BUREAU OF RECLAMATION

Draft Environmental Assessment

Hairpin Lateral Piping and Salinity Reduction Project

Basinwide Salinity Control Program
Upper Colorado Basin: Interior Region 7
Western Colorado Area Office

U.S. Department of the Interior

February 2026

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.

Draft Environmental Assessment

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

February 2026

Cover Photo: Segment of the Hairpin Ditch, Montrose County, Colorado (J-U-B 2025).

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CHAPTER 1—INTRODUCTION

This Environmental Assessment (EA) has been prepared to assess the potential environmental effects of Bostwick Park Water Conservancy District's (BPWCD) proposed Hairpin Lateral Piping and Salinity Reduction Project (Proposed Action). The Proposed Action is the Preferred Alternative. The Federal action evaluated in this EA is whether the Bureau of Reclamation (Reclamation) would provide funding assistance to BPWCD (Applicant) for the Proposed Action. The Colorado River Basin Salinity Control Act's (CRBSCA) Colorado River Basinwide Salinity Control Program authorizes Reclamation to fund the Proposed Action under the 2023 Notice of Funding Opportunity (NOFO) No. R23AS00353 from Reclamation.

Reclamation has prepared this EA in compliance with the National Environmental Policy Act (NEPA) and the Department of the Interior's NEPA regulations at 43 C.F.R. §§ 46.10-46.450. If potentially significant effects to environmental resources are identified, an Environmental Impact Statement (EIS) will be prepared. If no significant effects are identified, a Finding of No Significant Impact (FONSI) will be issued.

1.1 Project Location and Legal Description

Two sites exist within the Proposed Action area: the Hairpin Lateral Site and the Habitat Replacement Plan (HRP) site. The Hairpin Lateral Site is located in eastern Montrose County, approximately 12 miles east of Montrose, Colorado (see Figure 1). This site lies in the local geographic areas of Shinn Park, Waterdog Mesa, and Hairpin Draw, and extends from the end of the Cimarron Canal to the Shinn Park/Kinikin/Waterdog Laterals. The Proposed Action alignment traverses hills, ridges, and draws, with the principal improvements occurring along the Hairpin Ditch (hereinafter referred to as the Hairpin Lateral). Other sites involved with the Proposed Action include materials staging areas located west of the siphon installation. All construction activities and staging areas for the Proposed Action lie entirely on private land. The Hairpin Lateral Site is located in Sections 16, 17, 18, 20, and 21 of Township 48 North, Range 7 West and Section 6, New Mexico Meridian.

The HRP Site is in northern Montrose County, Colorado, approximately 2.5 miles north of the town of Olathe and about 25 miles northwest of the Hairpin Lateral Site (see Figure 1). The HRP Site lies adjacent to the Uncompahgre River, within a landscape characterized by riparian and floodplain habitats surrounded by private agricultural lands. The site is located in a permanent conservation easement of approximately 42.8 acres. The privately owned site is bisected by S. Blossom Road, and totals 6.6 acres. All project activities, including habitat improvements and monitoring, are confined to private land. The HRP Site is located in Section 33, Township 51 North, Range 10 West, New Mexico Meridian. The HRP Site was selected for its existing wildlife habitat value, ecological connectivity, and the presence of a conservation easement, making it a suitable location for habitat enhancement and long-term conservation.

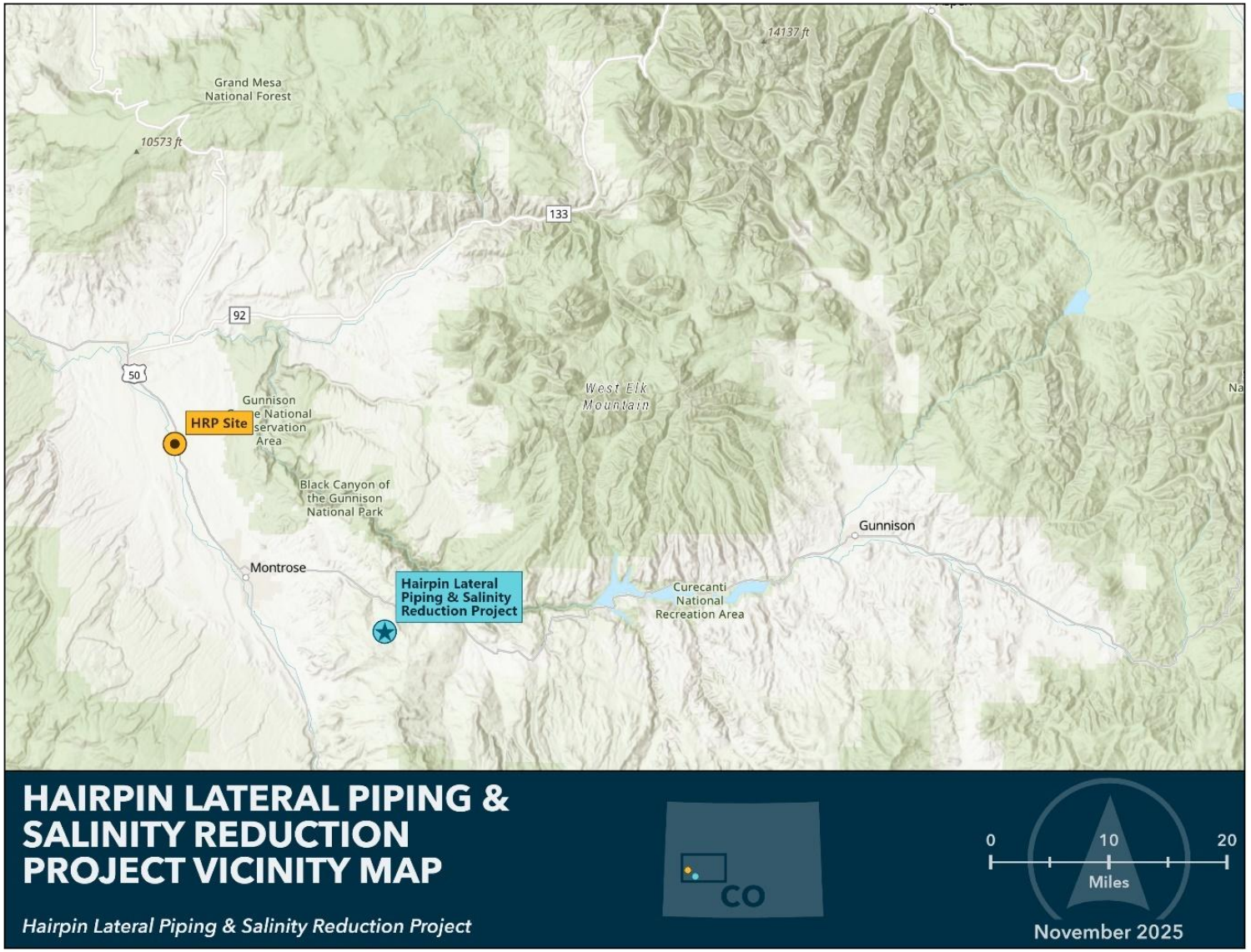

Figure 1. Hairpin Lateral Piping & Salinity Reduction Project Vicinity Map

1.2 Need for and Purpose of the Proposed Action

The need and purpose for the Proposed Action is to reduce salinity concentrations in the waters of the Gunnison, Uncompahgre, and Colorado River Basin, in compliance with the Colorado River Basin Salinity Control Act of 1974, 43 U.S.C. §§ 1571, et seq., as amended.

1.3 Decision to be Made

Reclamation will decide whether to provide funding to the Applicant to implement the Proposed Action.

1.4 Background

1.4.1 Salinity Control Program

The threat of salinity loading in the Colorado River Basin is a major concern in both the United States (U.S.) and Mexico (Reclamation 2019). Salinity affects water quality, which in turn affects downstream users, by threatening the productivity of crops, degrading wildlife habitat, and corroding residential and municipal plumbing. Irrigated agriculture contributes approximately 37 percent of the salinity in the Colorado River Basin system (Reclamation 2019). Irrigation increases salinity both by depleting in-stream flows, and by mobilizing salts found in underlying geologic formations especially during flood irrigation practices.

The CRBSCA authorizes the Secretary of the Interior to proceed with a program to enhance and protect the quality of water available in the Colorado River for use in the U.S. and Republic of Mexico. Public Law (PL) 104-20 of July 28, 1995, authorizes the Secretary of the Interior, acting through Reclamation, to implement a Basinwide Salinity Control Program. The Secretary may carry out the purposes of this legislation directly, or make grants, enter into contracts, sign memoranda of agreement, commit grants, establish cooperative agreements, and advance funds to non-federal entities under such terms and conditions as the Secretary may require (43 U.S.C. § 1592).

The Basinwide Salinity Control Program funds salinity control projects with a one-time grant that is limited to an applicant's competitive bid. Salinity control projects are awarded based on applications received in response to a NOFO (formerly called Funding Opportunity Announcement [FOA]) issued by Reclamation. As part of the NOFO, applicants are evaluated individually according to the following criteria: cost effectiveness, ability to enable on-farm salinity control features, risk assessment, detailed project plan, costs and capability to implement the project, future operation and maintenance and management capabilities for the project, past performance, and Department of the Interior goals. Applications are ranked by an Application Review Committee made up of multiple disciplines, and high-ranking projects are recommended to the Salinity Control Program Manager for consideration. The Salinity Control Program Manager then provides recommendations to the Grants Officer for award. Once constructed, the facilities are operated, maintained, and replaced by the Applicant at their own expense.

The cost effectiveness value of a proposed project is quantified as the estimated total annual salt load (in tons) reduced in the Colorado River Basin divided by the project cost amortized over 50 years. Estimated salinity reduction is calculated based on measured total dissolved solids loads in basin streams, geographic information system (GIS)-based model calculations to determine sub-basin loads, and ditch mapping data that include average flows, ditch lengths, and average annual days of use. Richards et al. (2014), Schaffrath (2012), and Linard (2013) provide more detailed information on salt loading estimate methodology.

Water seepage and the subsequent deep percolation through saline soils from earthen irrigation ditches is one way that salts are mobilized and transported into regional streams and rivers. Piping such ditches removes a source of deep percolation and salt mobilization to regional streams and rivers. The Proposed Action would eliminate water seepage from approximately 20,490 linear feet (LF) of an earthen ditch, reducing salinity loading by 1,237 tons per year in the Gunnison, Uncompahgre, and Colorado River Basins (Reclamation 2023).

1.4.2 The Applicant

BPWCD, the Applicant, is a public organization with governmental powers specific to water management formed and governed under the Water Conservancy Act of 1937 (Colorado Revised Statutes [CRS] Title 37, Article 45). Located in Montrose County, Colorado, the organization serves as a water management and conservation district focused on regional water resource infrastructure and sustainability efforts. BPWCD is primarily engaged in water resource management, irrigation infrastructure improvement, and watershed conservation projects, working closely with federal agencies to enhance water efficiency and environmental preservation in the Colorado River Basin region. The BPWCD system provides irrigation water to over 4,000 acres of land east of Montrose County. The Hairpin Lateral is owned by the Cimarron Canal and Reservoir Company (CC&RC) and is operated and maintained jointly between BPWCD and CC&RC.

1.5 Relationship to Other Projects

1.5.1 Salinity Control Program

Reclamation, under the authority of CRBSCA 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 is the process of using or has recently used Salinity Control Program funds for the following salinity control projects in the vicinity of the Project Area (see Figure 2 and Appendix A—Summary of Habitat Replacement Accounting for Approved Salinity Control Projects in the Region):

- Bostwick Park Siphon Lateral Piping Project
- C Ditch/Needle Rock Piping Project
- Cattleman's Ditches Piping Project Phases I and II
- Clipper Center Lateral Piping Project and Project A
- Crawford Clipper Ditch Company's Jerdon/West/Hamilton Piping Project
- Eastside Laterals Piping Projects ("UVWUA Project 9" and "UVWUA Project 10")
- Fire Mountain Canal Piping Project
- Forked Tongue/Holman Ditch Piping Project
- Gould Canal Improvement Projects A & B

• Grandview Canal Piping Project (Upper, Middle & Lower)
• Upper, Middle, and Lower Stewart Ditch Piping Projects
• Minnesota Canal Piping Project Phase I and II
• Minnesota L75 Piping Project
• Needle Rock-Lone Rock Piping Project
• North Delta Canal Piping Project
• Orchard Ranch Piping Project
• Pilot Rock Ditch Piping Project
• Short Ditch Extension Piping Project
• Slack and Patterson Lateral Piping Project
• Spurlin Mesa Lateral Piping Project ("Clipper Project 4")
• Turner-Lone Cabin Combination Piping Project
• Waterdog and Shinn Park Laterals Piping Project
• Zanni Lateral Piping Project

1.5.2 CRSP Funds

Reclamation's Western Colorado Area Office recently used Colorado River Storage Project (CRSP) Funds to implement the Aspen Canal Piping Project and the GK Lateral Piping Project in the vicinity of the Project Area (see Figure 2).

1.5.3 RCPP Funds

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) issued a Regional Conservation Partnership Program (RCPP) grant administered by the Colorado River Water Conservation District under the Lower Gunnison Watershed Plan. RCPP irrigation infrastructure projects planned or recently implemented in the vicinity of the Project Area include (see Figure 2):

• Needle Rock Diversion Project
• Grandview Upper Canal Piping Project
• Crawford Clipper Ditch Upper West Lateral Master Plan Projects (various)

1.6 Scoping

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

- U.S. Bureau of Land Management (BLM), Uncompahgre, Field Office, Montrose, CO
- Colorado State Historic Preservation Office (SHPO), Denver, CO
- U.S. Army Corps of Engineers (USACE), Southern Colorado Regulatory Branch, Durango, CO
- Navajo Nation, Southern Ute Tribe, and Ute Mountain Ute Tribe
- U.S. Fish & Wildlife Service (USFWS), Ecological Services, Grand Junction, CO
- Colorado Parks & Wildlife (CPW), Montrose Office, CO

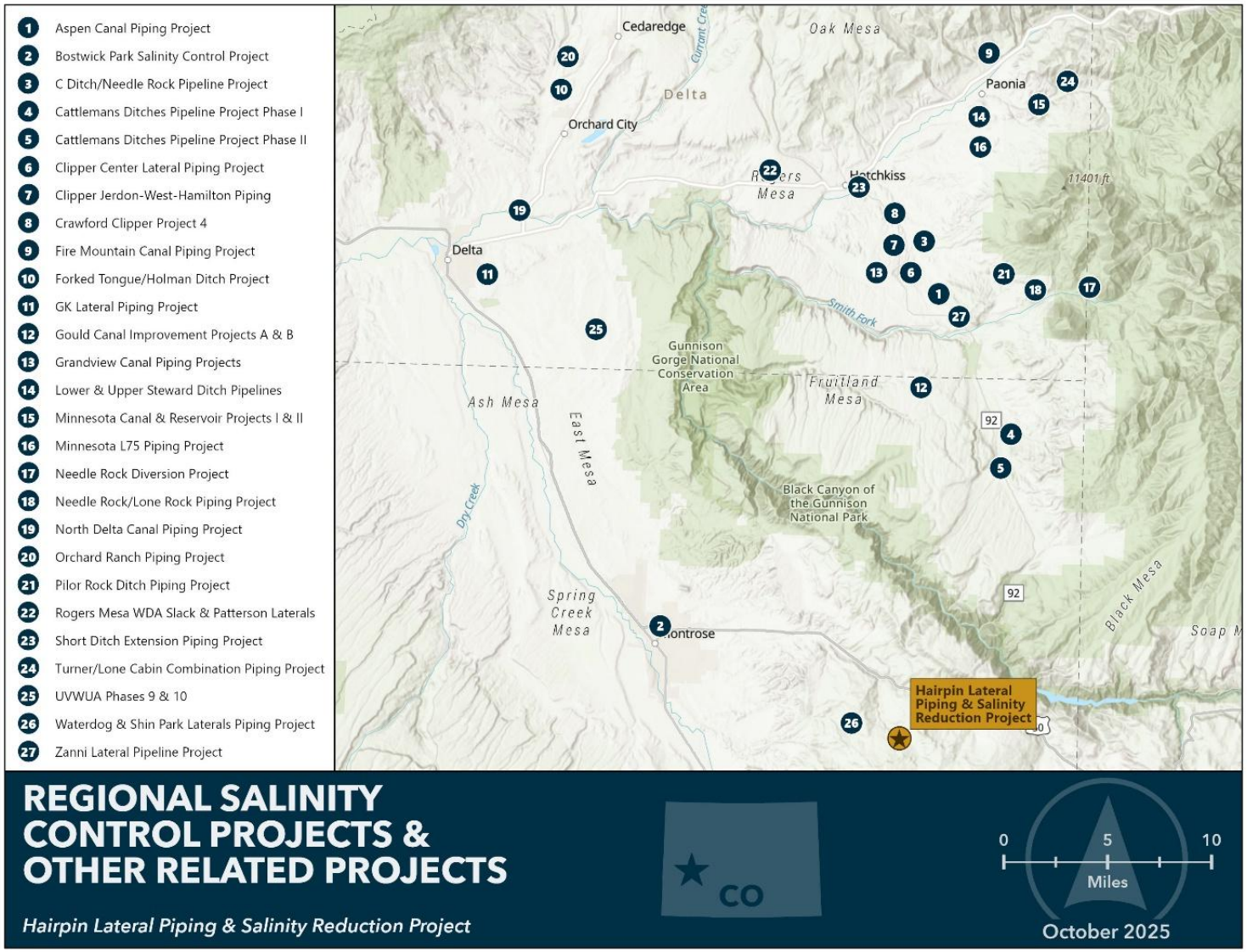

Figure 2. Regional Salinity Control Projects and Other Related Projects

Concerns raised during public comment periods on recent similar projects also helped identify potential resource concerns for the Project.

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

Table 1-1. Resources Considered but Eliminated from Further Analysis

Resource	Rationale for Elimination from Further Analysis
Public Lands: Grazing and Recreation	Although the Hairpin Lateral Site is currently grazed by cattle and the HRP Site would implement grazing to manage noxious weeds, the Proposed Action does not involve public lands. Therefore, neither the No Action Alternative nor the Action Alternative would affect public lands grazing or recreation.
Visual Resources	The Hairpin Lateral Site is not visible from any major roads and would occur on private land and is not subject to Federal visual resource management. Furthermore, at the HRP Site, vegetation removal would occur, but native plants would be installed, therefore, the site would not look significantly different following implementation. Neither the No Action Alternative nor the Action Alternative would affect visual resources.
Wilderness: Wild and Scenic Rivers, wilderness characteristics, wilderness study area	No Wild and Scenic Rivers, land with wilderness characteristics, or wilderness study areas occur in the Project Area. Gunnison Gorge Wilderness is approximately 6.7 miles east of the HRP Site (The Wilderness Society 2025). Therefore, neither the No Action Alternative, nor the Action Alternative would affect wilderness resources.

[1]Executive Order 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require the Department to strictly adhere to the NEPA, 42 U.S.C §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The [bureau] verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. The [bureau] has also voluntarily considered the Council on Environmental Quality's (CEQ) rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500-1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Oder 14154.

CHAPTER 2—Alternatives

Alternatives evaluated in this EA include the No Action Alternative and the Action Alternative (Preferred Alternative, Proposed Action).

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not authorize funding for the Proposed Action. The Hairpin Lateral proposed for piping would continue to flow in open, earthen ditches, and the resultant salt loading to the waters of the Gunnison, Uncompahgre, and Colorado River Basins would continue at the current rate. Without change in the existing environment (i.e., *an action*, such as other remedial measures with the potential to reduce salt loading associated with the ditch), salt loading associated with the Hairpin Lateral would continue at the current rate. No known actions or remedial salinity control measures which would impact the salt loading associated with the Hairpin Lateral are planned to occur at this time, and therefore the No Action Alternative does not include other potential salinity control measures in the area. Operations and maintenance (O&M) would continue. Irrigation practices and seepage from the unlined open laterals would continue to lose approximately 292.1 acre-feet (ac-ft) of water annually due to seepage, evaporation, and diversion inefficiencies, and approximately 1,237 tons of salt would continue to enter the Colorado River Basin each year (Reclamation 2023).

2.2 Action Alternative—Preferred Alternative

Under the Action Alternative, Reclamation would provide funding to BPWCD to support the Hairpin Lateral Piping and Salinity Reduction Project (Proposed Action) as the Preferred Alternative. The Proposed Action's activities associated with the Hairpin Lateral would involve irrigation water infrastructure improvements, including approximately 4,734 feet of siphon piping and installation of a drain for the siphon; approximately 3,304 feet of 8-inch high-density polyethylene (HDPE) piping to serve an existing turnout; approximately 2,000 feet of 2-inch HDPE piping to serve one of the new wildlife waterer adjacent to the existing lateral; two new wildlife waterer installations (one at the end of the 2-inch pipe and one adjacent to the new siphon); and approximately 15,186 feet of lateral abandonment. A map of the Hairpin Lateral Site and associated proposed activities are illustrated in Figure 3. The proposed activities would result in a direct disturbance area of 24.8 acres, where ground disturbance would occur due to construction and installation activities. When including additional areas needed for staging, access roads, and construction buffers around the installation and abandonment segments, the total Project Area for the Hairpin Lateral Site is 96.6 acres.

The Proposed Action's activities associated with the HRP include invasive species and debris removal, planting and seeding of native vegetation, fence installation, and other habitat enhancement actions and are described in Section 2.2.7. The HRP activities would have a direct disturbance area of 6.6 acres within the larger 42.8-acre conservation easement site.

Across both the Hairpin Lateral and HRP Sites, the total combined direct disturbance area is approximately 31.4 acres. When accounting for all construction buffers, access roads, and staging areas, the total combined Project Area for both sites is 138.7 acres.

