Project 7 Water Authority
Regional Water Resiliency Program

Fish and Wildlife Mitigation Plan

Prepared on behalf of:

Project 7 Water Authority

for

Colorado Parks and Wildlife

and

Colorado Department of Health and Environment

Ouray and Montrose Counties, Colorado

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1. Summary and Introduction

This Fish and Wildlife Mitigation Plan pertains to the Project 7 Regional Water Supply Program (project), which will develop a raw water pipeline to access Ridgway Reservoir waters contracted to Project 7, a new water treatment plant (WTP) to treat the new water supply and a finished water pipeline to distribute drinking water to the Uncompahgre River Valley.

Project 7 Water Authority (Project 7) is a cooperative body composed of seven entities, including the City of Montrose, City of Delta, Town of Olathe, Tri-County Water Conservancy District, Chipeta Water District, Menoken Water District, and the Uncompahgre Valley Water Users Association (UVWUA), which collectively provide potable water to nearly 60,000 individuals in the Uncompahgre River Valley. Project 7 is a wholesale water provider operating from a single water treatment plant (WTP) in Montrose, CO, supplied by a single water supply (Blue Mesa Reservoir via the 116-year-old Gunnison tunnel). It is uncommon for such a large population to rely on one water supply and treatment plant without backup. This will reduce the risk of being dependent on a single drinking water source and a single treatment facility (in this case, waters from the Gunnison River, Gunnison Tunnel, current Project 7 Water Treatment Plant, and current Project 7 infrastructure; **Figure 1. Service Area Risks**).

Project 7 has developed the proposed action, the Regional Water Supply Program ("project"), to mitigate future supply issues proactively. This project entails the construction of a raw water pipeline, approximately 30,746 linear feet (5.82-mile), 24-inch nominal diameter, which would start at the Bureau of Reclamation's (Reclamation) Ridgway Reservoir dam and follow the west side of U.S. Highway 550 (US-550) corridor to a point south of the town of Colona. There, a new water treatment plant (WTP, called "Project 7 South WTP") would be built on lands owned by Project 7; the new WTP would be able to utilize up to approximately 13,442 acre feet (AF; or 12 million gallons per day "MGD") annually of Project 7's existing contract waters directly from Ridgway Reservoir. Following treatment, finished water (aka potable water) will be routed north along the west side of US-550 in a 24-inch nominal diameter pipeline of approximately 30,252 linear feet (5.73 miles), where it would tie into the existing Tri-County Water Conservancy District (TCW) distribution system. The total length of the two water pipelines would be 11.5 miles.

Waters received from Blue Mesa via the Gunnison Tunnel to Project 7 are available through an exchange agreement between TCW and UVWUA. The exchange is a one-to-one trade. Water provided to Project 7 via the Gunnison River is then credited to UVWUA for using Ridgway Reservoir waters. Case No. 08CW150, filled in the District Water Court, Water Division No. 4 Colorado, states that this exchange agreement approves the municipal use of 200 cubic feet per second (cfs). The project will provide infrastructure for Project 7 to access water directly from Ridgway Reservoir, reducing reliance on water traded through the exchange agreement. Project 7's reduced use of exchanged Gunnison water will proportionately reduce the credit to UVWUA in Ridgway offered through the exchange agreement. The same quantity of water will be used to serve the Uncompahgre Valley; UVWUA will shift to using Gunnison waters.

The project would allow Project 7 to shift up to 43 percent of its existing water supply from the Gunnison River to Ridgway Reservoir, where Project 7 holds contract water from TCW (and has held these contract waters for the past 50+ years). The planned use of water from Ridgway Reservoir would occur in a series of phases to suffice minimum monthly demands based on population growth projections. Initial maximum diversions to the raw water pipeline would be 6,721 AF/year (or 9.28 cubic feet per second (cfs)) until approximately 2035. In 2035, anticipated water diversions would increase to 10,081 AF/year (or 13.93 cfs). There would be no additional water depletions to the Gunnison River or Colorado River associated with this project, but rather a shift in the diversion point of approximately 43 percent of Project 7's water supply from

the Gunnison River to Ridgway Reservoir. To further explain, the exchange agreement would directly be reduced on a one-to-one basis; that is, if Project 7 uses 6k af/yr from Ridgway, UVWUA would use 6k af/yr from the Gunnison River instead of Ridgway Reservoir.

