl P. Holm, AICP
- Kate Kelly, Planner I (Main Contact)

If you have any questions or need additional information, please contact me.

Respectfully,
Carl P. Holm, AICP, Director
Community Development & Natural Resources

By: 
Kate Kelly
Planner I
(970) 874-2107
kkelly@deltacounty.com