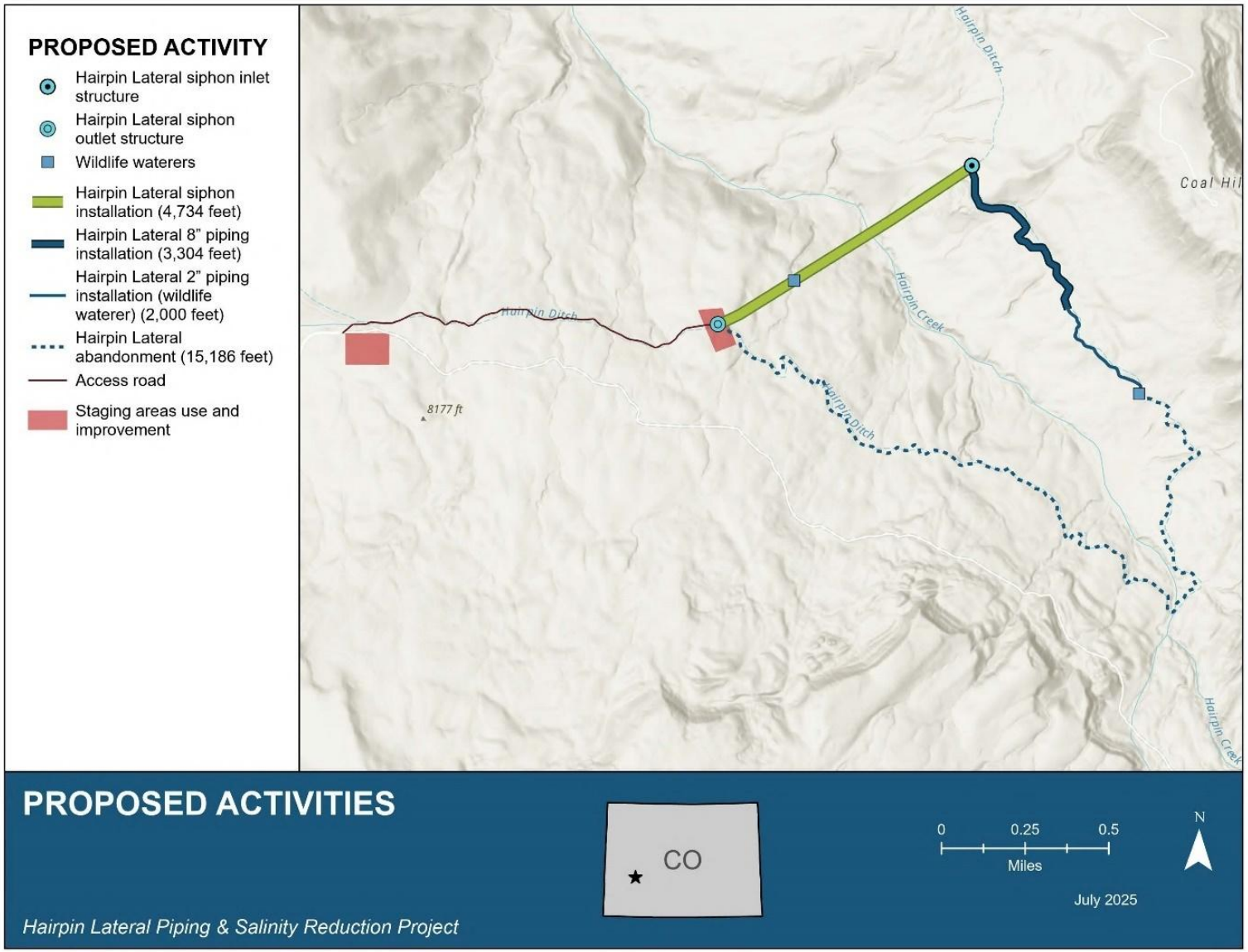

Figure 3. Map of Hairpin Lateral Proposed Activities

2.2.1 Siphon, Pipeline, and Wildlife Waterers Installation

2.2.1.1 *Hairpin Siphon Installation*

Associated with the existing Hairpin Lateral, the Proposed Action would install an approximately 4,734 feet long, pressurized 36-inch HDPE inverted siphon across Hairpin Draw. Installation would occur through open-cut trenching along the siphon alignment. The siphon would be placed in the trench, backfilled with native material (see 2.2.5 Borrow Activities), and compacted to design specifications. Hairpin Creek, an intermittent stream, crosses the Project Area in two places, including in the siphon area. If the creek is running during the planned siphon installation across the creek, temporary diversion and isolation measures would be used to maintain downstream flow and minimize sedimentation of the stream. The constructed siphon would allow water to bypass approximately 20,490 feet of open ditch of the Hairpin Lateral.

The intake for the new siphon would be a newly constructed concrete structure with an appurtenant trash rack within the existing Hairpin Lateral. A concrete outlet structure would be constructed at the outlet of the siphon, transitioning water from pressurized pipe flow to open channel flow back into the existing canal. The intake and outlet structure would each be approximately 25 feet wide by 20 feet long. The structures would each be approximately 6 feet high, however, most of the structures would exist below grade, with only 6 inches to 1 foot of the structure being above grade on the banks. The metal grating would be used on both structures to restrict access and enhance safety.

A 100-foot construction easement and an approximate 50-foot permanent easement would be required along the siphon area.

2.2.1.2 *Hairpin 8-inch Lateral Pipeline Installation*

To maintain irrigation service to a turnout located approximately 3,300 feet downstream from the siphon's starting point—which would otherwise be bypassed by the proposed siphon—a new 8-inch HDPE pipeline, approximately 3,304 feet in length, would be installed within the existing ditch alignment at the siphon's origin. This pipeline would be engineered to convey up to approximately 0.61 cubic feet per second (cfs) of flow. A flow meter would be installed immediately downstream of the inlet structure to monitor and record water delivery.

2.2.1.3 *Hairpin 2-inch Wildlife Waterer Pipeline Installation*

From the existing turnout location, an additional approximate 2,000 feet of 2-inch pipeline would be installed along the existing ditch prism leading to the wildlife waterer.

2.2.1.4 *Wildlife Waterers Installation*

Two wildlife waterers—commonly known as guzzlers—would be installed: one at the terminus of the 2-inch pipeline and another along the siphon route. The wildlife waterers would be constructed from durable, weather-resistant materials to ensure long-term reliability and consistent water availability for wildlife. BPWCD would donate the water to support the wildlife waterers.

Each waterer would feature either a trough or a float system to regulate the water delivery from the pipeline. If a trough is used, escape ramps would be incorporated to prevent accidental drowning.

A float valve would be installed to control water levels and prevent outflow. To support the trough, a concrete pad would be constructed at each installation site.

2.2.1.5 *General Pipeline Installation Notes*

Installation of the two pipelines would require excavation of trenches with sufficient width and depth to allow for proper compaction around the pipe haunch and to meet minimum burial depth requirements. The siphon pipeline would be installed primarily outside of the existing ditch alignment. The siphon pipeline would cross private property and require both construction and permanent easements. The 8-inch Hairpin Lateral pipeline would be installed within the existing ditch alignment, requiring excavation of the ditch bottom and sides. The 8-inch Hairpin Lateral pipeline and the 2-inch wildlife waterer pipeline would be installed within the current lateral prescriptive right-of-way (ROW).

During excavation, approximately 4 inches of trench foundation would be scarified at specified grades and elevations using heavy machinery to prepare bedding for the pipe. Pipe installation would involve fusing sections using specialized equipment and placing them on the prepared bedding. Embedment and backfill material would be placed and compacted in lifts until the designed grade is achieved. On-site material would be used when possible; otherwise imported aggregate from a commercial source may be used. Air vents, drains, and other pipeline appurtenances would be strategically installed along the pipeline alignment.

2.2.2 Abandoned Ditch Segments Decommissioning

Approximately 15,186 feet of the Hairpin Lateral, located between the wildlife waterer at the end of the 2-inch pipeline and the downstream end of the siphon, would be decommissioned and taken out of service. The abandoned ditch segments would be backfilled with on-site material and subsequently reseeded with native vegetation to promote vegetation regrowth and minimize erosion.

2.2.2.1 *General Ditch Segments Decommissioning Notes*

Existing ditch structures encountered along the pipeline alignment and abandoned section of the lateral—such as culverts, check structures, and flumes—would be removed. All sections of the existing ditch prism associated with the turnout pipe, wildlife waterer pipe, and the abandoned lateral bypassed by the 36-inch siphon would be filled with surrounding native material to disable irrigation water conveyance.

2.2.3 Access

The Proposed Action's activities associated with the Hairpin Lateral would occur entirely on private lands, with construction and access areas limited to only those necessary to safely implement the project. Access to the Hairpin Lateral Site from nearby Montrose, Colorado, would be via a combination of U.S. highways, county roads, and ditch O&M roads. From U.S. Highway 50, which runs eastward through Montrose, access would proceed along Kinikin Road to Q72 Road. At the eastern terminus of Q72 Road, approximately 10 miles from Montrose, access continues along the Hairpin Lateral O&M roads to reach the project site. Though no improvements to the Hairpin Lateral O&M roads are planned, if construction equipment is unable to safely access the site, some minor improvements and repairs may be required such as grading or leveling uneven sections, filling potholes, and adding temporary gravel to improve traction. In some locations, the road may need to

be widened by approximately 1 to 2 feet. If widening is necessary, it would likely be accomplished using on-site materials and would primarily involve cutting into adjacent hillsides rather than filling on the downhill side. The route is not particularly sinuous, so widening around tight curves is not expected. An approximate 100-foot construction easement and a 50-foot permanent easement would be required along the siphon installation area.

The Proposed Action's activities associated with the HRP would occur entirely on private land, with construction and access areas limited to only those necessary to safely implement the project. Access to the HRP Site from the town of Delta, Colorado, is provided via a combination of state highways, county roads, and private driveways. From Highway 50 south of Delta, access continues via Carnation Road, N. River Road, and S. Blossom Road, with the site situated adjacent to and bisected by S. Blossom Road, east of the Uncompahgre River. Entry to the site is available from private driveways located to the south of S. Blossom Road and at the intersection of N. River Road and S. Blossom Road on the northwest corner of the property.

2.2.4 Staging

Two staging areas of approximately 5.5 acres and 7.9 acres would be used on the west side of the siphon. The larger, 7.9-acre site, located further west, was previously used for the Shinn Park & Waterdog Salinity Reduction Project and would primarily serve as a location for equipment staging and storage of pipe and other appurtenances. The smaller, 5.5-acre site to the east would be designated for pipe fusion activities during construction.

To minimize environmental effects, BPWCD would make every effort to limit disturbances within the staging area. While tree removal is not anticipated, some disturbances or removal of smaller vegetation, such as shrubs and grasses, may occur.

2.2.5 Borrow Activities

All necessary pipe bedding and trench fill for the project would be generated from within the construction footprint. During pipeline installation, the contractor would attempt to use on-site material for embedment and backfill; however, if additional fill material is required, imported aggregate from a commercial source may be used. Although no borrow areas are proposed for this project, some movement of material is expected within the project footprint. Fill and embedment material would be loaded into dump trucks using excavators or loaders and hauled to the construction site via approved access routes. These practices are intended to minimize disturbance and avoid the need for offsite borrow area.

2.2.6 Weed Control & Post-construction Revegetation

To prevent the spread of noxious weeds during construction, all equipment and vehicles would be cleaned before arriving at the work site. Best Management Practices (BMPs) would be implemented throughout the project to minimize the introduction and spread of weeds, and noxious weeds in disturbed areas would be controlled according to ROW stipulations and Montrose County standards. Following construction, disturbed ground would be revegetated using either the sterile topsoiling and natural recruitment method or the conventional method, depending on landowner preference and site conditions. In non-farmed areas, sterile topsoil—weed-free soil sourced from subsurface layers—would be placed on disturbed ground, mulched, and inoculated with mycorrhiza to facilitate natural revegetation by native plant species. Conventional revegetation would be used in

irrigated pastures, hayfields, and areas associated with siphon installation, where reserved topsoil would be spread and the site reseeded with weed-free, regionally appropriate seed mixes. The specific revegetation method and seed mix for each area would be indicated in the project construction plans. Success of revegetation efforts would be monitored in accordance with agreements between BPWCD and landowners or public land permit stipulations.

2.2.7 Habitat Replacement

In accordance with the CRBSCA, habitat replacement would be required to maintain riparian and wetland habitat affected as a result of the Proposed Action. Habitat replacement would be accomplished by implementing the Hairpin HRP, which was developed to offset the ecological losses caused by the Hairpin Lateral Piping and Salinity Reduction Project. The original open ditch supports riparian vegetation and wildlife, but the installation of a siphon to bypass this ditch would result in the removal of that habitat. To compensate for the loss of this riparian habitat, the HRP Site was selected on the Denham Family property adjacent to the Uncompahgre River in Montrose County, Colorado, and was selected based on its ecological potential, existing conservation easement, as well as cooperative landowner permission. The site is intended to restore and enhance habitat quality through targeted treatments and long-term management, ensuring compliance with federal requirements and supporting regional biodiversity.

HRP Planned Activities and Treatments

The HRP is a comprehensive plan to improve habitat on the Denham Family property (Figure 4). Habitat improvement would occur by treating noxious weeds with herbicides and mechanical removal, applying riparian seed mix, planting native tree and shrub species, removing agricultural refuse (ranch debris) as well as existing human debris around the property, and installing a wildlife-friendly fence (Figure 5, Figure 6, and Figure 7). Summaries of each treatment are listed below.

Figure 4. Map of the HRP Site

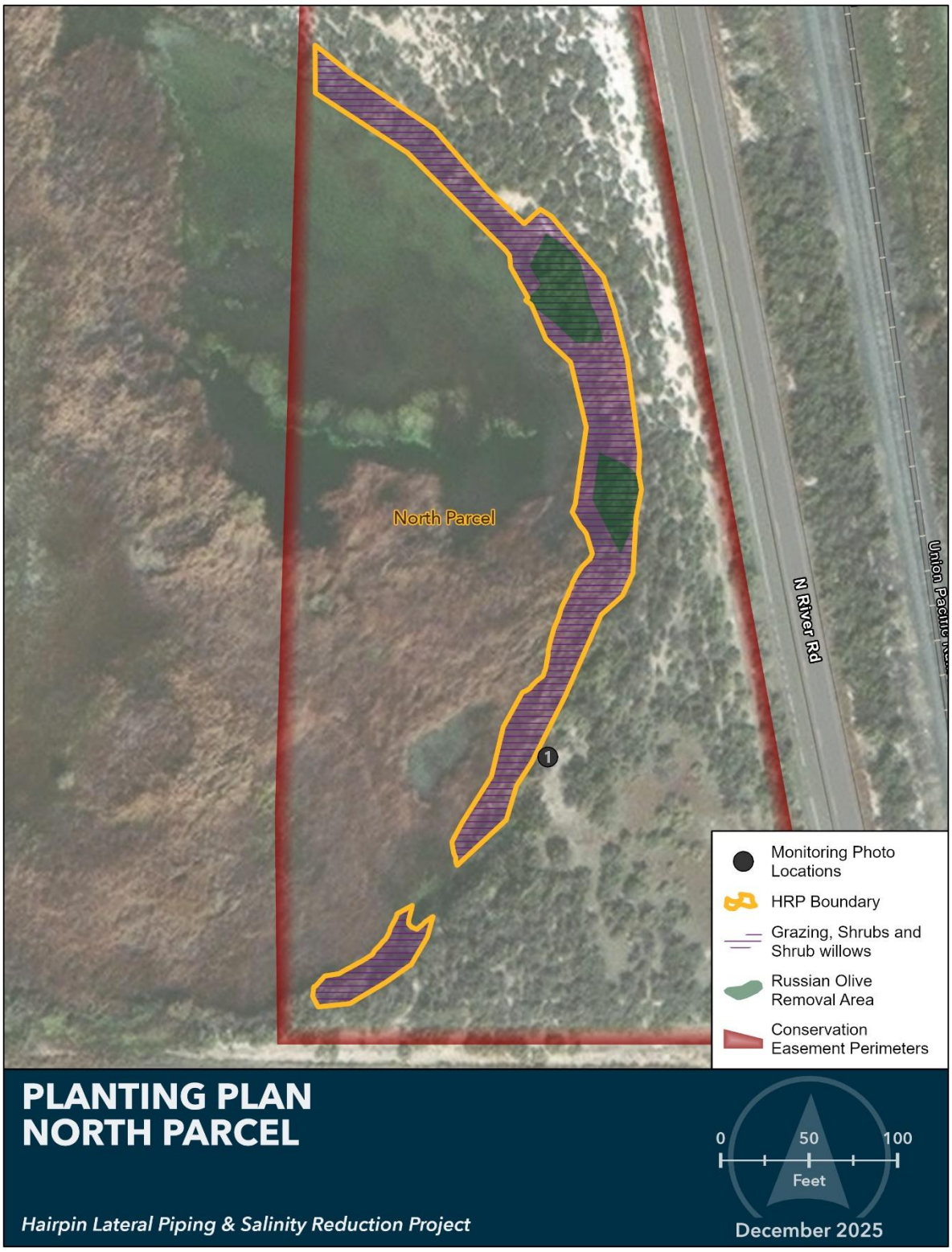

Figure 5. Map of HRP Proposed Activities, Planting Plan North Parcel

Figure 6. Map of HRP Proposed Activities, Planting Plan South Parcel 1

Figure 7. Map of HRP Proposed Activities, Planting Plan South Parcel 2

Noxious Weed Treatments

Grazing
Targeted grazing would occur in areas of Russian knapweed (*Acroptilon repens*), common reed (*Phragmites australis*), and saltgrass (*Distichlis spicata*) (where seed mix would be applied) as well as areas mapped for planting of Scouler's willow (*Salix scouleriana*), coyote willow (*Salix exigua*), and buffaloberry (*Shepherdia canadensis*). Grazing would occur before herbicide application.

Herbicide Application
Site-wide removal of noxious weeds, including Canada thistle (*Cirsium arvense*), Russian knapweed, perennial pepperweed (*Lepidium latifolium*), and leafy spurge (*Euphorbia esula*) would be conducted through targeted spot applications of herbicides. Herbicide application would specifically occur for the 0.27 acres of site-specific Russian knapweed/pepperweed area after the targeted grazing ("Grazing, Seed Mix" in Figure 7) as needed, as well as for areas identified in the "Grazing, Shrubs and Shrub Willows" (Figure 5, Figure 6, Figure 7), and in the "Russian Olive Removal Area" (Figure 5, Figure 6, Figure 7).

Vegetation Removal
Invasive woody species such as Russian olive (*Elaeagnus angustifolia)* and tamarisk (*Tamarix ramosissima*) would be mechanically removed throughout the site as well as in specific areas identified as "Russian Olive Removal Areas" (Figure 5, Figure 6, Figure 7) and herbicide would be applied to stumps to prevent regrowth. A raptor and migratory bird active nest survey must be completed within 7 days before tree removal activities (see Table 4-1). Cut vegetation can be piled and burned on-site as per Open Burn/Slash Pile Permit requirements.

Planting Native Trees and Shrubs and Spreading Seed Mix

Native trees and shrubs would be planted to replace the invasive species and foster a diverse plant community capable of supporting a broad range of wildlife guilds. Species selected for replanting include plains cottonwood (*Populus deltoides*), peachleaf willow (*Salix amygdaloides*), coyote willow, and Scouler's willow which would contribute to the development of midstory and overstory layers. Additionally, russet buffaloberry saplings and the herbaceous species contained in the seed mix would be introduced to increase habitat complexity.

To support successful plant establishment, agricultural compost provided by the landowner would be incorporated into planting areas to improve nutrient availability and optimize soil structure, thereby encouraging robust root growth and successful establishment of native vegetation. To support successful plant establishment, BPWCD would apply supplemental water to the new plantings as needed.

Following grazing and herbicide treatment, a High Plains/Foothills Riparian seed mix would be sown in the knapweed, common reed, and saltgrass areas to promote the reestablishment of native vegetation and enhance ecological resilience across the HRP Site. Seed mix would be sown at least 90 days after the second herbicide application.

All plant materials, including the High Plains/Foothills Riparian seed mix, would be sourced from reputable local nurseries, such as Western Native Seed in Coaldale, Colorado. A portion of the coyote willow stakes would be harvested from existing populations on-site.

Agricultural Refuse Removal

Ranch-related debris, such as stockpiled old fencing, and existing human debris, such as old refrigerators, around the property would be removed from the HRP Site to reduce visual and ecological effects associated with prior human activity.

Wildlife Fence Installation

Currently, a full barbed wire, non-wildlife friendly fence is stationed along the southern border of the South Site. To enable safer movement for deer and other animals, approximately 908 feet of wildlife-friendly fencing would be installed in its place. The new fencing would allow wildlife to pass safely while still protecting the restored areas from overgrazing and trampling.

HRP Activities and Treatments Timeline

The expected timeline for all activities and treatments associated with the HRP Site are presented in Table 2-1. See the complete HRP in the project record for further details regarding the proposed habitat work (J-U-B 2025a).

2.2.8 Schedule

Construction activities associated with the Hairpin Lateral Site are expected to begin in mid-July and be completed by mid-March of the following year. Work within the Hairpin Lateral footprint would occur primarily outside of the irrigation season, which is from April 30 to September 15, to avoid disruption to water delivery for recipients; for example, construction of the ditch prism and lateral abandonment would occur between September 16 and April 29 within the first year of project implementation. Installation of the siphon within areas overlapping Gunnison sage-grouse (GUSG) critical habitat would begin after July 15, outside of the nesting and brood-rearing season (March 15–July15) within the first year. Siphon installation in areas outside of critical habitat may occur at any time of the year, as it is not disruptive to GUSG or irrigation delivery. All construction would be conducted during daylight hours (typically 7:00 a.m. to 4:00 p.m.), Monday through Saturday, with potential interruptions due to extreme wet weather conditions. In the Hairpin Lateral Site, preconstruction nest surveys would be conducted before vegetation removal between April 1 and August 31 to avoid disturbance to Migratory Bird Treaty Act (MBTA) species.

Timing activities at the HRP Site would be subject to additional seasonal restrictions to avoid impacts to migratory birds protected under the MBTA. If vegetation removal occurs during migratory bird and raptor breeding and nesting season (April 1–August 31), surveys would be required 7 days before Russian olive and tamarisk removal activities. Herbicide application may proceed during these periods provided it does not result in harm to MBTA species. Grazing for weed control is not prohibited under MBTA and may occur as scheduled. Planting and weed treatment activities are timed to coincide with seasonal conditions that support successful establishment and effectiveness, respectively. A list of construction periods and timing restrictions for the various activities at both sites are provided in Table 2-1 and further described in Chapter 4 (see CHAPTER 4).

Table 2-1. Construction Schedule and Timing Restrictions for Proposed Action Implementation

Activity/Location	Construction Timeframe/Timing Restriction
General Timing Restrictions	
Daytime Working Hours	All work must occur within the designated Proposed Action footprint and during established daytime working hours.
Wet Weather Conditions	Construction activities would not occur during extreme wet weather conditions.
Irrigation Season	No work disruptive to irrigation water delivery would occur (April 30–September 15); siphon construction across Hairpin Draw may occur during irrigation season.
GUSG Critical Habitat	No construction would occur during nesting and brood-rearing season (March 15–July15)
Hairpin Lateral Site	
Timing Restrictions for Activities within GUSG critical habitat	
Active Nest Survey	Conduct within 7 days of vegetation removal activities if these activities are occurring during July 16 to August 31)
Siphon Installation	Would occur July 16–March 14 (outside GUSG nesting and brood-rearing season)
Siphon Inlet Structure Installation	Would occur July 16–March 14 (outside GUSG nesting and brood-rearing season)
2-inch Pipe Wildlife Waterer Installation	Would occur September 16–March 14 (outside irrigation season and GUSG nesting and brood-rearing season)
Hairpin Lateral 8-inch Pipe Installation	Would occur September 16–March 14 (outside irrigation season and GUSG nesting and brood-rearing season)
Hairpin Lateral 2-inch Pipe Installation	Would occur September 16–March 14 (outside irrigation season and GUSG nesting and brood-rearing season)
Activities outside GUSG critical habitat	
Active Nest Survey	Conduct within 7 days of vegetation removal activities if these activities occur during April 1 to August 31
Access Road Improvements	Would occur anytime
Lateral Abandonment/Backfill	Would occur September 16–April 29 (Outside irrigation season)
Siphon Installation	Would occur anytime
Siphon Wildlife Waterer Installation	Would occur anytime
Siphon Outlet Structure	Would occur anytime
HRP Site	
Grazing (Weed Removal)	Would occur March–April
Herbicide Application—Weeds	Would occur April–June
Herbicide Reapplication—Weeds	Would occur August-November
Seed Mix Application	Would occur at least 90 days after herbicide reapplication
Active Nest Survey	Conduct within 7 days before tree/shrub removal during MBTA season (April 1–August 31)

Activity/Location	Construction Timeframe/Timing Restriction
Mechanical Tree/Shrub Removal and Herbicide Application (Tamarisk, Russian Olive)	Would occur April–November
Herbicide Reapplication—Trees/Shrubs, as needed	Would occur April–November
Planting (Willows, etc.)	Would occur Fall/Spring
Application of Compost	Would occur Fall/Spring
Reapply Herbicide—Weeds and Trees/Shrubs, as needed	Would occur during Spring inspections
Installation of Fence	Would occur anytime; coordinate with tree removal and herbicide application
Debris Removal	Would occur anytime

2.2.9 Permits & Authorizations

Agreements & Authorizations

The following agreement would be required before Proposed Action implementation.