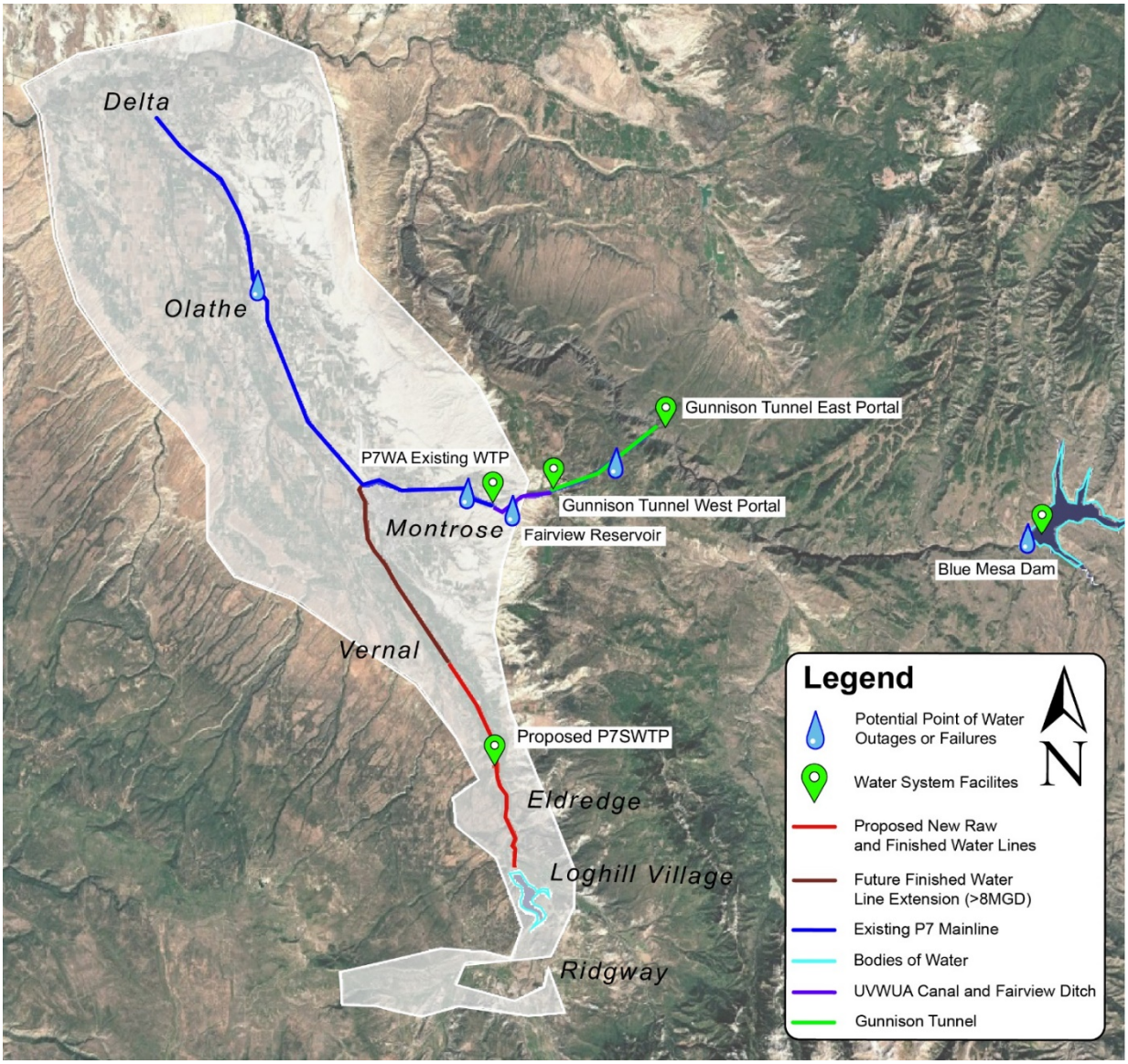


Figure 1: Service Area Risks

Project 7 has been approved for a State Revolving Fund (SRF) loan from the Colorado Water Resources and Power Development Authority (CWRPDA) and a Water Infrastructure Finance and Innovation Act (WIFIA) loan from the Environmental Protection Agency (EPA). Project 7 has also applied for Title XVI Water Reclamation and Reuse Program from the Bureau of Reclamation (Reclamation).