- HRP Agreement between BPWCD and landowner.

Construction Permits & Plans

The following construction permits and plans would be required prior to Proposed Action implementation:

- Stormwater Management Plan (SWMP), to be submitted to Colorado Department of Public Health & Environment (CDPHE) by the construction contractor before construction disturbance.
- CWA Section 401 Water Quality Certification to be obtained from CDPHE by BPWCD before ground 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 before construction disturbance (regardless of whether dewatering would take place during construction).
- CWA Section 404 Regional General Permit (RGP) 5 for Ditch Related Activities in the State of Colorado for the Hairpin Lateral Site: 30-Day Advance of Construction Submittal Package (to include "(1) the respective agency's documentation for compliance with the Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) and/or the lead Federal Agency NEPA document containing the same, (2) a project description, (3) project plans, and (4) a location map"), and CWA Section 404 NWP 27—Aquatic Habitat Restoration, Enhancement, and Establishment Activities or appropriate permit to be obtained from the USACE by BPWCD.
- Certification under CDPHE Water Quality Division (CDPHE-WQD) Construction Dewatering Discharges Permit COG070000 to be obtained by the construction contractor (if any dewatering is to take place during construction).

- Spill Prevention, Control, and Countermeasures (SPCC) Plan to be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.
- Utility clearances, to be obtained by the construction contractor prior to construction activities from local utilities in the area.
- Any construction, access, or use permits which may be required by the Montrose County Planning and Development Department, Montrose County Engineering, and Montrose Road and Bridge Department.
- If blasting is to be conducted during construction, the certified blaster/construction contractor must obtain a Type I Explosives Permit from Colorado Department of Labor and Employment Division of Oil and Public Safety – Explosives Program.
- If slash burning is to be conducted, an Open Burn/Slash Pile Permit to be obtained by the construction contractor from CDPHE.

Compliance with the following federal laws and Executive Orders (EO) are required before and during Project implementation (the following list is not intended to be all-inclusive):

Natural Resource Protection Laws

- Clean Air Act (CAA) of 1963 (42 U.S.C. § 7401)
- ESA of 1973 as amended (16 U.S.C. 1531-1544, 87 Stat. 884)
- CWA of 1972 as amended (33 U.S.C. 1251 et seq.)
- MBTA of 1918 (16 U.S.C. 703-712)
- Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 U.S.C. 668- 668c)
- Farmland Protection Policy Act (FPPA) (7 U.S.C. 4201, et seq.)

Cultural Resource Laws

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

Paleontological Resource Laws

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

CHAPTER 3—AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This chapter discusses resources that may be affected by the Action Alternative and the No Action Alternative. For each resource, the affected area and/or interests are identified, existing conditions described, and effects are disclosed under the No Action Alternative and the Action Alternative (Proposed Action, Preferred Alternative). This section concludes with a summary of effects for each resource.

3.2 Affected Environment and Environmental Consequences

3.2.1 Access, Transportation, and Public Health and Safety

Access, transportation, and public health and safety in the region are managed by various local, state, and federal agencies, including the Montrose County Sheriff, Montrose Fire Protection District, Montrose County Road and Bridge Department, and the Colorado Department of Transportation (CDOT). The major transportation routes in the vicinity of the Proposed Action include U.S. Highway 50, Kinikin Road, Q72 Road, Hairpin Lateral O&M roads, Carnation Road, North River Road, and S. Blossom Road. See section 2.2.3 Access for more detailed information regarding access at the Hairpin Lateral and the HRP Sites.

No Action Alternative

Hairpin Lateral Site
No effects would occur to public access, transportation, or public safety from the No Action Alternative at the local or regional level. O&M activities for the lateral would continue, and personnel would continue to use various private and public roads in the Project Area. No permits or coordination with local, state, or federal agencies would be required under the No Action Alternative. The safety risks associated with sources of open, moving water along the Hairpin Lateral would continue.

HRP Site
No effects would occur to public access, transportation, or public safety from the No Action Alternative at the local or regional level. No permits or coordination with local, state, or federal agencies would be required under the No Action Alternative. No public safety risks would occur at the HRP Site.

Proposed Action

Hairpin Lateral Site
Construction traffic would access the Project Area using existing roads and Hairpin Lateral O&M road maintained by BPWCD under a prescriptive easement. Though no improvements to the access road are anticipated, if construction equipment is unable to safely access the site, some minor

improvements and repairs may be required. Grading and pothole repair are the most likely improvements needed to provide safe access. To limit effects, construction and access footprints would be restricted to only those areas necessary to safely implement the Proposed Action.

Implementation of the Proposed Action would temporarily cause brief delays for residents and the public using U.S. Highway 50, Kinikin Road, and Q72 Road, and due to construction vehicles entering and exiting the private access roads. No road crossings are necessary to implement the Proposed Action. Traffic on local roads is currently light, and the Proposed Action would only result in a temporary, minor increase in traffic for residents and businesses. Therefore, this effect would not rise to the level of significance.

The Montrose County Sheriff and the Montrose Fire Protection District would continue to cover the Project Area for emergency response. Coordination efforts with those entities would ensure their response is not hindered by activities associated with the Proposed Action. Active construction areas would be adequately marked and barricaded to prevent public access. Therefore, no temporary significant adverse effects to public safety would occur.

To further minimize local and regional effects to access, transportation, and public safety from the Proposed Action, BPWCD and the contractor would coordinate with utility companies, the Montrose County Road and Bridge Department, CDOT, and County and Sheriff departments when traffic or access would be delayed during implementation of the Proposed Action at the Hairpin Lateral Site (see Section 2.2.9 and environmental commitments in Table 4-1). Standard industry practices required in the specifications to the contractor would limit any effects to health and safety (e.g., dust abatement, traffic control plans, coordination with local emergency responders, limiting work hours to daytime), and these measures are included in the environmental commitments for the project (see Table 4-1).

Given no new access roads would be constructed for the Hairpin Lateral Site and coordination with local agencies for traffic or access delays and emergency response would occur, the Proposed Action would have no significant adverse effects on access, transportation, or public safety.

The public safety risks associated with sources of open, moving water along the Hairpin Lateral would be reduced when the unlined ditch is replaced with a 4,734-foot siphon, 5,304-feet of HDPE pipeline, and the remainder is abandoned. Removing open, moving water within the Hairpin Lateral would have a long-term beneficial effect on public safety by reducing public safety risks.

HRP Site

Implementation at the HRP Site would result in temporary, minor increases in traffic on Highway 50, Carnation Road, North River Road, and S. Blossom Road due to equipment mobilization. No new access roads would be constructed, and coordination with local agencies would minimize delays. Traffic on local roads is currently light, and the Proposed Action would only result in a temporary, minor increase in traffic for residents and businesses. Therefore, this effect would not rise to the level of significance.

Coordination with local emergency responders would ensure their response is not hindered. Standard industry practices, such as traffic control plans and dust abatement, would be implemented consistent with project specifications (see Table 4-1). No public safety risks are associated with the implementation of the HRP.

3.2.2 Agricultural Resources and Soils

According to the USDA National Agricultural Statistics Survey (NASS) Agricultural Census, Colorado contains over 36,000 farm operations across more than 30.2 million acres (NASS 2022). The USDA NRCS maintains an inventory of prime and unique farmlands to identify lands essential for agricultural production (7 Code of Federal Regulations [CFR] 675.2). Under the FPPA (7 U.S.C. § 4201 et seq.; 7 CFR 658), federal agencies are required to assess potential effects to these farmland categories during project planning. Soil surveys were conducted using USDA NRCS Web Soil Survey to examine the soil types and farmland classifications for both sites.

Hairpin Lateral Site
The Project Area for the Hairpin Lateral Site encompasses 96.6 acres and is dominated by steep, stony soils. The major mapped soil units found in the Hairpin Lateral Site are Cerro, very stony-Curecanti, extremely stony complex (45.2%), Cerro-Swansonlake complex (23.3%), and Cerro, extremely stony-Shermap-Curecanti complex (17.9%). No other soil unit occupies more than 10% of the site. No soil in the Hairpin Lateral Site is classified as prime farmland because of slope, stoniness, and other limiting factors (NRCS 2025).

HRP Site
The HRP Site lies within a conservation easement of approximately 42.8 acres and is almost entirely composed of agriculturally significant soils. The dominant soil units are Waterdog-Riverwash complex (87.5%), classified as farmland of statewide importance, and Montrose silty clay loam (12.5%), classified as prime farmland if irrigated and reclaimed of excess salts and sodium (NRCS 2025). Although the HRP Site contains prime and unique farmland soils, the land is within a permanent conservation easement and is not currently used for agricultural production.

No Action Alternative

Hairpin Lateral Site
Under the No Action Alternative, no ground disturbance would occur. Soils in the Hairpin Lateral Project Area would remain in their current condition. The site would continue to exhibit steep, stony soils unsuitable for agriculture. No effects to agricultural resources or soils would occur.

HRP Site
Under the No Action Alternative, no ground disturbance would occur. Soils in the HRP Project would remain in their current condition. The HRP Site would remain in conservation use, with no change to its soil condition or land use designation. No effects to agricultural resources or soils would occur.

Proposed Action

Hairpin Lateral Site
The proposed siphon and pipeline installation and ditch abandonment involve the use of heavy machinery to manipulate the soil and would temporarily disturb approximately 24.8 acres within the 96.6-acre site. However, the soils in and around the Hairpin Lateral Site are not classified as prime or unique farmland and are not currently used for agricultural production. Soil disturbance would primarily occur within the existing lateral prism and adjacent upland areas. BMPs, including Temporary Erosion and Sedimentation Controls (TESCs), working from existing roads and upland area, and avoiding construction during wet conditions, would be implemented to minimize erosion and soil loss (see Table 4-1). Post-construction reclamation would include contouring, revegetation, using sterile topsoiling and natural recruitment or conventional methods, and inoculation with

mycorrhiza to promote soil health, ensuring soil preservation. Therefore, no significant adverse effects to soils within this Project Area would occur.

HRP Site

The Proposed Action includes the mechanical removal of invasive trees (tamarisk and Russian olive) and debris using equipment, which would result in temporary soil disturbance to 6.6 acres within the 42.8-acres conservation easement. BMPs, such as using soil and erosion control devices and reseeding and stabilizing disturbed soils areas, would be implemented to limit effects from soil disturbances (see Table 4-1). Although the soils are classified as prime and unique farmland, the land within the HRP Site is not currently in agricultural production. The invasive species and debris removal and native species planting would enhance soil quality and health in the long term by restoring native vegetation. The wildlife, agricultural, scenic, and general open space characteristics of the HRP Site protected under the existing conservation easement would be preserved. The Proposed Action would not alter the land use designation. Therefore, no significant adverse effects to agricultural resources and soils within the HRP Site would occur, and the Proposed Action would comply with the FPPA.

3.2.3 Air Quality

The National Ambient Air Quality Standards (NAAQS) established by the Environmental Protection Agency (EPA) under the CAA specify limits for criteria air pollutants. If the levels of criteria pollutant in an area are higher than the NAAQS, the airshed is designated as a nonattainment area. Areas that meet the NAAQS for criteria pollutants are designated as attainment areas. According to the EPA, Montrose County meets the attainment requirements for the NAAQS, meaning all criteria pollutants are at safe levels and are below specific limits set under the CAA (EPA 2025a).

Hairpin Lateral and HRP Sites

Currently, negligible effects to air quality occur from routine maintenance of the Hairpin Lateral including dust and exhaust from occasional travel in light vehicles along the lateral corridor, and occasional canal cleaning and maintenance activities and local ranching and agricultural activities that require heavy equipment. In addition, negligible effects to air quality occur from routine maintenance of the HRP Site, including dust and exhaust from occasional travel in light vehicles along the surrounding access roads and habitat restoration activities that require heavy equipment.

No Action Alternative

Hairpin Lateral and HRP Sites

Under the No Action Alternative, no changes in the existing level of air quality would occur in the Project Area. The Hairpin Lateral would continue to operate in its current position and configuration, and dust and exhaust would continue to be generated by vehicles and equipment during routine O&M activities and local ranching and agricultural activities. The HRP would additionally continue to operate in its current position and configuration, and dust and exhaust would continue to be generated by vehicles and equipment during habitat restoration activities. Montrose County and the surrounding areas would continue to meet NAAQS and remain in attainment.

Proposed Action

Hairpin Lateral and HRP Sites

During construction of the Proposed Action, the proposed trenching, excavation, and dirt work would produce negligible particulate and diesel emissions from the two to five pieces of heavy equipment operating at the same time during the construction phase, resulting in a temporary, negligible adverse effect to air quality.

Implementation of the HRP Site may require slash pile burning from vegetation removal (Russian olive and tamarisk). If slash pile burning is to be conducted, an Open Burn/Slash Pile Permit would be obtained by the construction contractor from CDPHE with prescribed burning limitations to ensure air quality compliance.

Air emissions from the Hairpin Lateral and HRP Sites would be localized and would be similar to occasional local air quality effects associated with ranching and agricultural activities that require heavy equipment, routine lateral maintenance, and slash pile burning. Therefore, these temporary impacts would not rise to the level of significant. BMPs to employ appropriate dust control measures during project implementation and prescribed burning limitations (Open Burn/Slash Pile Permit) would further reduce the temporary impacts to air quality (see Table 4-1). Once construction is complete, the amount of required O&M activities would decrease, resulting in a long-term beneficial effect to air quality. Montrose County and the surrounding areas would continue to meet NAAQS and remain in attainment.

Because the temporary adverse effects to air quality are negligible, Montrose County would continue to meet NAAQS and remain in attainment, and any long-term effects would be beneficial. Therefore, no significant effect to air quality would result from implementing the Proposed Action.

3.2.4 Cultural Resources

Federal statutes and EOs guide the protection of historic and 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. Cultural resources can be found throughout the Lower San Juan and Colorado River Basins.

Hairpin Lateral Site

For the Proposed Action, Alpine Archaeological Consultants, Inc. (Alpine) conducted a Class III cultural resource survey to identify potential historic and cultural resources within the Proposed Action's Area of Potential Effect (APE) in compliance with Section 106 of the NHPA (36 CFR 800.4; Blija 2025). The APE for the Hairpin Lateral Site, approximately 174.6 acres, consists of a 100-ft buffer around all project disturbances with a larger 200-foot buffer around the proposed siphon route. The inventory covered areas of proposed ground disturbance, including the staging areas within the APE. The inventory resulted in the documentation of one prehistoric site, five historic sites, and two historic linear site segments; all newly recorded. No isolated finds were recorded during the inventory. These sites are recommended as not eligible for inclusion in the National Register of Historic Places (NRHP), and the linear segments as non-supporting portions of resources that have been previously determined to be not eligible for listing in the NRHP (Table 3-1).

Table 3-1. Summary of Sites Documented within the Hairpin Lateral APE

Site Number	Site Name or Type	NRHP Eligibility Determination	Management Recommendation
5MN5036.25	Historic Hairpin Ditch	Non-supporting	No further work
5MN11058.5	Historic Curecanti-South Canal section of the Curecanti-Montrose 115-kV Transmission Line	Non-supporting	No further work
5MN13869	Historic open camp	Not eligible	No further work
5MN13870	Historic corral	Not eligible	No further work
5MN13871	Historic open artifact scatter	Not eligible	No further work
5MN13872	Prehistoric open lithic scatter	Not eligible	No further work
5MN13873	Historic homestead/habitation site	Not eligible	No further work
5MN13874	Historic trash dump site	Not eligible	No further work

HRP Site

For the HRP Site, J-U-B ENGINEERS, Inc. (J-U-B) conducted a Class III cultural resources survey to identify potential historical and cultural resources within the Proposed Action's APE in compliance with Section 106 of the NHPA (36 CFR 800.4; Vandagriff 2025). The direct APE for the site consisted of approximately 17-acres where ground disturbing activities may occur. Additionally, potential effects to NRHP eligible or listed historic properties were evaluated within a one-mile radius of the direct APE, constituting the indirect APE. No historic properties were identified within the direct or indirect APE.

No Action Alternative

Hairpin Lateral and HRP Sites

Under the No Action Alternative, no ground disturbance would occur. Therefore, cultural resources that exist in the Project Area would not be affected.

Proposed Action

Hairpin Lateral Site

As a result of the Class III cultural resources inventory of the Hairpin Lateral APE, Reclamation has recommended that the Proposed Action would have no effect on the cultural resources identified. Colorado SHPO concurred with the identification of historic properties and the assessment of effects in a letter dated December 12, 2025. The Navajo Nation Tribal Historic Preservation Officer agreed with the determination of eligibility and effect findings in a letter dated December 12, 2025. Copies of both letters are located in Appendix B. Additionally, if inadvertent cultural resources discoveries are made during implementation of the Proposed Action, activities would be suspended, and Reclamation would determine the appropriate course of action. See Table 4-1 for additional information on cultural resources BMPs.

HRP Site

Given that the Class III cultural resources inventory found no cultural resources within the HRP APE, Reclamation has recommended that the Proposed Action would have no effect on cultural resources. Colorado SHPO concurred with Reclamation in a letter dated December 12, 2025. The

Navajo Nation Tribal Historic Preservation Officer agreed with the determination in a letter dated December 12, 2025 (see Appendix B—Cultural Resource Compliance Documentation for copies of both letters). Additionally, if inadvertent cultural resources discoveries are made during implementation of the Proposed Action, activities would be suspended, and Reclamation would determine the appropriate course of action. See Table 4-1 for additional information on cultural resources BMPs.

3.2.5 Noise

Hairpin Lateral and HRP Site
A moderate baseline level of noise occurs around both the Hairpin Lateral and HRP Project Areas. Current noise levels in these areas are consistent with rural agricultural settings. Typical sources for noise include farm equipment, operation, and maintenance activities at the Hairpin Lateral and HRP Sites, and vehicular traffic from nearby roads. Noise is regulated at the local level through Montrose County ordinances. Montrose County's Right to Farm clause protects agricultural and related construction noise from nuisance complaints (Montrose County 2024).

No Action Alternative

Hairpin Lateral and HRP Site
Under the No Action Alternative, no construction activities would occur, and the existing noise conditions would persist. Surrounding agricultural operations and routine maintenance of irrigation infrastructure and the HRP Site would continue to generate a moderate baseline level of noise, but no additional sources would be introduced.

Proposed Action Alternative

Hairpin Lateral and HRP Site
Construction activities associated with the Proposed Action would generate temporary increases in noise from equipment such as excavators, loaders, and trucks. These activities would occur during daylight hours and within the designated Project Area. Some construction activities may require Temporary Use Permits or Special Use Permits; these permits include conditions such as restricted hours of operation to minimize noise effects. Effects from noise from the Proposed Action would be mitigated through complying with local requirements and implementing BMPs (see Table 4-1).

Given the temporary nature of construction and the implementation of minimization and mitigation measures, effects from noise would be minor and would not rise to the level of significance. No long-term changes to ambient noise levels would occur following implementation.

3.2.6 Noxious Weeds

The Colorado Noxious Weed Act (CNWA) designates undesirable plants considered a threat to Colorado's natural resources (CNWA CRS 35-5.5-101-119)). The City of Montrose Noxious Weed Management Program (CMNWMP) also provides weed management requirements and prevention measures which were used in the design of the Proposed Action (City of Montrose 2019; Project BMPs in Table 4-1). BPWCD is responsible for complying with the CNWA in the Project Area (CRS 35-5.5-104. Duty to manage noxious weeds).

Hairpin Lateral Site
The Project Area contains weed species, also known as noxious weeds, occurring in typical background concentrations. Activities on private lands including application of contaminated seeds

and irrigation water, and use of contaminated equipment continues to create disturbed areas vulnerable to weed infestation and provides transport vectors that allows weeds to reach and colonize those areas. The open canal transports invasive weed seeds downstream. In addition, cattle grazing is present in the Hairpin Lateral Site and likely contributes to the spread of noxious weeds.

Observed noxious species in the Project Area include Canada thistle, houndstongue (*Cynoglossum officinale*), oxeye daisy (*Leucanthemum vulgare*), perennial pepperweed, mullein (*Verbascum thapsus*), and cocklebur (*Xanthium spp.*).

HRP Site
The HRP Site contains noxious weed species, occurring in typical background concentrations. Activities on surrounding agricultural land and easement land including application of contaminated seeds and irrigation water, and use of contaminated equipment, and trespassing onto private property continue to create disturbed areas vulnerable to weed infestation and provide transport vectors that allows weeds to reach and colonize those areas. Observed noxious species in the HRP Site include Canada thistle, perennial pepperweed, Russian knapweed, leafy spurge, and two woody species: Russian olive and tamarisk.

No Action Alternative

Hairpin Lateral Site
At the Hairpin Lateral Site, noxious weeds would continue to occur in typical background concentrations. Ongoing activities on private lands—including the use of contaminated irrigation water and equipment—would continue to create disturbed areas vulnerable to infestation. The open canal would remain a vector for downstream transport of invasive weed seeds, and cattle grazing would continue to contribute to weed dispersal. Minor maintenance and vegetation clearing along the lateral would perpetuate disturbance, allowing invasive species to compete with native vegetation.

HRP Site
At the HRP Site, noxious weeds would also persist at current levels. Without intervention, these invasive species would likely expand their presence within the site, resulting in indirect but potentially cumulative adverse effects on native vegetation. Agricultural activities and trespass-related disturbances would continue to provide transport vectors for weed colonization. Open waterways adjacent to agricultural fields would remain a pathway for seed dispersal, further facilitating weed spread.

Proposed Action

Hairpin Lateral Site
Construction activities would temporarily disturb approximately 24.8 acres, creating conditions conducive to weed establishment. BMPs such as vehicle cleaning and post-construction rehabilitation would be implemented to minimize new weed introductions and establishment (see Table 4-1).

In the long term, the Proposed Action would remove segments of open canal, eliminating a key vector for weed seed transport and reducing seepage that supports herbaceous noxious weeds. Reduced maintenance needs along buried pipeline segments would further limit disturbance. Cattle grazing would continue to contribute to weed spread. Given the small disturbance footprint (0.0017% of Montrose County), proposed BMPs, and existing weed presence, no significant long-term effects would occur from implementation of the Proposed Action.

HRP Site
At the HRP Site, the Proposed Action would implement direct weed control measures, including mechanical removal, selective herbicide application, and cut-stump treatments for woody species. These actions would reduce weed populations and promote native vegetation recovery. Annual monitoring and herbicide reapplication would support long-term habitat restoration and biodiversity enhancement. BMPs would minimize construction-related weed spread, and compliance with CNWA and CMNWMP would be maintained. Overall, the HRP would have a beneficial effect on controlling noxious weeds at the HRP Site.

3.2.7 Vegetation

3.2.7.1 *General Vegetation*

Hairpin Lateral Site
The Hairpin Lateral Site contains upland and riparian community types and the lateral carries irrigation water seasonally from April 30 to September 15. The 96.6-acre Project Area includes a narrow riparian corridor along Hairpin Creek, minimal, fragmented, riparian patches along Hairpin Lateral and adjacent shrubland, with vegetation varying in presence, dominance, and intensity.

Vegetation communities within the Hairpin Lateral Site are primarily upland habitats, including sagebrush steppe, shrubland, and montane grassland/shrubland. The surrounding land is largely undeveloped, with ROWs providing access to other resources in the area. The site lies approximately 1.5 miles south of U.S. Highway 50 and the Montrose Reservoir.

Vegetation along the lateral and within the Project Area is dominated by big sagebrush (*Artemisia tridentata*), rubber rabbitbrush *(Ericameria nauseosa*), and Gambel oak (*Quercus gambelii*). Areas adjacent to the access road support ruderal and weedy species such as nodding thistle (*Carduus nutans*), prickly lettuce (*Lactuca serriola*), smooth brome (*Bromus inermis*), and curlycup gumweed (*Grindelia squarrosa*). Vegetation near Hairpin Lateral includes Baltic rush (*Juncus balticus*) and coyote willow.

The Hairpin Lateral Site does not support a continuous riparian corridor, and vegetation stratification is limited. However, minimal fragmented patches of riparian-associated species occur near the ditch. The site's proximity to undeveloped uplands and infrastructure corridors facilitates the movement of plant material, including seeds, which may contribute to the spread of both native and invasive species along the lateral and into adjacent habitats. Approximately 17.1 acres of low-quality riparian vegetation exist within 0.5-mile of the Hairpin Lateral Site.

HRP Site
The HRP Site contains both upland, wetland, and riparian plant communities. The site's hydrology is primarily influenced by subsurface water levels in the western-adjacent flowing Uncompahgre River, with additional inputs from the East Canal entering through a standalone pipe control structure. The 6.6-acre site supports diverse vegetation communities that differ in presence, dominance, and density. These include herbaceous wetlands, grasslands, and riparian habitats, along with adjacent upland shrub areas.

Riparian vegetation is the most extensive plant community across the site, although it is heavily impacted by monocultures of reed and invasive species. Russian olive and tamarisk form a sparse, non-functioning midstory alongside plains cottonwood and coyote willow. Within a 0.5-mile radius of the HRP Site, approximately 46.3 acres of moderate-quality riparian vegetation exists.

Wetland areas within the site are characterized by low-diversity herbaceous vegetation, including cattail (*Typha latifolia*), hardstem bulrush (*Schoenoplectus acutus*), and common reed. Grassland habitats are similarly low in diversity and include saltgrass, reed canarygrass *(Phalaris arundinacea*), and creeping wildrye (*Leymus triticoides*).

Upland areas are dominated by salt desert shrub communities, primarily composed of greasewood (*Sarcobatus vermiculatus*), rubber rabbitbrush, and big sagebrush.

Continuous riparian areas are limited at the HRP Site. However, localized patches of riparian-associated species occur near ponded areas and zones influenced by water flow. The site's undeveloped nature and proximity to other open lands facilitate the movement of plant material, including seeds, which may contribute to the spread of both native and invasive species across habitat boundaries.

No Action Alternative

Hairpin Lateral Site

The No Action Alternative would have no direct effect to vegetation within the Project Area. The Project Area would continue to support low-quality riparian habitat along the laterals due to seepage. The No Action Alternative would not alter vegetation or habitat in the region. Minor ongoing maintenance and vegetation clearing would continue along the Hairpin Lateral.

HRP Site

No direct effects would occur to the existing vegetation from the No Action Alternative. The Project Area would continue to support approximately 46.3 acres of riparian area within a 0.5-mile radius of the HRP Site and existing wetlands from the irrigation seepage and Uncompahgre River. The No Action Alternative would not alter vegetation or habitat in the region, and invasive species would persist.

Proposed Action

Hairpin Lateral Site

Approximately 24.8 acres of temporary disturbance to vegetation would occur due to the Proposed Action. The disturbance would be temporary, as areas disturbed by the Proposed Action would be restored following construction by contouring and implementing the natural revegetation method or by implementing the conventional reseeding method with appropriate seed mixes developed in coordination with the underlying landowners. Temporary effects would be minor, as the affected upland native vegetation is abundant in the surrounding areas and would continue to be abundant post-project. Reseeding success would be monitored by BPWCD.

The Proposed Action would result in the permanent loss of approximately 2.7 acres of low-quality riparian vegetation associated with the abandoned and backfilled segment of the lateral. This loss is not considered significant because the affected vegetation is low in diversity and limited in structure, similar habitat remains in the surrounding landscape, and environmental commitments, such as reseeding and the implementation of the HRP would minimize long-term effects (see Table 4-1). The remaining 14.4 acres of riparian vegetation would continue to persist near the Project Area. By reducing water loss, improving water delivery efficiency, and minimizing erosion and sedimentation, the Proposed Action would enhance riparian conditions downstream.

To reduce the effects to vegetation associated with implementing the Proposed Action, wherever possible, the construction activities would minimize disturbance to vegetation for erosion and

control purposes. Live cottonwoods within the Project Area associated with the reclaimed ditch would be left standing to the maximum extent practicable. See Chapter 4 (Table 4-1) for a complete summary of measures to protect vegetation and reclaim disturbed areas during and after project implementation. Given the implementation of the HRP, and the BMPs associated with construction activities both during and after construction, the Proposed Action would have no significant, long-term effects on vegetation.

HRP Site

The Proposed Action would have a direct short-term effect to vegetation due to mechanical removal and chemical treatment of noxious weeds from the HRP Site. Treatments of grazing, selective spraying, and cut stump treatments for the Russian olive and tamarisk would directly lower the potential for the continued spread and establishment of weeds as well as provide space for native plant establishment and seeding.

The subsequent planting of native species such as Scouler's willow, peachleaf willow, coyote willow, plains cottonwood, and russet buffaloberry as well as seeding native seed mix would increase native plant biodiversity and structure within the area. The majority of riparian vegetation is located along the Uncompahgre River and would continue to exist during and after implementation of the Proposed Action.

Although Russian olive and tamarisk would be removed, the replanting of native riparian species would directly benefit the HRP Site. While grazing activities would reduce weeds, it may temporarily remove native milkweed; however, reseeding efforts following grazing would include a native seed mix containing milkweed seeds to restore both the plant and overall native vegetation in grazed areas. Removal of invasive species and restoration with native species would provide a direct long-term benefit to vegetation within the HRP Site; therefore, the Proposed Action would not have significant adverse long-term effects and would have a long-term beneficial effect on vegetation.

3.2.7.2 *Special Status Plant Species*

Hairpin Lateral and HRP Sites

The ESA protects federally listed threatened and endangered plant and animal species and their critical habitats. The USFWS Information for Planning and Consultation (IPaC) system was queried to identify federally protected species that may occur within the Project Area. One endangered plant species, Clay-loving wild buckwheat (*Eriogonum pelinophilum*), was reported by the IPaC as having the potential to occur within the Project Area.

No Action Alternative

Hairpin Lateral and HRP Sites

Under the No Action Alternative, no direct disturbance to any threatened, endangered, or candidate plant species and no change to any critical, suitable, or potential habitat would occur. Therefore, the No Action Alternative would not affect Clay-loving wild buckwheat in the Project Area.

Proposed Action

Hairpin Lateral and HRP Sites

No clay-loving wild buckwheat was observed within the Project Area during the field surveys. Clay-loving wild buckwheat requires clay soils, yet only about 2.6% of the Project Area contains silty clay loam, which does not provide the highly alkaline clay substrate on which the species depends. Due to the limited presence of suitable clay soils at the sites, the predominance of Gambel oak and weedy

species at the Hairpin Lateral Site, and the presence of invasive plants at the HRP Site, suitable habitat for clay-loving wild buckwheat does not occur at either site; therefore, there would be no effect on this species as a result of project activities.

3.2.8 Water Resources

3.2.8.1 *Water Quality*

Water quality in the Project Area's is regulated under the CWA and the Colorado Water Quality Control Act (CWQCA) which require waters of the state to meet designated uses and numeric criteria established by the Colorado Water Quality Control Commission (CDPHE-WQCC 2025).

Hairpin Lateral Site
Surface water features in and around the Hairpin Lateral Site include Hairpin Creek and the Hairpin Lateral. Hairpin Creek is an intermittent stream that crosses through the Hairpin Lateral Site at two points—once along the southern lateral line near the direction change in the lateral, and again along the new siphon lateral line in the north—before emptying into Cedar Creek. The Hairpin Lateral is one of two principal laterals from the Cimarron Canal, which is fed by the Cimarron River and its tributary creeks. The Hairpin Lateral Site is located within two subwatersheds, the Dry Cedar Creek subwatershed (Hydrologic Unit Code (HUC) 140200060402) and the Hairpin Creek-Cedar Creek subwatershed (HUC 140200060404). These subwatersheds are situated in the larger Happy Canyon Creek-Uncompahgre River watershed (HUC 1402000604) which is part of the Uncompahgre River Sub-Basin (HUC 14020006) located within the Gunnison River Basin (HUC 140200). The entire basin is part of the larger Upper Colorado Region (HUC 14).

Data from the EPA's How's My Waterway database indicates the Hairpin Creek-Cedar Creek watershed, which includes Hairpin Creek, is an impaired waterbody under its designated use for Aquatic Life: Warm Water–Class 1 (EPA 2025b). This classification applies to streams expected to support warm-water species such as bass, catfish, and sunfish. The impairment means the creek does not meet water quality standards—such as temperature, dissolved oxygen, or pollutant limits—necessary to sustain these species and other aquatic organisms. Although Hairpin Creek is listed as impaired for Aquatic Life: Warm Water–Class 1 under Section 303(d), currently, no approved Total Maximum Daily Load (TMDL) exists for this segment; future management will rely on best practices and watershed planning until a TMDL is developed (EPA 2025b). Other water bodies in the Gunnison River Basin, including the Cimarron River, are impaired for uses such as drinking water and recreation, with common issues including bacteria, nutrients, and metals (EPA 2025c).

The Dry Cedar Creek and Hairpin Creek-Cedar Creek subwatersheds support irrigation and agricultural activities which currently receive their irrigation water through unlined canals. These unlined canals allow seepage and return flows to mobilize salts from the surrounding soils, introducing substantial salinity into surface and groundwater systems. The Hairpin Lateral alone contributes approximately 1,237 tons of salt annually to these subwatersheds, elevating salinity levels within the Colorado River Basin.

High levels of salinity directly affect agricultural productivity by reducing crop yields and limiting crop selection; prolonged exposure at high concentrations can kill trees and make land unsuitable for agricultural practices (NRCS 2025). For municipal systems, water with high salinity requires additional chemical treatment, raising operation costs, and accelerating corrosion in plumbing and appliances, leading to increased maintenance expenses (NRCS 2025). Similar irrigation projects have

demonstrated that increased water deliveries through unlined canals exacerbate seepage losses and deep percolation, which elevate groundwater tables and mobilize naturally occurring salts, further increasing salt loading to river systems (Richard and Leib 2011). In addition to salinity, the open Hairpin Lateral provides direct access for livestock, introducing bacteria and nutrients into the water. This interaction results in microbial contamination and nutrient loading, including pathogens commonly associated with animal waste (EPA 2025c).

Open irrigation canals are also susceptible to sediment and debris inflow during precipitation events. Runoff from surrounding lands introduces suspended sediments, organic materials, and other debris into the Hairpin Lateral, affecting water quality and delivery efficiency to recipients. Sediment accumulation can require additional maintenance and reduce the effectiveness of water distribution for irrigation. During large storm events, excessive runoff can cause the Lateral to overflow, leading to sediment transport and localized erosion. These storm events can require emergency management efforts to prevent damage to irrigation infrastructure, control sediment deposition, and maintain proper water conveyance.

HRP Site

The HRP Site lies within the Outlet Uncompahgre River subwatershed (HUC 140200060606) which is part of the Lower Uncompahgre River watershed (HUC 1402000606), located within the Uncompahgre River Sub-Basin (HUC 14020006). The HRP Site is adjacent to the Uncompahgre River, a natural drainage, and the primary surface water feature in the area. The river segment near the site is moderately incised, supporting a perched water table at the base of the site. Additional surface water features include two ditches—which convey irrigation tailwater from the East Canal—five wetlands, and one pond. Water quality in the area is influenced by agricultural runoff, presence of invasive species, and debris from ranching activities. While the river and ponds support wetland and riparian habitats, some wetland areas are dominated by invasive, low-diversity vegetation, which can affect water quality by altering nutrient cycling and sedimentation. The EPA's How's My Waterway database indicates that waterbodies in and surrounding the HRP Site Project Area do not have impaired water quality waters—streams or lakes that fail to meet water quality standards for their designated uses such as aquatic life, recreation, or drinking water (EPA 2025b).

No Action Alternative

Hairpin Lateral Site

Under the No Action Alternative, current water quality conditions would persist, and no temporary effects to water quality would occur as no construction and restoration activities would take place. The Hairpin Lateral would remain an open earthen ditch, contributing approximately 1,237 tons of salt annually to the Colorado River Basin. Continued seepage, livestock access, and sediment inflow would degrade water quality and reduce irrigation efficiency. Hairpin Creek and the Cimarron River (and subsequently Hairpin Lateral) would remain impaired under their designated use classification.

HRP Site

Under the No Action Alternative, lack of restoration would allow invasive vegetation and debris to persist, limiting filtration and increasing nutrient loading. Current water quality conditions would persist.

Proposed Action Alternative

Hairpin Lateral Site

During pipeline and siphon installation and ditch abandonment, temporary and localized soil disturbance from construction activities may result in direct and indirect effects to water quality, as described next. Construction activities would include trenching using open-cut excavation within the proposed siphon alignment.

If siphon installation occurs during a period when Hairpin Creek is dry, no direct effects to water quality would occur because no water would be present in the creek to transport sediment or other materials. BMPs, such as erosion and control devices, would be implemented to further prevent sediment mobilization during potential precipitation events. Under this scenario, temporary effects to water quality in the project area would be negligible and would not rise to the level of significance.

If Hairpin Creek is flowing during siphon installation, temporary, localized soil disturbance could introduce sediment into Hairpin Creek. To avoid this potential effect, a temporary diversion of Hairpin Creek would be implemented to route flow around the construction area. Additional BMPs—including sediment barriers, erosion control devices, and a dewatering plan if necessary—would be implemented to minimize sediment transport into Hairpin Creek. Under this scenario, effects to Hairpin Creek would be negligible because any sediment increase would be temporary and minor, and implementation of BMPs and temporary diversion measures would minimize erosion and sedimentation (see Table 4-1). Appropriate permits would be obtained by BPWCD and the contractor to ensure compliance with local and federal laws, such as a Construction Dewatering Discharges Permit (COG070000) from CDPHE-WQD. These proactive measures ensure the Proposed Action would not contribute to further degradation of water quality in impaired waters and are consistent with Clean Water Act Section 303(d) requirements for protecting listed streams.

Long-term, the Proposed Action would result in beneficial effects to water quality. Hairpin Lateral is located within the Colorado River Basin, which has been identified as a priority region for salinity reduction under the CRBSCA. Salinity loading from irrigation return flows is a known concern in the region. By eliminating seepage from unlined canals, the project would reduce mobilization of salts into surface water. Piping the Hairpin Lateral with HDPE would reduce salt loading by approximately 1,237 tons annually in the Colorado River Basin, reduce nutrient and bacterial contamination from livestock access, and limit sediment and debris inflow during storm events. Additionally, 292.1 ac-ft of water would be conserved by eliminating seepage, evaporation, and operational losses. Salinity reductions and cleaner water would improve irrigation efficiency, particularly for systems using advanced techniques such as drip irrigation or micro sprinklers. These improvements would enhance drought resilience, reduce sediment and nutrient loading to downstream waters, and contribute to salinity reduction in the Colorado River Basin. By conserving water and improving delivery efficiency, the Proposed Action supports both local agricultural practices and broader regional water management goals.

No significant adverse effects to water quality would occur in the Hairpin Lateral Site Project Area because the Proposed Action incorporates BMPs to protect water quality during construction, and, in the long term, reduces salinity loading, prevents contamination from livestock access, and improves irrigation efficiency without altering overall water availability.

HRP Site

The Proposed Action activities associated with the HRP involve restoration activities which include invasive species and debris removal, planting native species, and improving soil structure with

compost. The soil-disturbing restoration activities could temporarily increase sediment mobilization, however effects to water quality would be negligible given effects would be temporary and minor and minimized through extensive BMPs such as implementing TESCs (see Table 4-1). Long term, these activities would improve water quality by reducing nutrient loading, enhancing filtration, and stabilizing soils. No significant adverse effects to water quality would occur in the HRP Site Project Area, and waterbodies within and around the HRP Site Project Area would continue to qualify as unimpaired under the Proposed Action.

3.2.8.2 *Water Quantity and Use*

Hairpin Lateral Site
The Hairpin Lateral is one of two principal laterals from the Cimarron Canal, the primary conveyance canal within the BPWCD system. The canal is approximately 23.5 miles long and has water rights that total 185 cfs. J-U-B calculated the annual water loss due to seepage and evaporation associated with the open, unlined, earthen Hairpin Lateral to be approximately 292.1 ac-ft (J-U-B 2025b).[1] Water losses reduce irrigation efficiency and limit water availability for shareholders. The Project Area for the Hairpin Lateral Site does not have extensive floodplain connectivity, but canal seepage likely contributes to localized groundwater recharge.

HRP Site
The owner of the HRP Site holds 26.1 shares of the East Canal. These shares are conveyed through the ditches which receive water from a standpipe in the southeast corner of the site and are used to irrigate the HRP Site. The HRP Site additionally benefits from groundwater recharge associated with the Uncompahgre River and tailwater that flows from the agricultural fields to the east of North River Road. These surface and groundwater inputs maintain the ponded areas of the HRP Site and wetland hydrology year-round.

No Action Alternative

Hairpin Lateral Site
Under the No Action Alternative, the existing Hairpin Lateral would continue to operate as it has historically, and no effects to water quantity or use would occur. Water losses due to seepage and evaporation would persist at approximately 292.1 ac-ft annually, reducing the overall efficiency of the irrigation system. Seeping irrigation water from the canal would continue to contribute to localized groundwater recharge. Water would continue to be allocated as it is currently under BPWCD's management.

HRP Site
Under the No Action Alternative, the HRP Site would continue to rely on existing irrigation and groundwater inputs; however, the presence of invasive species may reduce water retention and groundwater recharge over time.

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[1]Water loss was estimated using established seepage rates associated with different soil types, as documented in technical resources such as the USDA's National Engineering Handbook (NRCS 1993). Soil classifications along the canal alignment were identified using the NRCS Web Soil Survey. Based on these classifications, representative seepage rates were selected from published guidance. Canal geometry and slope were considered using surveyed cross sections and typical design assumptions to estimate the wetted surface area. By applying the selected seepage rate over the irrigation season and the total canal length, an estimate of annual water savings resulting from canal abandonment was developed.

Proposed Action

Hairpin Lateral Site

Under the Proposed Action, BPWCD would improve water delivery efficiency by replacing approximately 20,490 LF of the unlined Hairpin Lateral with a 4,734-foot siphon, 5,304-feet of HDPE pipeline, and abandoning the remainder. These actions would eliminate seepage and evaporation losses associated with the existing earthen ditch, resulting in an estimated annual water savings of approximately 292.1 ac-ft. The proposed improvements would not alter the volume of water diverted into the Hairpin Lateral, which would remain consistent with historic use. The siphon and pipeline are designed to maintain current water delivery to all shareholders and meet irrigation demands, including the existing turnout that lies beyond the proposed siphon inlet structure. While water donated from BPWCD would supply the two wildlife waterers and provide reliable water access for wildlife, no changes to water rights or delivery schedules would occur because of these additions. The Proposed Action would not modify legally decreed water rights managed by BPWCD.

Hairpin Creek, which intercepts the Hairpin Lateral in two locations, would not be adversely affected in terms of water quantity and use. The proposed siphon would be installed beneath Hairpin Creek, maintaining its natural flow and avoiding alteration to surface hydrology. After the lateral is piped and abandoned, minor additional flow may occur downstream in Hairpin Creek because the lateral would no longer intercept incidental runoff. However, this intercepted flow from the existing Hairpin Lateral is minimal and consists mainly of seepage and incidental runoff, not a significant source of creek flow. Because Hairpin Creek is an intermittent stream that only flows during periods of precipitation or snowmelt, any additional contribution would occur only during these limited periods. Therefore, this change would be negligible and would not rise to the level of significance.

The portion of the seepage which currently enters the groundwater through the ditch prism would be redistributed within the general Project Area. While the specific area where the canal leakage would seep into the groundwater would be redistributed, it would be redistributed within the irrigated acres related to the ditch, and therefore it would remain in the general Project Area. Therefore, there would be no change in the estimated groundwater recharge in the area.

HRP Site

The Proposed Action activities at the HRP Site include habitat restoration activities such as invasive species removal, native vegetation planting, and soil enhancement with compost. These actions are expected to improve soil structure and increase water retention capacity, thereby promoting groundwater recharge. No changes would be made to the existing water rights or to the surface water and groundwater inputs currently used at the HRP Site.

Overall, the Proposed Action would result in beneficial effects to water quantity and use at both the Hairpin Lateral and HRP Sites. No significant adverse effects to water quantity and use would occur from the implementation of the Proposed Action.

3.2.8.3 *Floodplains*

J-U-B conducted an Aquatic Resources Delineation (ARD) using standardized diagnostic criteria within the Project Area to identify hydrological resources, including floodplains (J-U-B 2025c). The Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer (NFHL) geospatial database was queried to identify flood zones in the Project Area.

Hairpin Lateral Site
The Hairpin Lateral Site, which includes the Hairpin Lateral and Hairpin Creek, is entirely within FEMA Flood Zone X (Unshaded). This zone represents areas of minimal flood hazard, with an annual chance of flooding less than 0.2%, placing the site outside of the 500-year floodplain (FEMA 2025).

HRP Site
The HRP Site is located adjacent to the Uncompahgre River and is characterized by a prominent bench landform within the river's floodplain. A floodplain lies between the HRP Site and the Uncompahgre River to the west, where the river reach is moderately incised. The incision of the river channel has resulted in a perched water table on the bench. Portions of the HRP Site fall within FEMA Flood Zone X (Shaded), which indicates areas of moderate flood hazard—outside the 100-year but within the 500-year floodplains—with an annual chance of flooding between 0.1% and 1% (FEMA 2025). This classification reflects the site's proximity to the river, the presence of floodplain steps, and the perched water table caused by channel incision.