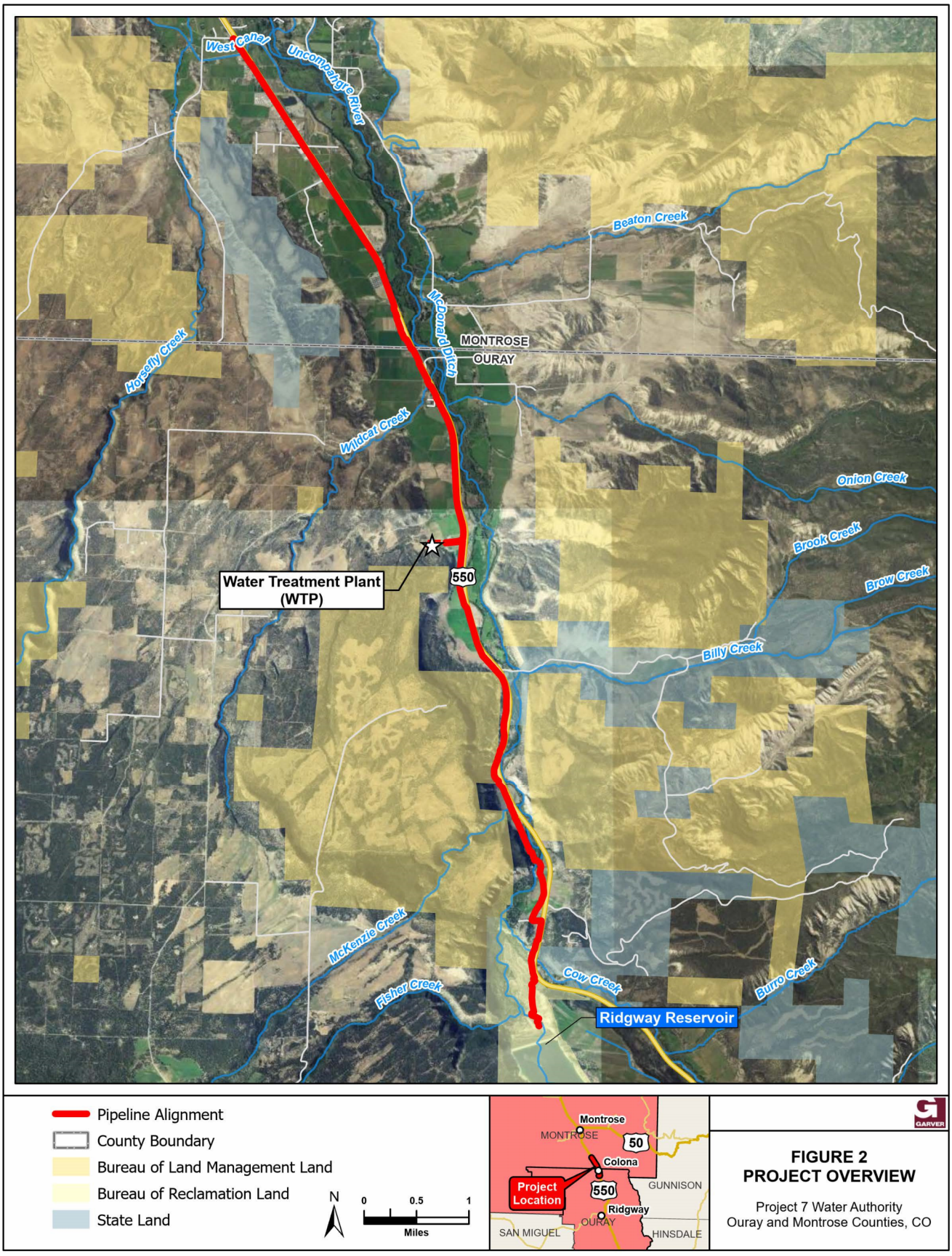
The EPA is the lead federal agency for this project, but through their Drinking Water State Revolving Fund program[1], the EPA has delegated the CDPHE to administer compliance with the National Environmental

[1] Procedures for Implementing Environmental Federal Cross-Cutting Authorities in the CW and DW SRF Programs (epa.gov)

Policy Act (NEPA). The Colorado Department of Public Health and Environment (CDPHE) is required to follow all environmental review regulations, including assessing a project's short and long-term direct, secondary, and cumulative impacts presented in an Environmental Assessment. The CDPHE is also required to review projects for compliance with other applicable environmental laws and regulations, including the Colorado State Environmental Review Process (SERP), which is designed to be consistent with NEPA guidelines and to help consolidate and coordinate the environmental review process. An Environmental Assessment was developed in compliance with EPA, Reclamation, Bureau of Land Management (BLM), Council for Environmental Quality, and SERP guidance for environmental reviews and NEPA compliance.