No Action Alternative

Hairpin Lateral Site
Under the No Action Alternative, the existing open ditch system would remain in place, and no work would occur within the Lateral. No effects to floodplains would occur in the Hairpin Lateral Site Project Area.

HRP Site
Under the No Action Alternative, no restoration or enhancement activities would occur, and floodplain conditions would remain unchanged. Invasive vegetation and sediment accumulation would continue to affect floodplain function, potentially reducing the site's capacity to moderate floodwaters and support riparian habitat.

Proposed Action

Hairpin Lateral Site
The Proposed Action involves the installation of HDPE pipeline installed within and outside the existing ditch alignment. Although the Hairpin Lateral Project Area is located outside of mapped floodplains, temporary soil disturbance could occur in areas subject to localized overland flow. BMPs, including erosion and sediment control devices and post-construction rehabilitation of disturbed areas, would be implemented to mitigate erosion and sedimentation (see Table 4-1). The buried pipeline would not interfere with natural floodwater movement, and any existing floodplain connectivity within the Project Area would remain intact.

HRP Site
The Proposed Action at the HRP Site includes habitat restoration activities that would occur adjacent to the Uncompahgre River and within FEMA Flood Zone X (Shaded), which represents a moderate flood hazard. The primary topographic feature of the site is a bench within the river's floodplain, underlain by a perched water table conducive to phreatophytic vegetation. Restoration activities would improve floodplain function by enhancing vegetation cover and root structure, stabilizing soils, reducing sediment and nutrient loading into the river, and improving water infiltration and floodwater retention. All disturbed areas would be rehabilitated following implementation, and BMPs would be employed to prevent erosion and maintain water quality (see

Table 4-1). The Proposed Action would not alter floodplain boundaries or increase flood risk. Natural and beneficial floodplain values would be preserved and enhanced.

Overall, the Proposed Action would result in minor temporary disturbances to floodplain areas, followed by long-term beneficial effects through improved soil stability and hydrologic function. The Proposed Action would not cause significant floodplain impacts under NEPA or EO 11988. The Hairpin Lateral Site lies outside mapped floodplains, and the HRP Site is within FEMA Flood Zone X (Shaded), which represents moderate flood hazard outside the 100-year floodplain but within the 500-year floodplain. Construction-related disturbances would be temporary and localized, and no structures would be placed in the 100-year floodplain. BMPs and site rehabilitation would prevent erosion, maintain water quality, and preserve natural floodplain functions. Restoration activities at the HRP Site would enhance soil stability and hydrologic function, resulting in long-term beneficial effects. Therefore, effects would be minor and do not rise to the level of significance.

3.2.8.4 *Wetlands and Aquatic Resources*

J-U-B conducted an ARD using standardized diagnostic criteria within the Project Area to identify wetlands and aquatic resources, following the methodologies outlined in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987), its Regional Supplement for the Region (Version 2.0) (USACE 2010), the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (David et al. 2022), and the National Wetland Plant List (USACE 2022). The ARD identified a total of 9.5 acres of wetlands, 0.7 acres of ponds, and 4.6 acres (22,085 LF) of linear features within the Project Area, encompassing 15.3 acres of aquatic resources. Table 3-2 depicts the aquatic resources mapped in the Project Area across both sites.

Hairpin Lateral Site
The Hairpin Lateral Site contains one wetland, Wetland 6, and two linear features, Hairpin Creek, and Hairpin Lateral. Wetland 6 is a freshwater emergent wetland encompassing 0.3 acres. Wetland 6 receives water from seepage out of Hairpin Lateral, which sits at a higher elevation. Wetland 6 lacks a surface connection to other water features and is therefore considered non-jurisdictional. Hairpin Creek flows into Cedar Creek, and Hairpin Lateral connects to the Cimarron Canal and ultimately to the Cimarron River, both known as Waters of the United States (WOTUS) under the CWA. Therefore, Hairpin Creek and Hairpin Lateral are considered jurisdictional.

HRP Site
The HRP Site contains five freshwater emergent wetlands (Wetlands 1-5), one pond (Pond 1), and two ditches (Ditch 1 and Ditch 2). Wetlands 1-5 and Pond 1 are part of a larger riparian and wetland complex associated with the Uncompahgre River. All mapped water features within the HRP Site are jurisdictional WOTUS under the CWA due to their surface water connections to the Uncompahgre River.

Table 3-2. Aquatic Resources Mapped in the Project Area

Feature	Classification[1]	Area (acres)	Length (LF)	Jurisdictional	Site
Wetland and Pond Features					
Wetland 1	PEM1	0.6	NA	Yes	HRP
Wetland 2	PEM1	0.7	NA	Yes	HRP
Wetland 3	PEM1	0.5	NA	Yes	HRP
Wetland 4	PEM1	7.5	NA	Yes	HRP
Wetland 5	PEM1	0.3	NA	Yes	HRP
Wetland 6	PEM1	0.3	NA	No	Hairpin Lateral
Pond 1	PUBH	0.7	NA	Yes	HRP
Linear Features					
Ditch 1	RS4BC	0.1	687	Yes	HRP
Ditch 2	RS4BC	0.2	678	Yes	HRP
Hairpin Creek	RS4BC	0.1	230	Yes	Hairpin Lateral
Hairpin Lateral	RS4BCx	4.3	20,490	Yes	Hairpin Lateral
Total		**15.3 acres**	**22,085 LF**		

[1]Wetland are classified using the Cowardin system (Cowardin et al. 1979).

No Action Alternative

Hairpin Lateral Site

Under the No Action Alternative, no construction activities would occur within the identified wetlands or aquatic resources. Wetland 6 would continue to receive seepage from Hairpin Lateral, maintaining its hydrology. Hairpin Lateral would remain open and unlined, continuing to convey irrigation water and contributing to seepage-induced wetland formation. No changes to the extent or function of these aquatic resources would occur, and they would continue to provide their current level of ecological and hydrological services.

HRP Site

Under the No Action Alternative, no habitat replacement or enhancement activities would occur within the identified wetlands or aquatic resources. Wetlands and ponds would remain intact, continuing to support riparian and wetland habitat. No changes to the extent or function of these aquatic resources would occur, and they would continue to provide their current level of ecological and hydrological services.

Proposed Action

Hairpin Lateral Site

At the Hairpin Lateral Site, the Proposed Action includes installation of HDPE pipeline and siphon infrastructure within and outside the existing lateral alignment. Construction would require temporary trench excavation and backfilling with embedment and backfill material. Permanent effects to the Hairpin Lateral would occur from installation of the lateral and siphon infrastructure and conversion of approximately 4.3 acres of open water associated with the piping and abandonment. While surface water would be removed, irrigation conveyance and wildlife water sources would be maintained through the installed siphon, irrigation pipeline, and wildlife waterers. This conversion eliminates surface flow but does not represent a permanent loss of water availability, as conveyance would continue through approximately 0.9 acres of enclosed

infrastructure. Therefore, the Proposed Action's effects to open water would not rise to the level of significance.

The Proposed Action would also result in the permanent loss of approximately 0.3 acres of Wetland 6, a seepage-induced wetland created exclusively by lateral seepage. Wetland 6 lacks a surface water connection to other aquatic features and is therefore non-jurisdictional under Section 404 of the CWA. Temporary effects to Wetland 6 would occur during trenching and backfill activities and permanent effects would occur from elimination of seepage following lateral piping and abandonment. Wetland 6 would be adversely affected but these effects would not rise to the level of significance because the value of this lost wetland would be replaced by the HRP. Furthermore, the reduction of 0.3 acres of seepage-induced wetland would be offset by the broader benefits to regional water management, including improved water use efficiency, conservation, and reduced salinity loading to the Uncompahgre River Sub-Basin.

The Hairpin Ditch and Hairpin Creek are jurisdictional WOTUS under USACE because they connect to Cimarron Canal and Cedar Creek, both known WOTUS. Compliance with RGP-5 would be required for discharge of dredged or fill material into jurisdictional waters. RGP-5 includes terms and conditions with which project proponents must comply to ensure their proposed projects would have minimal individual or cumulative adverse effects on the aquatic environment. In accordance with federal and state requirements, a Section 401 Water Quality Certification and Section 402 Storm Water Discharge Permit from the CDPHE would also be obtained to ensure compliance with state water quality standards. If Hairpin Creek is flowing during installation of the siphon, a temporary diversion of Hairpin Creek would be implemented to route flow around the construction area (see Section 3.2.8.1 Water Quality for more details). If water is to be pumped out of the Hairpin Creek streambed during construction, a Construction Dewatering Discharges Permit (COG070000) would be obtained by the contractor. If cofferdams or temporary impoundments are used, Dam Safety Rules would be implemented as governed by the Colorado Division of Water Resources under 2 CCR 402-1. Consultation with USACE is ongoing.

BMPs would be implemented to avoid and minimize temporary impacts, including sedimentation and erosion controls, spill prevention, and stormwater management measures. All disturbed areas would be stabilized and revegetated post-construction (see Table 4-1 for all BMPs). Mitigation through the HRP would compensate for incidental fish and wildlife values foregone by converting open lateral to buried pipeline (see Compensatory Restoration Measures and Habitat Replacement Planning in Section 3.2.9.1 for additional information on the HRP).

HRP Site

At the HRP Site, the Proposed Action includes habitat replacement and enhancement activities designed to offset wildlife habitat losses associated with the Hairpin Lateral improvements. Open water would not be affected under the Proposed Action.

Temporary, minor, direct and indirect effects to jurisdictional wetlands would occur from restoration activities such as mechanical invasive species removal, targeted herbicide application, and fence installation. These activities may result in short-term negligible soil disturbance, vegetation trampling, and localized hydrologic disruption. However, all disturbed areas would be rehabilitated following implementation, and BMPs would be employed to minimize erosion and sedimentation (see Table 4-1).

In the long term, restoration activities would improve wetland hydrology, stabilize soils, and increase vegetation diversity. These improvements would enhance wetland function by promoting water

retention, reducing sediment and nutrient loading into adjacent waterways, and supporting habitat for wetland-dependent species. The Proposed Action would have no significant adverse effects to wetlands in the Project Area and would result in a net benefit to wetland function over time.

The proposed restoration activities would occur within jurisdictional riparian and wetland areas associated with WOTUS and authorization under Section 404 of the CWA would be secured through Nationwide Permit 27—Aquatic Habitat Restoration, Establishment, and Enhancement Activities (NWP 27), per USACE coordination. This permit would be obtained from the USACE for BPWCD as appropriate. Consultation with USACE is ongoing (see Appendix C—U.S. Army Corps of Engineers Correspondence (*Pending*)). In accordance with federal and state requirements, a Section 401 Water Quality Certification from the CDPHE would also be obtained to ensure compliance with state water quality standards.

3.2.9 Wildlife

3.2.9.1 *General Wildlife*

Hairpin Lateral and HRP Sites

The geographic scope of analysis for wildlife is the Project Area plus an approximate 0.5-mile buffer. The riparian vegetation provides nesting, breeding, foraging, cover, and movement opportunities for an array of wildlife. The Hairpin Lateral also provides a water source for wildlife.

The Project Area falls within overall and summer range of mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), moose (*Acles acles*), and black bear (*Ursus americanus*). Mule deer and elk winter range and migration patterns also overlap with the Project Area. In addition, mule deer severe winter range and a migration corridor lies within the Project Area. Elk migration patterns also lie within the Project Area. The overall ranges for mountain lion (*Puma concolor*) also lie within the Project Area. CPW range data indicates that lynx habitat within the Project Area is unlikely.

A variety of small mammals, reptiles, and birds also inhabit the general Project Area (CPW 2025a). Small mammals overall range within the Project Area includes multiple bat species, dwarf shrew (*Sorex nanus*), southern red-backed vole (*Myodes gapperi*), white-tailed jackrabbit (*Lepus townsendii*), and river otter (*Lontra canadensis*). In addition, the river otter winter range overlaps with the Project Area. Reptiles overall range within the Project Area includes common sagebrush lizard (*Sceloporus graciosus*), common side-blotched lizard (*Uta stansburiana*), great plains ratsnake (*Elaphe guttata emoryi*), Hernandez's short-horned lizard (*Phrynosoma hernandesi*), plateau striped whiptail (*Aspidoscelis velox*), prairie lizard (*Sceloporus consobrinus*), plateau fence lizard (*Sceloporus tristichus*), Smith's black-headed snake (*Tantilla hobartsmithi*), smooth greensnake (*Opheodrys vernalis*), striped whipsnake (*Coluber taeniatus*), and terrestrial gartersnake (*Thamnophis elegans*). In addition, fish species include the presence of bluehead sucker (*Pantosteus discobolus*), flannelmouth sucker (*Catostomus latipinnis*), and roundtail chub (*Gila robusta*) in the Project Area.

Within the Project Area, canal operations, maintenance, and system monitoring activities occur, and wildlife are accustomed to these activities.

The Hairpin Lateral is located within the Gunnison River Basin, which ultimately drains to Cedar Creek. Cedar Creek is a tributary to the Colorado River which supports native fish species. Current salinity loading affects downstream waters and contributes to the degradation of wildlife and fisheries habitat in the Gunnison and Colorado River Basins.

Migratory birds protected under the MBTA use the Gunnison River watershed, including the Project Area, for nesting and migratory habitat. The official species list from the USFWS IPaC identified five bird species protected under the MBTA and the BGEPA that have the potential to be present within the Project Area as shown in Table 3-3 (USFWS 2025). The inventory and assessment for these species are documented in the Biological Assessment (BA) (J-U-B 2025d).

Table 3-3. Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Species that May Occur within the Project Area

Common Name	Scientific Name	Breeding Period	Federal Law Protecting Species*
Broad-tailed hummingbird	*Selasphorus platycercus*	May 25–August 21	MBTA
Cassin's finch	*Carpodacus cassinii*	May 15–July 15	MBTA
Golden eagle	*Aquila chrysaetos*	December 1–August 31	BGEPA/MBTA
Lewis's woodpecker	*Melanerpes lewis*	April 20–September 30	MBTA
Virgina's warbler	*Leiothlypis virginiae*	May 1–July 31	MBTA

* MBTA = Migratory Bird Treaty Act; BGEPA = Bald and Golden Eagle Protection Act

Surveys included a 0.5-mile buffer around the Project Area in accordance with Yellow-billed Cuckoo (YBCU) survey requirements, which also encompassed potential raptor nesting areas. No active nests, or breeding or nesting behavior for any avian species were observed during the incidental field surveys.

No Action Alternative

Wildlife resources would remain in their current condition, and no disturbance or displacement of wildlife would occur. The No Action Alternative would not alter vegetation and therefore would not affect wildlife and wildlife habitat. The Hairpin Lateral would continue to provide seasonal water sources. Canal operation, maintenance, and system monitoring activities would continue to occur to which wildlife is accustomed to. Salinity loading would continue to affect downstream waters and contribute to degradation of wildlife and fisheries habitat in the Gunnison River Basin.

Proposed Action

As described in the following subsections, the Proposed Action would affect large mammals, including big game, small mammals and reptiles, fish and aquatic wildlife, and migratory birds.

Large Mammals

Construction and restoration activities—including siphon installation, HDPE piping, wildlife waterer installation, and lateral abandonment—may cause temporary disturbance to big game species (mule deer, elk, moose, black bear, and mountain lion) within their overall and seasonal ranges and to migration patterns for mule deer and elk. Potential effects include temporary displacement and altered movement patterns due to noise, equipment, and human presence, as well as localized habitat disturbance along the lateral footprint, which is narrow and linear. These effects would be limited because construction would be short in duration, limited to and incrementally moving along the narrow and linear project footprint, and would not introduce permanent barriers or new fencing. While some siphon work could occur anytime, the limited spatial extent and short duration minimize risk. Temporary disruption may occur to migration corridors, but no permanent barriers or new fencing would be installed, and the surrounding landscape provides abundant

alternative movement corridors. Once construction is complete, the area would return to its previous condition, allowing normal movement patterns to resume.

Within the larger vicinity of the Project Area, farming activity, residential development, and roads already contribute to year-round wildlife disturbance. While deer, bear, mountain lions, and other wildlife species are common in the area, the temporary increase in human activity during construction may disrupt individuals but would not have lasting impacts. Once construction for the lateral is complete, the existing rural agricultural setting would resume, and the Proposed Action would not contribute to short- or long-term regional trends in wildlife habitat disruption, ensuring minimal disruption to migration corridors and seasonal ranges. Therefore, no significant effects to migration patterns or seasonal ranges would occur because of the Proposed Action.

Long-term effects to large mammals would occur from the 2.7-acre loss of riparian fringe habitat supported by the Hairpin Lateral (see Section 3.2.7). The loss of the upland and riparian vegetation would affect large mammals by the temporary loss of food and shelter until the area is reclaimed. However, this effect would be minor because the riparian area associated with the Hairpin Lateral is sparse and considered low-quality. In addition, the areas surrounding the Hairpin Lateral Site offers ample alternative habitat, which large mammals could alternatively occupy.

The construction of two wildlife waterers would allow the site to continue to provide a water source for wildlife and would limit the effects from the loss of approximately 4.3 acres of open water associated with the piping and abandonment of the Hairpin Lateral. After implementation of the Proposed Action, water resources for large mammals would continue to exist at the Hairpin Lateral Site at a rate of more than 4 sources per square mile, including the two wildlife waterers, Hairpin Lateral near the siphon inlet and outlet structures, and the intermittent Hairpin Creek. BMPs and environmental commitments described in CHAPTER 4 would further minimize potential effects to large mammals.

Overall, the Proposed Action would provide substantial long-term benefits to wildlife habitat. Abandonment and restoration of the lateral would stabilize soils and allow revegetation, providing forage and cover for big game species. Installation of two wildlife waterers would ensure hydration opportunities during the driest times of the year, supporting seasonal movements and reducing stress during dry periods. Reduced seepage, erosion, and salinity loading would contribute to healthier ecosystems. Installing a wildlife-friendly fence at the HRP Site would replace the current barbed-wire fence, which hinders animal movement, thereby enhancing wildlife passage across the area. Because no new permanent barriers would be introduced, migration corridors would remain intact, and the project would ultimately improve habitat connectivity and resilience. Water resources for large mammals would continue to exist at a rate of more than four sources per square mile, including the two wildlife waterers, Hairpin Lateral near the siphon inlet and outlet structures, and intermittent Hairpin Creek. These measures ensure that the Proposed Action supports long-term habitat quality and wildlife movement while minimizing adverse effects to large mammals.

Small Mammals and Reptiles

The minor and temporary effects described for large mammals would also occur for small mammals. In addition, direct effects from construction activities to individual small animals, including burrowing amphibians and reptiles and small mammals, would include mortality and displacement during piping activities. Though individual animals would suffer mortality or displacement, the species and habitats are common throughout the project and surrounding areas. Based on the principles of ecological succession, these species would continue to propagate in the region, and

population-level significant impacts would not occur, and the effects from habitat disruption at the landscape-level would be minor.

The Proposed Action may cause temporary minor disturbance to river otters near the HRP Site due to increased human activity, equipment noise, and localized habitat disruption during restoration activities. These effects would be temporary, confined to the construction period, and reduced through BMPs such as limiting work near activity areas and maintaining riparian cover where feasible. Following implementation, the HRP would enhance riparian and aquatic habitat quality by stabilizing banks, reducing sediment input, and improving vegetation structure within the HRP Site. These improvements would increase prey availability, provide better cover, and create more stable foraging and resting areas for the river otters. As a result, the Proposed Action would yield lasting benefits for otter populations and overall ecosystem health.

Long-term effects to small mammals and reptiles include the 2.7-acre loss of riparian habitat supported by the lateral and the open water source it currently provides. Because mobility is limited in small mammals and reptiles, the loss of an open water source could result in mortality for animals unable to access alternative water sources. However, these species and habitats are relatively common throughout the area. Small mammals and reptiles that occur in the Project Area are common throughout the site and surrounding regions, which offer alternative riparian habitats and water sources. Therefore, the 2.7-acre riparian habitat loss would have only minor effects on small mammals and reptiles and would not impact these species at the population level. From a landscape perspective, the habitat conditions following implementation would be substantially similar to existing habitat conditions in the surrounding area and on a regional scale, ensuring significant effects to small mammals and reptiles would not occur. Therefore, significant effects to small mammals and reptiles would not result from the Proposed Action.

Fish and Aquatic Wildlife

CPW range data indicates the bluehead sucker, flannelmouth sucker, and roundtail chub may occur within the broader Project Area. However, within the Project Area, Hairpin Creek is intermittent and typically lacks perennial flow and sustained fish habitat except during limited precipitation or snowmelt periods. Accordingly, direct effects on these species would be unlikely if lateral abandonment and siphon installation occurs when Hairpin Creek is dry because no water would be present to transport sediment or to support fish occupancy. Under dry-creek conditions, BMPs—including erosion and sediment controls—would be implemented to prevent sediment mobilization during precipitation events, and temporary effects to fish and habitat would be negligible and would not rise to the level of significance (see Section 3.2.8.1).

If Hairpin Creek is flowing at the time of the single siphon crossing, temporary, localized soil disturbance could increase turbidity and fine sediment in the creek, which—if fish are present—could briefly affect gill function, foraging efficiency, and short-term habitat suitability. To avoid and minimize these potential effects, the Proposed Action implements a temporary diversion to route flow around the construction area, along with BMPs such as sediment barriers, erosion control devices, and, if needed, a dewatering plan. With these measures in place, any sediment increase would be minor and short-lived, and effects to Hairpin Creek fish habitat would be negligible. The contractor and BPWCD would obtain appropriate permits (e.g., COG070000 Construction Dewatering Discharges Permit) to ensure compliance with state and federal requirements. These proactive measures ensure the Proposed Action would not contribute to further degradation of

water quality in impaired waters and would be consistent with CWA Section 303(d) requirements for listed streams, protecting important fish habitat.

Importantly, the siphon would be installed beneath Hairpin Creek, preserving the natural bed and maintaining flow and fish passage; no permanent instream structures, drops, or weirs would be introduced at the crossing. Therefore, construction of the siphon and lateral piping/abandonment would not create a barrier to movement for native warm-water fishes that may use the creek during wet periods.

Additionally, the Proposed Action would not result in any new water depletions. The Proposed Action, along with regional salinity reduction efforts, would improve overall water quality conditions in the long term in downstream perennial waters of the Gunnison and Colorado River Basins by eliminating lateral seepage losses from unlined canals and reducing salinity, nutrients, bacteria, and sediment mobilization. Piping the Hairpin Lateral would reduce salt loading by approximately 1,237 tons annually and conserve about 292.1 acre-feet of water by eliminating seepage, evaporation, and operational losses. These improvements would support habitat quality for native warm-water fishes—including bluehead sucker, flannelmouth sucker, and roundtail chub—primarily in the perennial reaches downstream where these species are more likely to occur and persist.

Because the siphon crossing is buried and the lateral is abandoned without introducing permanent instream features, fish passage and channel connectivity would be maintained. Over time, lower salinity and reduced fine-sediment inputs would contribute to better water-quality conditions and substrate characteristics in receiving waters, which would benefit spawning, feeding, and refuge functions for native warm-water fishes. These beneficial effects are aligned with the project's water-quality objectives and regional salinity-reduction goals within the Colorado River Basin.

Given the intermittent nature of Hairpin Creek, implementation of a temporary diversion and BMPs during any in-flow construction, and the buried siphon design that preserves channel continuity, the Proposed Action would have no significant adverse effect on bluehead sucker, flannelmouth sucker, or roundtail chub, and long-term water-quality improvements in downstream perennial waters would be beneficial to these native warm-water fishes.

Migratory Birds and Eagles

The majority of construction would occur in winter months outside of the irrigation season and most migratory bird and eagle nesting seasons, reducing the likelihood of temporary effects to migratory birds and eagles. Temporary disturbance from noise related to construction may result in a temporary disruption to stopover or foraging habitats for resident or migratory birds and raptor species near the Project Area. Avian species using the area are adapted to farming and ranching human activities within the Project Area and the additional construction activities would not disrupt normal foraging or roosting activities. The avian species would return to the surrounding habitat once construction is completed.

If vegetation removal occurs during migratory bird nesting season (April 1–August 31), pre-construction nesting bird surveys would be conducted seven days before the removal of trees and shrubs to confirm no active nests are present. If an active nest is identified, appropriate CPW and USFWS buffer distances would be applied, and work in that area would be restricted as necessary to avoid disturbance.

The permanent loss of approximately 2.7 acres of low-quality riparian fringe habitat along the abandoned Hairpin Lateral would have only a minor effect on migratory birds and raptors for several reasons. First, the affected vegetation is highly degraded, dominated by invasive species and lacking structural diversity, which limits its suitability for nesting, foraging, and cover compared to intact riparian systems. Second, the project area occurs within a landscape that supports higher-quality riparian corridors, including Cedar Creek and other downstream waterways, which provide alternative habitat for migratory birds and raptors. Third, the scale of habitat loss is small relative to the regional availability of riparian habitat and does not fragment or isolate existing habitat patches. Finally, restoration activities at the HRP site would enhance riparian function and increase overall habitat quality within the watershed, replacing localized losses. Considering the low ecological value of the affected area, the availability of nearby high-quality habitat, and compensatory restoration measures, the indirect effects on migratory birds and raptors would be minor and would not rise to the level of significance.

BMPs would be implemented to further minimize potential effects to MBTA and BGEPA species. BMPs include protecting native riparian vegetation, limiting vegetation removal to the smallest area necessary, rehabilitating and revegetating disturbed ground following construction, and using noise mitigation measures, in addition to conducting MBTA surveys before vegetation removal during MBTA nesting season (see CHAPTER 4).

Given the existing human disturbance surrounding the Project Area, the alternative riparian habitat nearby, and the construction timing and requirements for surveys to avoid effects to nesting birds and other BMPs, effects from the Proposed Action to migratory birds and eagles would not rise to a level of significance.

Habitat Replacement

Using Reclamation's *April 2018 Basinwide Salinity Control Program: Procedures for Habitat Replacement* (Reclamation 2018), the affected area within the Hairpin Lateral Site was assessed for a Habitat Quality Score (HQS). In accordance with the protocol, the habitat value is calculated for each affected wetland or riparian habitat area by multiplying its acreage by its HQS, which is assigned based on evaluation of a series of ten physical and biological criteria. These criteria include vegetative diversity, vegetative stratification, presence of noxious weeds, overall vegetative condition, interspersion of open water with vegetation, connectivity and proximity of other wildlife habitat areas, wildlife use, uniqueness or abundance, water supply, and degree of human-caused alteration. The analysis determined a total HQS of 53 for Segment 1, 54 for Segment 2, 49 for Segment 3, resulting in a net loss of 13.8 habitat units from implementing the proposed salinity control measures, as reflected in the Habitat Losses Report (J-U-B 2025e).

To offset this loss, the HRP was designed to replace the 13.8 habitat units of incidental wildlife values lost. Based on the proposed habitat enhancements at the HRP Site (see Section 2.2.7), the HRP was evaluated for baseline and post-treatment habitat quality. The projected ecological uplift resulting from the planned treatments would generate 14.4 habitat credits, exceeding the required 13.8 habitat unit replacement threshold. The surplus accounts for potential variability in treatment efficacy and ensures a conservative compliance margin. Credit generation is determined by quantifiable enhancements in habitat structure, species composition, and ecological resilience. This process adheres to established best practices in riparian restoration, as outlined in the HRP (J-U-B 2025a).

The HRP was developed to offset incidental wildlife habitat losses associated with the Proposed Action. The HRP fulfills habitat replacement requirements under the CRBSCA and adheres to Reclamation's HRP procedures (Reclamation 2018). By generating habitat credits that exceed the calculated losses, the HRP ensures a net ecological benefit through riparian restoration, structural enhancements, and improved habitat.

General Wildlife Resources Impact Summary

The Proposed Action would not result in significant effects to wildlife resources for several reasons. First, the scale and intensity of impacts are minor and largely temporary, limited to short-term construction disturbance and the permanent loss of approximately 2.7 acres of low-quality riparian fringe habitat. This habitat is highly degraded, dominated by invasive species, and provides limited ecological function compared to intact riparian systems. Second, the Project Area occurs within a landscape that supports alternative habitats—including higher-quality riparian corridors such as Cedar Creek and adjacent uplands—ensuring that wildlife species have ample opportunities for foraging, nesting, and movement. Third, BMPs and environmental commitments, including pre-construction nesting bird surveys, erosion control, revegetation, and installation of wildlife waterers, would minimize direct and indirect effects on wildlife. Finally, restoration activities at the HRP site would enhance riparian function and improve habitat quality at the watershed scale, offsetting localized losses. Considering the low ecological value of the affected area, the availability of alternative habitats, and compensatory restoration measures, the Proposed Action would not contribute to adverse regional trends in wildlife habitat or population viability. Therefore, effects to large mammals, small mammals, reptiles, fish, aquatic species, and migratory birds and eagles would be minor and would not rise to the level of significance.

3.2.9.2 *Special Status Animal Species*

Hairpin Lateral and HRP Sites

The ESA protects federally listed threatened and endangered plant and animal species and their critical habitats. The Project Area supports a variety of wildlife and provides important wildlife habitat, including federally protected species. A pedestrian survey for threatened and endangered species was performed, and a BA was developed to analyze the effects to ESA-protected species (J-U-B 2025d).

Ten federally listed threatened, endangered, or non-essential experimental animal species and two proposed animal species were identified as having the potential to occur in the Project Area, as shown on the official species lists from the USFWS IPaC system (USFWS 2025). These species and their designations are listed in Table 3-4.

Table 3-4. Endangered Species Act Species that May Occur within the Project Area

Common Name	Scientific Name	Listing Status	Critical Habitat Present?	Suitable Habitat Present?
INSECTS				
Monarch butterfly	*Danaus plexippus*	Proposed Threatened	No	Yes
Silverspot butterfly	*Speyeria nokomis nokomis*	Threatened	No	No
Suckley's cuckoo bumble bee	*Bombus suckleyi*	Proposed Endangered	No	Yes
BIRDS				
Gunnison sage-grouse	*Centrocercus minimus*	Threatened	Yes	Yes

Common Name	Scientific Name	Listing Status	Critical Habitat Present?	Suitable Habitat Present?
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	No	No
Yellow-billed cuckoo	*Coccyzus americanus*	Threatened	No	No
MAMMALS				
Canada lynx	*Lynx canadensis*	Threatened	No	No
Gray wolf	*Canis lupus*	Non-essential Experimental	No	Yes
FISH				
Bonytail	*Gila elegans*	Endangered	No	No
Colorado pikeminnow	*Ptychocheilus lucius*	Endangered	No	No
Humpback chub	*Gila cypha*	Threatened	No	No
Razorback sucker	*Xyrauchen texanus*	Endangered	No	No

No Action Alternative

Under the No Action Alternative, no direct disturbance to any threatened, endangered, or proposed animal species and no change to any critical, suitable, or potential habitat would occur. Therefore, the No Action Alternative would not affect proposed, threatened, or endangered species in the Project Area or their habitat. The Hairpin Lateral would continue to provide a seasonal water source. Salinity loading would continue to affect downstream waters and contribute to the degradation of habitat in the Gunnison and Colorado River Basins.

Proposed Action

The determination of effects of the Proposed Action to ESA protected species with the potential to occur within the Project Area are summarized in Table 3-5.

Table 3-5. Effects Determinations for Endangered Species Act Animal Species

Common Name	Designation	Determination
Monarch butterfly	Proposed Threatened	May Affect, Not Likely to Adversely Affect (MANLAA)
Silverspot butterfly	Threatened	No Effect
Suckley's cuckoo bumble bee	Proposed Endangered	No Effect
Gunnison sage-grouse & critical habitat	Threatened	MANLAA
Mexican spotted owl	Threatened	No Effect
Yellow-billed cuckoo	Threatened	No Effect
Canada lynx	Threatened	No Effect
Gray wolf	Non-essential Experimental	No Effect
Bonytail	Endangered	No Effect
Colorado pikeminnow	Endangered	No Effect
Humpback chub	Threatened	No Effect
Razorback sucker	Endangered	No Effect

Monarch Butterfly

The Hairpin Lateral Site does not contain suitable habitat for the monarch butterfly. No milkweed species were identified during field surveys. Therefore, the Hairpin Lateral project activities would have no effect on the monarch butterfly.

Within the HRP Site, one milkweed species, showy milkweed (*Asclepias speciosa*), was identified within the Project Area. Approximately 80 plants were observed during the field survey. The area containing milkweed is scheduled to be grazed during the implementation of the HRP. Because grazing would occur in an area where milkweed is present, and milkweed is essential for monarch reproduction, a temporary potential for effects to monarch butterflies exist. However, the likelihood of adverse effects is low because the grazing would not jeopardize the existence of the species. To reduce the chance of direct harm to larvae or adults, grazing is limited to a single season and would occur in early spring outside of the general milkweed growing season. While goats may consume milkweed despite its toxicity, the short duration of grazing and the implementation of conservation measures reduce the effects to milkweed and consequently to the monarch butterfly.

BMPs would be employed to reduce potential effects to the monarch butterfly. BMPs include replanting showy milkweed following grazing and herbicide application and applying herbicide to control invasive species that compete with milkweed (NRCS 2022). The actions associated with the HRP would improve monarch butterfly habitat by enhancing native plant diversity, reducing invasive species, and restoring riparian vegetation of native wetland plants including milkweed.

The Proposed Action may affect but is not likely to adversely affect (MANLAA) the monarch butterfly. This determination is supported by the temporary nature of disturbance, the absence of designated critical habitat, and the conservation measures and long-term enhancement of monarch habitat within the HRP Site, ensuring the Proposed Action would not jeopardize the continued existence of the species and the effects to monarch butterflies would be insignificant.

Silverspot Butterfly

The Project Area does not contain suitable habitat for the silverspot butterfly. No wet meadow habitat or bog violet (*Viola nephrophylla*), on which silverspot larvae are obligate feeders and adults lay their eggs, were observed during field surveys (J-U-B 2025d). Based on the absence of suitable habitat, no potential exists for the silverspot butterfly to occur within the Project Area, therefore, the Proposed Action would have no effect to the silverspot butterfly.

Suckley's Cuckoo Bumble Bee

Although the Project Area does contain nectarous species, the Suckley's cuckoo bumble bee is considered to be extirpated in Colorado because this species has not been identified in Colorado for over 10 years (Kristen Salamack, CDOT USFWS Liaison, personal communication, June 4, 2025). Therefore, the Proposed Action would have no effect on the Suckley's cuckoo bumble bee.

Gunnison Sage-grouse

No GUSG potential habitat exists in the HRP Site. Therefore, the proposed activities at the HRP Site would have no effect to GUSG.

Approximately 1.2 miles of GUSG critical habitat overlaps with sections of the Hairpin Lateral Site (see BA for overlap map [J-U-B 2025d]). The nearest GUSG lek is located approximately 5.1 miles

southeast of the Hairpin Lateral Site. Sagebrush, the primary component of GUSG habitat, is present throughout the Hairpin Lateral Site, and some sagebrush within critical habitat would be removed during construction. However, the following factors minimize potential adverse effects: only temporary and localized disturbance effects, timing restrictions to avoid sensitive periods, large distance from an active lek, critical habitat function maintenance, and BMPs. BMPs include noise reduction measures, dust control, and vehicle access limitations to designated routes to minimize indirect effects such as displacement or habitat degradation (see CHAPTER 4).

Based on the minimization measures and the temporary nature of the disturbance, the Proposed Action may affect but is not likely to adversely affect (MANLAA) the GUSG. The determination is supported by the avoidance of sensitive periods, restoration commitments, and maintenance of critical habitat function, ensuring the effects to GUSG are not significant. See BA for detailed analysis.

Gunnison Sage-grouse Critical Habitat

GUSG critical habitat is defined by five primary constituent elements (PCEs), which are the elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species (USFWS 2014).

PCEs 1 through 4 would remain unaffected or are not present. Landscape-level sagebrush (PCE 1) would remain intact, above the 25 percent threshold within the 0.9-mile analysis area for PCE 1. Breeding habitat (PCE 2) would not be affected because the existing habitat is marginal due to existing disturbance, lack of species diversity, and the small quantity of forbs present in or near the Project Area; construction will occur outside the March 15–July 15 breeding window; and the nearest lek is 5.1 miles away. For PCE 3, though 0.51 acres of seepage-induced meadow area would eventually dry near the siphon area, the area does not meet the plant assemblage percentages for PCE 3, and other marginally suitable meadow habitat would persist. Though a portion of the siphon area meets the 30 to 40 percent canopy cover for PCE 4, winter habitat is absent because shrubs in the Project Area, including both the siphon area and the Hairpin Lateral area, would likely be snow-covered during typical winters.

For PCE 5, the Proposed Action would result in minor and localized changes to GUSG designated critical habitat within the 1.2 miles of overlap with the Project Area. Piping the canal would eliminate seepage, approximately 0.51 acres within critical habitat of seepage-induced meadow area would eventually dry; however, because this area is evaluated to be marginal habitat, lacks key forb components, and is seepage induced, the loss of this area is considered insignificant with respect to PCE 5, and the effect on PCE 5 is appropriately characterized as MANLAA. Therefore, the Proposed Action MANLAA GUSG critical habitat. See BA Addendum for detailed analysis.

Mexican Spotted Owl

The Mexican spotted owl (MSO) is not likely to use the Project Area for foraging or stopover habitat. Small amounts of Gambel oak trees are present, however the Project Area lacks sufficient overstory trees. The Project Area is unlikely to support the MSO, because no suitable nesting or roosting habitat occurs within the Project Area. Noise from construction would temporarily contribute to an increase in current noise levels. Project BMPs, including implementing established working hours, would minimize noise disturbance to individual MSO. No MSO nesting or roosting habitat would be affected by implementation of the Proposed Action. Therefore, the Proposed Action would have no effect on the MSO.

Yellow-billed Cuckoo

An incidental nesting and bird survey for raptors and migratory birds, including YBCU, was conducted within the Project Area. A habitat suitability assessment for YBCU was also completed, which included a 0.5-mile buffer around the Project Area and used available aerial imagery and local regional data for the analysis.

Habitat within 0.5 miles of the Hairpin Lateral Site is predominantly shrub-scrub habitat, with fragmented patches of Gambel oak and very little riparian habitat. Small riparian patches occur throughout the Hairpin Lateral Site, but all are under two acres in area. Patchy, fragmented, and narrow riparian habitat occurs along Hairpin Creek and the Hairpin Lateral, but these areas do not meet the minimum patch size requirement of 12 acres for the YBCU (USFWS 2025).

Within 0.5 miles of the HRP Site, approximately 6.4 acres of continuous riparian habitat occurs along the Uncompahgre River. Patch sizes throughout the HRP Site range from 50 to 375 feet. The 6.4 acres of riparian habitat is concentrated in small riparian patches along the Uncompahgre River, west of the HRP Site. The riparian habitat within and near the HRP Site is narrower and smaller than what is accepted as suitable YBCU habitat.

No riparian vegetation communities occur within or near the Project Area with the appropriate cover, vegetation stratification, and acreage to constitute suitable breeding habitat for the YBCU. Due to the absence of suitable habitat for YBCU within or adjacent to the Project Area—including riparian patches that are too small, fragmented, and lacking the required vegetation structure—the Proposed Action would have no effect to YBCU.

Canada Lynx

The Canada lynx is a snowshoe hare obligate species; the snowshoe hare population drives Canada lynx populations. The Canada lynx preferred habitat—dense, coniferous montane forest—is not abundant within or near the Project Area. Though shrub vegetation is dominant throughout the Hairpin Lateral Site, it does not equate to suitable or high-quality habitat for the snowshoe hare or Canada lynx. According to CPW Species Activity Data, lynx is unlikely in the Hairpin Lateral Site and does not overlap with the HRP Site at all. Therefore, the Proposed Action would have no effect on Canada lynx because the species' preferred habitat—dense, coniferous montane forest—is absent within or near the Project Area, snowshoe hare populations are unlikely due to unsuitable shrub-dominated conditions, and CPW Species Activity Data confirms lynx presence is highly unlikely at the Hairpin Lateral Site and does not overlap with the HRP Site.

Gray Wolf

Although reintroduction efforts are currently underway, the gray wolf has only been documented once in the Project Area over the past 19 months as confirmed by the CPW Collared Gray Wolf Activity Map (CPW 2025b). No predation mitigation plans are included in the Proposed Action. Due to the experimental population status in Colorado and rare records in the Project Area, it is unlikely that gray wolves would use this area, and it is reasonable to determine that the Proposed Action would not jeopardize the continued existence of the species. Therefore, the Proposed Action would have no effect on the gray wolf because the species occurs in Colorado only as a nonessential experimental population under ESA Section 10(j), which allows for flexible management; documented wolf presence in the Project Area is extremely rare (one record in 19 months); and the

Proposed Action does not include activities that would increase human-wolf conflict or alter prey availability, making it unlikely to affect wolf use or jeopardize species recovery.

Colorado River Fish

No habitat for Colorado River fish (bonytail, Colorado pikeminnow, humpback chub, and razorback sucker) exists within the Project Area. Although Hairpin Creek crosses the Hairpin Lateral Site where the siphon would be installed and also where a portion of the Hairpin Lateral would be abandoned, the creek is considered an intermittent stream. Because proposed activities would occur during the low-water season, only negligible effects to water quality would occur. The nearest designated critical habitat area for these species is approximately 9.2 miles north of the HRP Site. Historic depletions for all water in the Gunnison River basin, including the BPWCD canal system and the HRP Site, were addressed through ESA Section 7 consultation as part of the original Bostwick Park Project. The consultation was conducted under the Gunnison Basin Programmatic Biological Opinion (PBO) issued by the USFWS in 2009 (USFWS Tails: 65413-2009-F-0044; USFWS 2009). No new depletions are proposed, and the Bostwick Park Project depletion rate would remain unchanged under the Proposed Action.

Although temporary effects may occur to flannelmouth sucker, bluehead sucker, and roundtail chub as described in Section 3.2.9.1, these effects would not occur to the listed Colorado River fishes because no habitat exists for Colorado River fishes within the Project Area. Due to the lack of habitat for these fish within the Project Area, the minimal effects to streams, the implementation of BMPs to further reduce potential effects, and the existing data indicating these species are not present in the watershed, the Proposed Action would not affect these fish species. Additionally, based on USFWS guidance, because the Proposed Action is a water-related activity in the Upper Colorado River Basin resulting in less than 10.0 ac-ft per year of new depletions, the Proposed Action would have no effect on the four ESA listed Colorado River fish species—the bonytail, Colorado pikeminnow, humpback chub, and the razorback sucker—or their designated critical habitat.

3.3 Summary of Effects

Table 3-6 provides a summary of environmental effects for the resources evaluated in this EA. Resource effects are outlined for both the No Action and Action Alternative. As described throughout Chapter 3, environmental effects of the Action Alternative were determined to be insignificant.

Table 3-6. Summary of Effects from the No Action and Proposed Action Alternatives

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
Access, Transportation, and Public Safety	No effect	No new access roads would be constructed, but a 100-foot construction easement and an approximate 50-foot permanent easement would be required along the siphon area. Implementation of the Proposed Action would temporarily cause brief, insignificant traffic delays along public roadways adjacent to the Proposed Action. Once the Hairpin Lateral is piped, and remaining portions are abandoned, the safety risks associated with a source of open, moving water would no longer occur within the Project Area, resulting in a beneficial effect to public safety.
Agricultural Resources and Soils	No Effect	The total soil disturbance within the Hairpin Lateral Site would be approximately 24.8 acres. The Proposed Action would have no significant adverse effects to soil resources because soil disturbance would be temporary and primarily occurring within the previously disturbed lateral prism and adjacent upland areas. Soils in the area are classified as not prime farmland and are not currently in agricultural production. BMPs during construction and post-construction Reclamation would reduce erosion and sedimentation potential and restore disturbed areas (see Table 4-1). The total soil disturbance within the HRP Site would be approximately 6.6 acres. The mechanical removal of invasive trees and debris using heavy machinery followed with revegetation would enhance soil quality and health in the long term. BMPs would be implemented to minimize erosion and soil loss (see Table 4-1). Although soils in the area are classified as prime and unique farmlands, the land within the HRP Site is not currently used for agricultural production. Disturbances to these soils would be temporary and the Proposed Action would not alter the land use in this area. The wildlife, agricultural, scenic, and general open space characteristics of the HRP Site protected under the existing conservation easement would be preserved. The Proposed Action would not alter the land use designation. Therefore,

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		no significant adverse effects to agricultural resources and soils within the HRP Site would occur, and the Proposed Action would comply with the FPPA.
Air Quality	No effect	During construction, the proposed trenching, excavation, and dirt work would produce minimal particulate and diesel emissions from the two to five pieces of heavy equipment operating at the same time during the construction phase, resulting in a temporary, negligible adverse effect to air quality. Once construction is complete, the amount of required O&M activities would decrease, resulting in a long-term beneficial effect to air quality. Implementation of the HRP Site may require slash pile burning from vegetation removal (Russian olive and tamarisk). If slash pile burning is to be conducted, an Open Burn/Slash Pile Permit would be obtained by the construction contractor from CDPHE with prescribed burning limitations to ensure air quality compliance. Montrose County and the surrounding areas would continue to meet NAAQS and remain in attainment.
Cultural Resources	No effect	The Proposed Action would result in no adverse effects to cultural resources. A Class III cultural resources inventory of the Hairpin Lateral APE identified cultural resources that would not be adversely affected, while no cultural resources were found within the HRP Site APE. Reclamation has recommended a finding of no adverse effect for the Hairpin Lateral Site and no effect for the HRP Site. Colorado SHPO concurred with Reclamation's findings in a letter dated December 12, 2025. The Navajo Nation Tribal Historic Preservation Officer agreed with the determination in a letter dated December 12, 2025 (see Appendix B—Cultural Resource Compliance Documentation for copies of both letters). In the event of inadvertent discoveries during implementation, work would be suspended, and Reclamation would determine the appropriate course of action. BMPs for cultural resources would be implemented as outlined in Table 4-1.
Noise	No effect	The Proposed Action would result in temporary increases in noise during construction from equipment such as excavators, loaders, and trucks; however, activities would occur during daylight hours and within the designated project footprint at both the Hairpin Lateral site and HRP site. Compliance with Montrose County requirements, including any necessary Temporary Use or Special Use permits, and implementation of BMPs would minimize effects from noise. Given the short duration of construction and mitigation measures, effects from noise would be minor, temporary, and would not rise to the level of significance. No long-term changes to ambient noise levels within the Project Areas would occur following construction.

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
Noxious Weeds	No effect	Approximately 24.8 acres of temporary disturbance to vegetation would occur due to the Proposed Action at the Hairpin Lateral Site. BMPs such as vehicle cleaning and post-construction rehabilitation would be implemented to minimize new weed introductions and establishment. In the long term, the Proposed Action would remove segments of open canal, eliminating a key vector for weed seed transport and reducing seepage that supports herbaceous noxious weeds. Reduced maintenance needs along buried pipeline segments would further limit disturbance. Given the small disturbance footprint (0.0017% of Montrose County), proposed BMPs, and existing weed presence, no significant long-term effects are anticipated from implementation of the Proposed Action. At the HRP Site, the Proposed Action would implement direct weed control measures, including mechanical removal, selective herbicide application, and cut-stump treatments for woody species. These actions would reduce weed populations and promote native vegetation recovery. Annual monitoring and herbicide reapplication would support long-term habitat restoration and biodiversity enhancement. BMPs would minimize construction-related weed spread, and compliance with CNWA and CMNWMP would be maintained.
Vegetation—General Vegetation	No effect	Approximately 24.8 acres of temporary disturbance to vegetation would occur due to the Proposed Action. The disturbance would be temporary, as areas disturbed by the Proposed Action would be restored following construction by contouring and implementing the natural vegetation method or by implementing the conventional reseeding method with appropriate seed mixes developed in coordination with the underlying landowners. The Proposed Action would result in the permanent loss of approximately 2.7 acres of low-quality riparian vegetation associated with the abandonment of 15,186 feet of Hairpin Lateral at the Hairpin Lateral Site. This loss is not considered significant because the affected vegetation is low in diversity and limited in structure, similar habitat remains abundant in the surrounding landscape, and environmental commitments, such as reseeding and habitat restoration would minimize long-term impacts. The remaining 14.4 acres of riparian vegetation would continue to persist near the Project Area. By reducing water loss and salinity loading, improving water delivery efficiency, and minimizing erosion and sedimentation, the Proposed Action would enhance riparian conditions downstream of the Hairpin Lateral Site.

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		At the HRP Site, the Proposed Action would have a direct short-term effect to vegetation due to mechanical removal and chemical treatment of noxious weeds from the HRP Site. Treatments of grazing, selective spraying, and cut stump treatments for the Russian olive and tamarisk would directly lower the potential for the continued spread and establishment of weeds as well as provide space for native plant establishment and seeding. Grazing activities would reduce weeds but may temporarily remove native milkweed, but reseeding efforts following grazing would include a native seed mix containing milkweed seeds. The subsequent planting of native species such as Scouler's willow, peachleaf willow, coyote willow, plains cottonwood, and russet buffaloberry as well as seeding native seed mix would increase native plant biodiversity and structure within the area. Overall, the removal of invasive species and restoration with native species would provide long-term benefits to vegetation at the HRP Site.
Vegetation—Special Status Plant Species	No effect	No clay-loving wild buckwheat was observed within the Project Area during field surveys. Approximately 2.6% of the Project Area contains silty clay loam, which does not have the highly alkaline clay substrate on which the species depends. Due to the lack of suitable habitat, the Proposed Action would have no effect on clay-loving wild buckwheat.
Water Resources—*Water Quality*	No effect	The Proposed Action would cause temporary direct and indirect effects to water quality due to localized soil disturbance from construction activities at the Hairpin Lateral and HRP Sites. At the Hairpin Lateral Site, if Hairpin Creek is dry during construction, no direct effects would occur because no water would be present in the creek to transport sediment, and BMPs would further reduce the possibility of effects during potential precipitation events. If Hairpin Creek is flowing during construction, temporary sediment mobilization could occur but would be minimized through extensive BMPs such as erosion control devices, sediment barriers, and temporary diversion of creek flow. Any increase in sediment would be negligible and would not rise to the level of significance because increases would be minor and temporary, and minimized through extensive BMPs and diversion measures. These proactive measures ensure the Proposed Action would not contribute to further degradation of water quality in impaired waters and are consistent with CWA Section 303(d) requirements for protecting listed streams. Long term, the Proposed Action would reduce salt loading by approximately 1,237 tons annually, eliminate livestock-related contamination, and improve irrigation efficiency. Therefore, the Proposed Action would have a beneficial effect on water quality in the long term. Soil disturbing restoration activities at the HRP Site could temporarily increase sediment mobilization, however effects to water quality would be negligible given effects would be temporary and minor and

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		minimized through extensive BMPs. Long term, restoration activities at the HRP Site would enhance filtration, stabilize soils, and reduce nutrient loading. Therefore, no significant adverse effects to water quality would occur, and waterbodies within and around the HRP Site Project Area would continue to qualify as unimpaired under the Proposed Action.
Water Resources—*Water Quantity and Use*	No effect	The Proposed Action would improve water delivery and efficiency through piping and siphon installation, resulting in an estimated annual savings of approximately 292.1 ac-ft. Water quantity delivered to shareholders and wildlife would remain unchanged, and legally decreed water rights would not be affected. Hairpin Creek would not experience adverse effects; the siphon would be installed beneath the creek to maintain natural flow, and any minor increase in downstream flow from reduced interception of incidental runoff would be negligible and not significant. While the location of seepage entering groundwater would shift due to piping, recharge would remain within the irrigated acres of the Project Area, resulting in no measurable change to overall groundwater recharge. Restoration activities at the HRP Site would enhance water retention and promote groundwater recharge. No significant adverse effects to water quantity and use would occur from implementing the Proposed Action.
Water Resources—*Floodplains*	No effect	Although the Hairpin Lateral Project Area is located outside of mapped floodplains, temporary soil disturbance could occur in areas subject to localized overland flow. BMPs, including erosion and sediment control devices and post-construction rehabilitation of disturbed areas, would be implemented to mitigate erosion and sedimentation (see Table 4-1). The buried pipeline would not interfere with natural floodwater movement, and any existing floodplain connectivity within the Project Area would remain intact. Restoration efforts at the HRP Site would enhance floodplain function and water retention capacity, contributing to overall beneficial hydrologic outcomes. Construction-related disturbances would be temporary and localized, and no structures would be placed in the 100-year floodplain. BMPs and site rehabilitation would prevent erosion, maintain water quality, and preserve natural floodplain functions. No significant adverse effects to floodplains would occur from implementing the Proposed Action.

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
Water Resources—*Wetlands and Aquatic Resources*	No effect	At the Hairpin Lateral Site, the Proposed Action would permanently convert approximately 4.3 acres of open water associated with the Hairpin Lateral to enclosed pipeline and siphon infrastructure, eliminating surface flow but maintaining irrigation conveyance and wildlife water sources. Mitigation through an HRP is proposed to replace the loss of riparian habitat associated with artificial irrigation conveyances. The incidental fish and/or wildlife values foregone in association with converting open lateral to buried pipeline would be compensated through the HRP. Approximately 0.3 acres of Wetland 6, a non-jurisdictional seepage-induced wetland, would be permanently lost, and temporary disturbance would occur during trenching and backfill activities. While Wetland 6 would be permanently affected, this effect does not rise to the level of significance because the value of this lost wetland would be replaced by the HRP. Jurisdictional waters, including Hairpin Creek, would be protected through compliance with RGP-5 (ditch related activities in the state of Colorado) and Section 401 Water Quality Certification and Section 402 Storm Water Discharge Permit, with additional measures such as temporary creek diversion and dewatering permits implemented if flowing conditions occur during construction. BMPs would minimize temporary effects, and disturbed areas would be stabilized and revegetated post-construction. Overall, the Proposed Action would result in minor, temporary effects, and limited permanent effects to artificial aquatic features, while providing long-term benefits through improved water management and salinity reduction. At the HRP Site, the Proposed Action would not affect open water but would cause temporary, minor, direct and indirect effects to wetlands from restoration activities. These activities may result in short-term soil disturbance, vegetation trampling, and localized hydrologic disruption; however, all disturbed areas would be rehabilitated, and BMPs would be implemented to minimize erosion and sedimentation (see Table 4-1). In the long term, restoration activities would improve wetland hydrology, stabilize soils, and enhance habitat quality, resulting in a net increase in aquatic resource functions and services. Because these activities occur within jurisdictional riparian and wetland areas associated with WOTUS, authorization under Section 404 of the CWA would be obtained through NWP 27, per coordination with the USACE, along with a Section 401 Water Quality Certification from CDPHE. Consultation with USACE is ongoing (see Appendix C—U.S. Army Corps of Engineers Correspondence (*Pending*)). Overall, the Proposed Action would provide long-term benefits to wetland function and aquatic habitat.

Wildlife—*Wildlife Resources*	No effect	***Large Mammals*** Temporarily, large mammals within their overall and seasonal ranges and migration corridors would be displaced by the increased human presence during construction activities. These effects would be limited because construction would be short in duration, largely scheduled outside irrigation season and sage-grouse lekking season, limited to the immediate narrow and linear project footprint, and would not introduce permanent barriers or new fencing. While some siphon work could occur anytime, the limited spatial extent and short duration minimize risk. Temporary disruption may occur to migration corridors, but no permanent barriers or new fencing would be installed, and the surrounding landscape provides abundant alternative movement corridors. Disruption effects would be limited to the construction phase only, and much of the wildlife in the area is accustomed to farm equipment, agricultural activities, and ongoing operation and maintenance of the irrigation system, similar to the equipment and activities during implementation of the Proposed Action, so the disruptions would be minimal. The loss of the upland and riparian vegetation due to construction disturbance would affect large mammals by the temporary loss of food and shelter until the area is reclaimed. However, this effect would be minor because the riparian area associated with the Hairpin Lateral is sparse and considered low-quality. In addition, the areas surrounding the Hairpin Lateral Site offers ample alternative habitat, which large mammals could alternatively occupy. The construction of two wildlife waterers would allow the site to continue to provide a water source for wildlife, which would limit the effects from the enclosure of the Hairpin Lateral. After implementation, water resources for large mammals would continue to exist at the Hairpin Lateral Site at a rate of more than 4 sources per square mile. BMPs would further minimize effects to large mammals. Overall, the Proposed Action would provide substantial long-term benefits to wildlife habitat. Abandonment and restoration of the lateral would stabilize soils and allow revegetation, providing forage and cover for big game species. Installation of two wildlife waterers would ensure hydration opportunities during the driest times of the year, supporting seasonal movements and reducing stress during dry periods. Reduced seepage, erosion, and salinity loading would contribute to healthier ecosystems. Installing a wildlife-friendly fence at the HRP Site would replace the current barbed-wire fence, which hinders animal movement, thereby enhancing wildlife passage across the area. Because no new permanent barriers would be introduced, migration corridors would remain intact, and the project would ultimately improve habitat connectivity and resilience. Water resources for large mammals would continue to exist at a rate of more than four sources per square mile, including the two wildlife waterers, Hairpin Lateral near the siphon inlet and outlet structures, and intermittent Hairpin Creek. These

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		measures ensure that the Proposed Action supports long-term habitat quality and wildlife movement while minimizing adverse effects to large mammals.
Wildlife—*Wildlife Resources*	No effect	***Small Mammals and Reptiles*** Temporary, direct effects from construction activities to individual small animals, including burrowing amphibians, reptiles, and small mammals, would include mortality and displacement during ditch piping activities. Although some individuals may be affected, these species and their habitats are common throughout the project and surrounding areas, and the loss of 2.7 acres of riparian habitat would have only minor landscape effects. The Proposed Action would not significantly affect these species at the population level. Long-term effects include the loss of riparian habitat supported by the lateral. Limited mobility may cause mortality to individual animals if they cannot access alternative water sources or nearby wildlife waterers. Because these species are widespread and alternative riparian habitat exists nearby, the overall effect of losing 2.7 acres of low-quality riparian habitat would be minor as it would not affect these species at the population level. From a landscape perspective, the habitat conditions following implementation would be substantially similar to existing habitat conditions in the surrounding area and on a regional scale, ensuring significant effects to small mammals and reptiles would not occur. Therefore, significant effects to small mammals and reptiles are not anticipated as a result of the Proposed Action.
Wildlife—*Wildlife Resources*	No effect	***Fish and Aquatic Wildlife*** CPW range data indicates the bluehead sucker, flannelmouth sucker, and roundtail chub may occur within the broader Project Area. Within the Project Area, Hairpin Creek is intermittent and typically lacks perennial flow and sustained fish habitat except during limited precipitation or snowmelt periods. Accordingly, direct effects on fish and aquatic wildlife would be unlikely, especially if lateral abandonment and siphon installation occur when Hairpin Creek is dry because no water would be present to transport sediment or to support fish occupancy. Under dry-creek conditions, BMPs—including erosion and sediment controls—would be implemented to further prevent the potential for sediment mobilization during precipitation events. If Hairpin Creek is flowing at the time of the single siphon crossing, temporary, localized soil disturbance could increase turbidity and fine sediment in the creek, which could briefly affect fish, if present, and short-term habitat suitability. To avoid and minimize these potential effects, the Proposed Action

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		implements a temporary diversion to route flow around the construction area, along with BMPs such as sediment barriers, erosion control devices, and, if needed, a dewatering plan. With these measures in place, any sediment increase would be minor and short-lived, and effects to Hairpin Creek fish habitat would be negligible. The contractor and BPWCD would obtain appropriate permits (e.g., COG070000 Construction Dewatering Discharges Permit) to ensure compliance with state and federal requirements. These proactive measures ensure the Proposed Action would not contribute to further degradation of water quality in impaired waters and would be consistent with CWA Section 303(d) requirements for listed streams, protecting important fish habitat. No new depletions would occur because of the Proposed Action. In the long term, the Proposed Action would eliminate lateral seepage losses and reduce salinity loading to the Gunnison and Colorado River Basins, having the beneficial effect of improving fish and wildlife habitat within the greater Upper Colorado River Basin. Given the intermittent nature of Hairpin Creek, implementation of a temporary diversion and BMPs during any in-flow construction, and the buried siphon design that preserves channel continuity, the Proposed Action would have no significant adverse effect on bluehead sucker, flannelmouth sucker, or roundtail chub, and long-term water-quality improvements in downstream perennial waters would be beneficial to these native warm-water fishes.
Wildlife—*Wildlife Resources*	No effect	***Migratory Birds and Eagles*** Temporary disturbance from noise related to construction may result in temporary disruption if stopover foraging habitats for resident or migratory birds and raptor species near the Project Area. However, avian species using the area are adapted to farming and ranching human activities within foraging or roosting activities and the avian species would return to the surrounding habitat once construction has concluded. Additionally, the majority of construction would occur in winter months outside of the irrigation season and most migratory bird, eagle, and nesting seasons, reducing the likelihood of temporary effects to federally protected avian species. Approximately 2.7 acres of low-quality riparian vegetation would be permanently lost associated with the piping and abandonment of the Hairpin Lateral. Alternative high-quality riparian habitat for bird species is located downstream of the Project Area. The permanent loss of 2.7 acres of low-quality riparian habitat would not significantly affect the habitat availability at the landscape scale, and the indirect effects on migratory birds and raptors from the riparian habitat loss along the canals would be minor. Restoration activities at the HRP site would enhance riparian function and increase overall habitat quality within the

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		watershed, offsetting localized losses. Considering the low ecological value of the 2.7 acres affected area, the availability of nearby high-quality habitat, and compensatory restoration measures, the indirect effects on migratory birds and raptors would be minor and would not rise to the level of significance.
Wildlife—*Wildlife Resources*	No effect	***Habitat Replacement*** The HRP was developed to offset incidental wildlife habitat losses associated with the Proposed Action. The HRP fulfills habitat replacement requirements under the CRBSCA and adheres to Reclamation's HRP procedures (Reclamation 2018). By generating habitat credits that exceed the calculated losses, the HRP ensures a net ecological benefit through riparian restoration, structural enhancements, and improved habitat.
Wildlife—*Special Status Animal Species*	No effect	The effects of the Proposed Action are shown below. The Proposed Action would have no effect to the following proposed or listed ESA animal species within the Project Area: • Silverspot Butterfly: No suitable habitat exists within the Project Area for the silverspot butterfly; therefore, no effects would occur to this species. • Suckley's Cuckoo Bumble Bee: The Suckley's cuckoo bumble bee is considered to be extirpated in Colorado, because this species has not been identified in Colorado for over 10 years (Kristen Salamack, CDOT USFWS Liaison, personal communication, June 4, 2025). Therefore, the Proposed Action would have no effect to the Suckley's cuckoo bumble bee. • Mexican Spotted Owl: Suitable habitat for the MSO is not present within the Project Area. Small amounts of Gambel oak trees are present, however the Project Area lacks sufficient overstory trees. Project BMPs, including implementing established working hours, would minimize noise disturbance to the MSO. No MSO nesting or roosting habitat would be impacted by the implementation of the Proposed Action. Therefore, the Proposed Action would have no effect to the MSO. • Yellow-billed Cuckoo: Habitat within 0.5 miles of the Hairpin Lateral Site is predominately shrub-scrub habitat, with fragmented patches of Gambel oak and very little riparian habitat. Patchy, fragmented, and narrow riparian habitat occurs along Hairpin Creek and Hairpin Lateral, but do not meet the minimum patch size requirement for YBCU. Approximately 6.4 acres of continuous riparian habitat occurs within 0.5 miles of the HRP Site along the Uncompahgre River. Patch sizes throughout the HRP Site range from 50 to 375 feet. The riparian habitat within or near the HRP Site is narrower and smaller than what is accepted as suitable YBCU habitat. Due to the absence of suitable habitat for YBCU in or adjacent to the Project Area, the Proposed Action would have no

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		effect to YBCU. • Canda Lynx: The Canada lynx is a snowshoe hare obligate species. Canada lynx preferred habitat—dense, coniferous montane forest— is not abundant within the Project Area. Shrub vegetation is dominant throughout the Hairpin Lateral Site, which does not equate to suitable or high-quality habitat for the snowshoe hare or Canada lynx. Therefore, the Proposed Action would have no effect to the Canada lynx. • Gray Wolf: Reintroduction efforts for the gray wolf are currently underway. However, individuals have only been documented once in the Project Area over the past 19 months (CPW 2025b). Due to the experimental population status in Colorado and rare records in the Project Area, it is unlikely that gray wolves would use this area, and it is reasonable to determine that the Proposed Action would not jeopardize the continued existence of the species, and the Proposed Action would have no effect on the gray wolf. • Colorado River Fish: No habitat for Colorado River fish exists within the Project Area. Proposed instream activities would occur outside irrigation season and only minimal effects to water quality would occur from construction. Historic depletions have been previously consulted on as part of the original Bostwick Park Project. No new depletions are proposed, and the Bostwick Park Project depletions rate would remain unchanged under the Proposed Action. Due to the lack of habitat for these fish within the Project Area, the minimal stream effects, the implementation of BMPs to further reduce the potential effects, and the existing data indicating these species are not present, the Proposed Action would have no effect on Colorado River fish species or their designated critical habitat. The Proposed Action MANLAA the ESA proposed and listed species below. • Monarch Butterfly: The Hairpin Lateral Site does not contain suitable habitat for the monarch butterfly; therefore, the Hairpin Lateral project activities would have no effect on the monarch butterfly. Approximately 80 Showy milkweed plants were identified at the HRP Site. This area is scheduled to be grazed during the implementation of the HRP. Because grazing would occur in an area where milkweed is present, and milkweed is essential for monarch reproduction, a temporary potential for effects to monarch butterflies exist. To reduce the chance of direct harm to larvae or adults, grazing would occur in early spring outside of the general milkweed growing season. BMPs and environmental commitments would further minimize potential adverse effects, including revegetating with native species including milkweed, and applying herbicide to control invasive

Resource	No Action Alternative Effects	Proposed Action Alternative Effects
		species that compete with milkweed. The Proposed Action MANLAA the monarch butterfly. This determination is supported by the temporary nature of disturbance, the absence of designated critical habitat, and the conservation measures and long-term enhancement of monarch habitat within the HRP Site, ensuring the Proposed Action would not jeopardize the continued existence of the species. • Gunnison Sage-Grouse: No potential GUSG habitat exists in the HRP Site; therefore, the HRP Site would have no effect to the GUSG. Approximately 1.2 miles of GUSG critical habitat overlaps with sections of the Hairpin Lateral Site. The Hairpin Lateral Site is approximately 5.1 miles northwest of a GUSG lek. GUSG habitat is present within the Hairpin Lateral Site and some sagebrush within critical habitat would be removed during construction. However, environmental commitments and BMPs would minimize potential adverse effects, including timing restrictions to avoid sensitive periods, maintaining critical habitat function, implementing noise reduction and dust control measures, and limiting vehicle access to designated routes. Based on the mitigation measures and the temporary nature of the disturbance, the Proposed Action MANLAA the GUSG. The Proposed Action MANLAA the ESA listed species critical habitat below. • Gunnison Sage-Grouse Critical Habitat: PCEs 1 through 4 would remain unaffected or are not present. For PCE 5, the Proposed Action would result in minor and localized changes to GUSG designated critical habitat within the 1.2 miles of overlap with the Project Area. Approximately 0.51 acres of seepage-induced meadow area would eventually dry due to the piping of the canal. However, this area is evaluated to be marginal habitat, lacks key forb components, and is seepage induced; therefore, the loss of this area is considered insignificant with respect to PCE 5, and the effect on PCE 5 is appropriately characterized as MANLAA. Therefore, the Proposed Action MANLAA GUSG critical habitat.

CHAPTER 4—ENVIRONMENTAL COMMITMENTS

This section summarizes the design features, BMPs, conservation measures, and other requirements (collectively, "Environmental Commitments") developed to further decrease the potential insignificant effects of the Proposed Action. The actions in the following environmental commitment list would be implemented as an integral part of the Proposed Action and would be included in any contractor bid specifications.

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

Table 4-1. Environmental Commitments

Environmental Commitment	Affected Resource	Authority
General Commitments		
Both Sites (Hairpin Lateral and HRP Sites)		
Adequately mark and barricade active construction areas, as necessary, to prevent public access. BPWCD and the contractor would coordinate with utility companies, the Montrose County Road, and Bridge Department, CDOT, and County and Sheriff departments when traffic or access would be delayed.	Access Transportation Public Safety	BPWCD CDOT Montrose County
Post-construction, comply with the CNWA and CMNWMP for the eradication or management of noxious weeds on disturbed areas within private property.	Vegetation Weeds	CMNWMP CNWA
Hairpin Lateral Site		
Obtain a 100-foot construction easement and an approximate 50-foot permanent easement along the siphon area.	Access Transportation Water Soils Cultural Resources	BPWCD; Local Utilities; Montrose County; CDOT; CWA; NHPA; ARPA; NAGPRA; AIRFA; 48 FR 44716; PRPA
Obtain Temporary Use Permits or Special Use Permits, if required, for construction projects.	Noise Access Transportation	Montrose County

Environmental Commitment	Affected Resource	Authority
Best Management Practices Associated with Water Quality Protection and Erosion Prevention		
Both Sites (Hairpin Lateral and HRP Sites)		
Complete all work within the designated Proposed Action footprint.	Water Soils Vegetation Weeds Cultural Resources Wildlife	CWA CNWA CMNWMP CDPHE ARPA PRPA
Ensure the contractor develops and follows an approved SWMP and an SPCC plan or other similar plans, as required. Comply with all measures in the associated SWMP and SPCC plan when fueling, performing cleaning and maintenance, and storing or disposing of hazardous materials.	Water	CWA CDPHE
Comply with all measures in the associated SWMP and SPCC plan, or similar plans for implementing TESCs, covering, and storing materials, and other erosion prevention measures.	Water Soils	CWA CDPHE
Do not perform construction, restoration, or debris removal activities during extreme wet weather conditions, whenever practicable. If heavy precipitation is predicted to occur within 24 hours, respond appropriately to cover up any stockpiles and check that TESCs are functioning.	Water Soils	CWA CDPHE
Maintain adequate response equipment (i.e., spill kits and cleanup materials) on-site to avoid chemical contamination in the event of a spill. Clean all spills immediately.	Water	CWA CDPHE
When not in use, store construction equipment away from concentrated flows of stormwater, drainage courses, and inlets.	Water	CW CDPHE
Use vegetable-based hydraulic fluid for equipment operating in or near a waterbody.	Water	CWA CDPHE
Employ appropriate dust control measures during project implementation.	Air Quality Water Soils	CAA CWA CDPHE
Hairpin Lateral Site		
Complete all work during established working hours.	Water Soils Vegetation Weeds Cultural Resources Wildlife	CWA CDPHE CNWA CMNWMP ARPA PRPA
Contain all work activities, including those within staging areas, to upland areas to minimize potential impacts to surface water quality, whenever feasible.	Water	CWA CDPHE

Environmental Commitment	Affected Resource	Authority
Ensure all applicable local or state water quality permits are in place (Section 401 Water Quality Certification and Section 402 Storm Water Discharge Permit), and where applicable, obtain CWA Section 404 RGP 5 and a CDPHE-WQD Construction Dewatering Discharged Permit (if needed) for the Proposed Action. Meet associated permit conditions during construction operations.	Water	CWA CDPHE
Dispose of excavated sediment and debris more than 200 feet from any surface water feature.	Water Soils	CWA CDPHE
Do not allow uncured concrete or form materials to enter the active stream channel.	Water	CWA CDPHE
Locate borrow areas outside the 100-year floodplain or greater than 200 feet from any identified waters within the Project Area, whichever is greater.	Water Soils	CWACDPHE
Construct project outside the irrigation season and during periods of low flow, minimizing the potential for short-term downstream impacts (April 30–September 15, unless project components are non-disruptive to irrigation delivery, such as siphon installation). Use specific erosion control measures, including temporary sediment traps, filter fabric fences, and vegetation buffers, to prevent significant sediment transport during construction.	Water Wildlife	CWA CDPHE
HRP Site		
Ensure all applicable local or state water quality permits are in place and where applicable, obtain CWA Section 404 NWP 27—Aquatic Habitat Restoration, Establishment, and Enhancement Activities for the Proposed Action. Meet associated permit conditions during implementation.	Water	CWA CDPHE
Best Management Practices Associated with Reclaiming Abandoned Segments of Hairpin Lateral		
Hairpin Lateral Site		
Leave standing any live cottonwoods within the Project Area associated with the reclaimed ditch to the maximum extent practicable.	Water Soils Vegetation	CWA BPWCD
Do not use cut vegetation as fill in the reclaimed ditch.	Vegetation Weeds Water Soils	CNWA CMNWMP CWA

Environmental Commitment	Affected Resource	Authority
Best Management Practices Associated with Vegetation		
Both Sites (Hairpin Lateral and HRP Sites)		
Clean equipment of mud and other debris to avoid noxious weed or seed dispersal within or near the Project Area. Use pressure washing where appropriate to remove soil, plant parts, or other materials that may carry invasive and noxious weed seeds before arriving at the Project Area. Ensure this cleaning occurs each time equipment is brought into the Project Area from a different location.	Water Soils Vegetation Weeds	CWA CNWA CMNWMP
Hairpin Lateral Site		
Limit disturbances to only those areas necessary to safely implement the project to ensure retention of vegetation for erosion control and to protect native vegetation, including milkweed and riparian vegetation, whenever practicable. Confine vegetation removal to the smallest portion of the Project Area as necessary to complete the work.	Vegetation Water Resources Wildlife	BPWCD CWA ESA
Following construction, revegetate disturbed ground using either: 1) the sterile topsoiling and natural recruitment method, or 2) the conventional revegetation method, as identified in the construction plans and described in Section 2.2.6.	Vegetation Weeds Water Soils	CNWA CMNWMP CWA
Rehabilitate all areas of ground disturbance. Spread or grade stockpiled materials and use a native seed mix (99.9% noxious weed-free seed) approved by Reclamation to reseed all areas where ground disturbance has occurred. Ensure the seed mix and plants are appropriate to the region and include milkweed species when appropriate to the site.	Vegetation Weeds Water Soils	CNWA CMNWMP CWA
If appropriate for the area, apply seed by hydroseeding, using a temporary erosion control mulch tackifier to provide stabilization, eliminate erosion concerns, and create vegetation recruitment opportunities.	Vegetation Weeds Water Soils	CWA CNWA CMNWMP
Protect native site vegetation and plant communities, including wetland vegetation, when practicable.	Water Soils Vegetation Weeds	CWA CNWA CMNWMP
Minimize sagebrush removal to the maximum extent practicable, and revegetate any areas where sagebrush is removed from construction.	Soils Vegetation Weeds Wildlife	CNWA CMNWMP

Environmental Commitment	Affected Resource	Authority
HRP Site		
Graze the HRP Site one time during the designated grazing period to facilitate invasive species and noxious weed removal. Monitor site conditions following grazing. If adequate measures are in place to protect newly planted and seeded vegetation, additional grazing events may be considered to meet weed reduction objectives.	Vegetation Weeds Threatened and Endangered Species	CNWA CMNWMP ESA
Apply herbicide treatment to target invasive species. Monitor herbicide application and reapply herbicide treatment, as necessary.	Vegetation Weeds Threatened and Endangered Species	CNWA CMNWMP ESA
Following grazing and herbicide treatment, when applying the High Plains/Foothills Riparian seed mix in the Russian knapweed, common reed and saltgrass areas, include milkweed species in the seed mix.	Vegetation Weeds Threatened and Endangered Species	CNWA CMNWMP ESA
Best Management Practices to Avoid and Minimize Effects to Wildlife and Fish Species, Including Bald Eagles and Migratory Birds		
Both Sites (Hairpin Lateral and HRP Sites)		
If threatened or endangered species are discovered during construction, restoration, or debris removal, halt activities until consultation is completed with the USFWS and protection measures are implemented. Additional surveys may be required if plans or proposed disturbance areas are changed.	Wildlife Threatened & Endangered Species	ESA
Hairpin Lateral Site		
Ensure a qualified biologist performs pre-construction nest surveys when vegetation removal occurs during the MBTA breeding season (April 1–August 31) or when other construction activities during this period could disturb nesting birds (e.g., heavy equipment, noise, or work near suitable nesting habitat). Surveys must be conducted no more than 7 days before the activity. If vegetation removal or disturbance occurs outside this timeframe, surveys are not required. For activities during the breeding season that do not pose a risk to nesting birds, surveys are not necessary. Repeat surveys if vegetation removal and disturbance are paused and resumed. If an active nest is discovered within the Project Area, halt construction and/or vegetation removal and contact the appropriate regulatory agency for guidance	Wildlife	MBTA BGEPA
Time construction for the areas that overlap GUSG critical habitat to occur outside of GUSG nesting and brood-rearing season (March 15–July 15).	Threatened and Endangered Species	ESA

Environmental Commitment	Affected Resource	Authority
Ensure noise mitigation measures are used, including properly functioning mufflers.	Wildlife Threatened and Endangered Species	MBTA BGEPA ESA
Implement appropriate dust control measures to minimize impacts to GUSG.	Threatened and Endangered Species	ESA
Limit vehicle access to designated construction routes.	Noxious Weeds Vegetation Wildlife Threatened and Endangered Species	CNWA CMNWMP MBTA BGEPA ESA
HRP Site		
Ensure a qualified biologist performs pre-construction nest surveys when vegetation removal (e.g., Russian olive and tamarisk removal) occurs during the MBTA breeding season (April 1–August 31) or when other activities during this period could disturb nesting birds (e.g., heavy equipment, noise, or work near suitable nesting habitat). Surveys must be conducted no more than 7 days before the activity. If vegetation removal or disturbance occurs outside this timeframe, surveys are not required. For activities during the breeding season that do not pose a risk to nesting birds, surveys are not necessary. Repeat surveys if vegetation removal is paused and resumed. If an active nest is discovered within the Project Area, halt vegetation removal and contact the appropriate regulatory agency for guidance.	Wildlife	MBTA BGEPA
Best Management Practices to Avoid and Minimize Effects to Cultural Resources		
Both Sites (Hairpin Lateral and HRP Sites)		
In the event of inadvertent cultural resources discovery, immediately suspend all activities in that area and contact Reclamation.	Cultural Resources	NHPA
Prohibit activities in the Cultural Avoidance Zone outside of the direct APE and HRP Site boundary, but within the conservation easement boundary (see Figure 6).	Cultural Resources	NHPA

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 the 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 will be distributed to private landowners adjacent to the Proposed Action, and to the organizations and agencies listed in Appendix D.

5.3 Distribution

The electronic version of the Draft EA will be publicly-available on Reclamation's website (https://www.usbr.gov/uc/DocLibrary/ea.html) and will meet the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the document can be accessed by people with disabilities using accessibility software tools.

CHAPTER 6—PREPARERS

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

Table 6-1. Reclamation Team, Environmental Preparers

Name	Agency/ Organization	Title	Areas of Responsibility
Jennifer Ward	Reclamation	Environmental Group Chief	EA Review
Zachary Nelson	Reclamation	Regional Archeologist	Cultural Resources
Nick Emmendorfer	J-U-B	Professional Engineer, Project Manager	Alternative Development/Plans
Tyler Schade	J-U-B	Senior Environmental Specialist/Biologist	HRP/ARD
Lexie Conley	J-U-B	Lead Environmental Specialist	General Authorship
Suzanne Acton	J-U-B	Environmental Planning/ NEPA Group Technical Lead	General Authorship
Jamie Vandagriff	J-U-B	Senior Environmental Specialist, Principal Investigator- Cultural Resources	Cultural Inventory and Report
Sydney Allen	J-U-B	Environmental Specialist Assistant	Biological Assessment, General Authorship
Addison Ribordy	J-U-B	Environmental Specialist Assistant	HRP, General Authorship
Emma Haener	J-U-B	Environmental Specialist Assistant	General Authorship
Hannah Blija	Alpine	Principal Investigator	Cultural Inventory and Report

CHAPTER 7—REFERENCES

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CHAPTER 8—ACRONYMS AND ABBREVIATIONS

Table 8-1 identifies acronyms and abbreviations used in this document and their definitions.

Table 8-1. Definitions for Acronyms and Abbreviations

Acronym or Abbreviation	Definition
ac-ft	Acre-feet
AIRFA	American Indian Religious Freedom Act
Alpine	Alpine Archaeological Consultants, Inc.
APE	Area of potential effect
ARD	Aquatic Resources Delineation
ARPA	Archaeological Resources Protection Act
BA	Biological Assessment
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
BPWCD	Bostwick Park Water Conservancy District
CAA	Clean Air Act
CC&RC	Cimarron Canal and Reservoir Company
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CDPHE-WQCC	CDPHE-Water Quality Control Commission
CDPHE-WQD	CDPHE-Water Quality Division
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CMNWMP	City of Montrose Noxious Weed Management Plan
CNWA	Colorado Noxious Weed Act
CPW	Colorado Parks and Wildlife
CRBSCA	Colorado River Basin Salinity Control Act
CRS	Colorado Revised Statutes
CRSP	Colorado River Storage Project
CWA	Clean Water Act
CWQCA	Colorado Water Quality Control Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FOA	Funding Opportunity Announcement
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act

Acronym or Abbreviation	Definition
GIS	Geographic information system
GUSG	Gunnison sage-grouse
HDPE	High-density polyethylene
HRP	Habitat Replacement Plan
HUC	Hydrologic Unit Code
HQS	Habitat Quality Score
IPaC	Information for Planning and Consultation
J-U-B	J-U-B ENGINEERS, Inc.
LF	linear-feet
MANLAA	May Affect, Not Likely to Adversely Affect
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
MSO	Mexican Spotted Owl
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NASS	National Agricultural Statistics Survey
NEPA	National Environmental Policy Act
NFHL	National Flood Hazard Layer
NHPA	National Historic Preservation Act
NOFO	Notice of Funding Opportunity
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
O&M	Operation and maintenance
PBO	Programmatic Biological Opinion
PL	Public Law
PRPA	Paleontological Resources Preservation Act
RCPP	Regional Conservation Partnership Program
Reclamation	U.S. Bureau of Reclamation
RGP	Regional General Permit
ROW	Right-of-way
SHPO	State Historic Preservation Officer
SPCC	Spill Prevention, Control, and Countermeasures
SWMP	Stormwater management plan
TESC	Temporary erosion and sediment controls
U.S. or US	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WOTUS	Waters of the United States

APPENDICES

Appendix A—Summary of Habitat Replacement Accounting for Approved Salinity Control Projects in the Region

Appendix B—Cultural Resource Compliance Documentation

Appendix C—U.S. Army Corps of Engineers Correspondence (pending)

Appendix D—Distribution List

Appendix A—Summary of Habitat Replacement Accounting for Approved Salinity Control Projects in the Region

Salinity Project	Status	Habitat Units Lost	Habitat Credits Created
Bostwick Park Siphon Lateral Piping Project and Waterdog & Shinn Park Laterals Piping Project	Past	32.1	32.4
C Ditch/Needle Rock Piping Project	Past	7.9	10.5
Cattleman's Ditches Piping Project Phases I and II	Past	18.6	23.3
Clipper Center Lateral Piping Project	Past	33.9	38.4+ Excess from previous project
Crawford Clipper Ditch Company's Jerdon/West/Hamilton Piping Project	Past	11.6	33.4
Eastside Laterals Piping Project ("UVWUA Project 9" and "UVWUA Project 10")	Past/Present	54.3	37.1+ Excess from previous project
Fire Mountain Canal Piping Project Phase I	Past	8.4	13.0
Forked Tongue/Holman Ditch Piping Project	Past	6.7	11.0
Gould Canal Improvement Projects A & B	Past	18.1	24.2
Grandview Canal Piping Project (Upper, Middle and Lower)	Past	33.4	37.1
Upper and Lower Stewart Ditch Piping Projects	Past	8.7	9.6
Minnesota Canal Piping Project Phase I and II	Past	35.6	40.3
Minnesota L75 Piping Project	Past	0.5	Using excess from previous project[1]
Needle Rock/Lone Rock Piping Project	Past	13.9	15.8
North Delta Canal Piping Project Phase I + Extension	Past	173.0	174.6
North Delta Canal Piping Project Phase II	Present	17.7	16.3 + Excess
Orchard Ranch Piping Project	Past	5.1	6.0
Pilot Rock Ditch Piping Project	Past	16.9	20.9
Short Ditch Extension Piping Project	Present	13.8	14.1
Slack and Patterson Lateral Piping Project	Past	20.3	39.9
Spurlin Mesa Lateral Piping ("Clipper Project 4")	Past	10.0	16.4

Salinity Project	Status	Habitat Units Lost	Habitat Credits Created
Waterdog and Shinn Park Laterals Piping Project	Past	24.9	30.3
Zanni Lateral Piping Project	Past	6.4	Using excess from previous project
TOTAL:		**571.8**	**644.6**

[1]Minnesota L75 Piping Project used excess habitat credits generated from the Minnesota Canal Piping Project Phase I and II

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Appendix B—Cultural Resource Compliance Documentation

History Colorado

December 9, 2025

Bart Deming
Acting Area Manager
Western Colorado Area Office
Bureau of Reclamation
185 Suttle Street, Suite 2
Durango, CO 81303
JMunkres@usbr.gov

RE: Consultation Under Section 106 of the National Historic Preservation Act (NHPA), Bostwick Park Water Conservancy District Hairpin Ditch Salinity Control Project, Salinity Control Program, Colorado (HC# 86965)

Dear Mr. Deming,

Thank you for your correspondence received by our office on December 8, 2025 requesting review of the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800. Our office has reviewed the submitted materials, and we offer the following comment.

Identification of Historic Properties
We concur that 5MN.5036, 5MN.11058, and 5MN.13869-13874 are not eligible for listing in the National Register of Historic Places. Based on the documentation provided, we agree with your finding that the undertaking will result in no historic properties affected, 36 CFR 800.4(d)(1).

Should unidentified historic properties or unanticipated effects to historic properties be discovered in the course of the undertaking, work must be interrupted in order to complete consultation with our office and other consulting parties 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 other 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 Kathryn Norton

Digitally signed by Dr. Holly Kathryn Norton
Date: 2025.12.12 14:35:08 -07'00'

(for) Dawn DiPrince
State Historic Preservation Officer

United States Department of the Interior

BUREAU OF RECLAMATION
Durango Field Division
185 Suttle Street, Suite 2
Durango, CO 81303-7911

IN REPLY REFER TO:

WCG-JWard
2.1.1.04

VIA ELECTRONIC MAIL ONLY

Subject: Consultation Under Section 106 of the National Historical Preservation Act, Bostwick Park Water Conservancy District Hairpin Ditch Salinity Control Project, Salinity Control Program, Colorado

Dear Tribal Consulting Party:

The Bureau of Reclamation (Reclamation) is considering a request from Bostwick Park Water Conservancy District (BPWCD) for funds available through the Colorado River Basin Salinity Control Program (CRBSCP) to install salinity control measures along the existing open-air Hairpin Ditch in the Cimarron Canal System (Lateral) and the CRBSCP-required implementation of a Habitat Replacement Project (HRP) in Montrose County, Colorado, on private land in portions of Sections 16, 17, 18, 20, and 21, Township 48 North (T48N), Range 7 West (R7W), and Section 33, Township 51 North (T51N), Range 10 West (R10W), New Mexico Meridian (NMM), depicted on the Cerro Summit and Olathe NW, Colorado 7.5″ United States Geological Survey (USGS) quadrangle maps. Reclamation has determined that the proposed action constitutes an undertaking with the potential to affect historic properties, if present, and is the lead agency for compliance under Title 54 USC 306108, commonly known as Section 106 of the National Historic Preservation Act, and its implementing regulations, specifically 36 CFR 800.3 through 800.5.

The proposed undertaking has two components, each located in a different part of Montrose County. The Lateral component of the proposed undertaking is located in portions of Sections 16, 17, 18, 20, and 21, T48N, R7W, depicted on the Cerro Summit, Colorado 7.5″ USGS quadrangle map. It aims to increase conveyance efficiency and reduce water salinity in the system by piping and shortening the current alignment of the open-air Hairpin Ditch. This portion of the undertaking occupies approximately 174.6 acres and consists of the installation of:

- a 4,800-foot underground pressurized 36-inch High-Density Polyethylene (HDPE) inverted siphon across the Hairpin Ditch basin, bypassing an approximately 20,500-foot segment of the existing open-air Hairpin Ditch
- a trash rack-equipped intake structure on the upstream, east end and a transitional structure on the downstream, west end of the siphon
- a 3,500-foot-long 8-inch HDPE pipe installed to service an existing turnout in Hairpin Draw
- a 2,000-foot-long 2-inch HDPE pipe installed to service a wildlife waterer
- the installation of two wildlife waterers – one at the terminus of the 2-inch line mentioned above and one along the new siphon – to support wildlife with a reliable water source; and
- the abandonment; filling, using on-site material; and reseeding of the remaining 15,000 feet of the bypassed section of the ditch.

Based on the results of the surveys documented in the Class III reports and the above, Reclamation is offering that no historic properties will be affected by the proposed undertaking referenced as Bostwick Park Water Conservancy District Hairpin Ditch Salinity Control Project, Montrose County, Colorado.

Reclamation welcomes your Tribe's participation in the Section 106 process and requests information under Section 106 of the NHPA regarding the identification of, or concerns with, cultural resources, including sites of religious and cultural significance pursuant to 36 CFR § 800.4(a)(4), that may be affected by the proposed undertaking. If the location and nature of these resources is sensitive or confidential, this information may be withheld from public disclosure as outlined in the regulations at 36 CFR § 800.11(c).

If you have any questions, comments, or concerns, would like to discuss potential effects to resources of concern, participate in the Section 106 process, or have further questions or concerns, please contact Dr. Zachary Nelson at (385) 575-0533 or ZNelson@usbr.gov. For the hearing impaired, please call the Federal Relay System at (800) 877-8339 (TTY).

Sincerely,

Digitally signed by BART DEMING
Date: 2025.12.05 17:14:53 -07'00'

Bart Deming
Acting Area Manager

Enclosure: Cultural Resource Report

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Concurrence:

Ray Mathe, Sr. Archaeologist 12/12/2025

for Navajo Nation Tribal Historic Preservation Officer — Date

No comments or concerns.

Appendix C—U.S. Army Corps of Engineers Correspondence (*Pending*)

Appendix D—Distribution List

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

- Federal
  - U.S. Army Corps of Engineers, Southern Colorado Regulatory Branch, Durango Field Office
  - U.S. Bureau of Land Management, Uncompahgre Field Office
  - U.S. Department of Agriculture Natural Resources Conservation Service
  - U.S. Fish and Wildlife Service, Ecological Services
- State
  - Colorado Department of Agriculture
  - Colorado Department of Transportation, Region 5-South Central and Southwest Colorado
  - Colorado Parks and Wildlife
  - Colorado River Water Conservation District
  - Colorado State Historic Preservation Office
  - Colorado Water Conservation Board
- Local
  - City of Montrose
  - Montrose County Commissioners
  - Montrose County Planning and Development
  - Montrose County Road and Bridge
- Tribal
  - Navajo Nation
  - Southern Ute Indian Tribe
  - Ute Mountain Ute Tribe
- Other
  - All landowners adjacent to the Project
  - Black Hills Energy
  - Bostwick Park Water Conservancy District
  - Delta Montrose Electric Association
  - Montrose Press
  - Project 7 Water Authority
  - Trout Unlimited
  - Western Slope Conservation Center
  - 70 Shareholders/Water Users

Comment Letters—*Pending*

Comment Responses—*Pending*