Components of this project occur on lands managed by Reclamation and BLM. Both Reclamation and the BLM are considered cooperating agencies for the development of the Environmental Assessment. For this project, CDPHE, Reclamation, and the BLM have agreed that CDPHE would draft the Environmental Assessment, and each cooperating agency would produce its own NEPA decision document (e.g., a Finding of No Significant Impact). A license agreement from Reclamation and a Right-of-Way agreement from BLM are required to authorize project components' construction, operation, and maintenance on their respective lands.

Figure 2: Project Overview



1.1 Purpose and Need for Action

The project will provide the Uncompahgre Valley and its 60,000 residents with a sustainable and reliable second water source and supply to build resilience in the face of aging infrastructure and climate change-related pressures. The project will alleviate pressure on the existing infrastructure to allow for necessary maintenance and inspections by providing operational flexibility to provide safe drinking water.

The Ridgway Dam of the Dallas Creek Project was constructed in 1987 to increase water supplies for irrigation and municipal and industrial purposes, and to provide flood control. The project also includes recreational development at the reservoir and measures to enhance fishing opportunities on the Uncompahgre River, improve wildlife habitat, and mitigate wildlife losses caused by the reservoir development. TCW manages the reservoir and releases. Project 7 contracted waters from Ridgway Reservoir in the 1970s, an annual water supply of 28,100 AF for municipal and industrial purposes out of the total active storage capacity of 59,396 AF. Table 1 below defines the Ridgway Reservoir pool allocation; Project 7 contracted waters are shown in blue. Because of the physical location of the current Project 7 WTP east of Montrose (relatively far away from Ridgway Reservoir) and because of the low costs and infrastructure needed to treat waters from the Gunnison River, an exchange of Ridgway Reservoir storage water with water from the Gunnison River was established with the UVWUA. This exchange agreement with UVWUA allows Project 7 to use up to 23,000 AF per year of Gunnison River waters (delivered through the Gunnison Tunnel), but as mentioned, it currently only uses approximately 9,000 to 10,000 AF per year.

Table 1: Summary of Existing Annual Releases from Ridgway Reservoir (acre feet)

Ridgway Reservoir Pool				Acre-Feet/Year
Active	Unallocated			19,996
	Allocated	Irrigation		11,200
		Recreation		100
		Municipal and Industrial	City of Montrose	10,000
			City of Delta	3,700
			Tri-County	12,860
			Town of Olathe	300
			Menoken Water District	640
			Chipeta Water District	600
			Municipal and Industrial Total	**28,100**
Total				59,396

As shown in Figure 1 above, the current Project 7 system has multiple potential points of failure. Should the infrastructure fail, or should a wildfire, drought, or other serious disaster occur that prevents the conveyance or treatment of water, nearly 60,000 residents of the Uncompahgre Valley would have reduced availability of potable water or, at worst, be without potable water.

One such issue, drought, is a familiar topic for both Colorado and this region. On July 1, 2021, Colorado Governor Jared Polis formally declared a drought emergency for western Colorado by Proclamation of the Governor[2] as counties continued to face evolving impacts and water shortages from a multi-year, severe drought episode affecting industries and citizens. In the same year, the water supply at the Blue Mesa Reservoir was depleted to meet Drought Contingency Plans established to keep Lake Powell's water elevation above 3,525 feet – the target level identified to provide a buffer to hydropower generation.

[2] Available at: *Proclamation of the Governor*

Pursuant to the Upper Colorado River Basin 2022 Drought Response Operations Plan[3] (DROA), additional releases from Blue Mesa Reservoir may be required to prevent Lake Powell from depletion below this elevation, further decreasing available water supply for the Project 7 service area. In the Colorado River Basin, the period from 2000 to 2021 was the driest 22-year period recorded in more than 100 years of record keeping.

Based on the project design, there would be no net change in water diversions. If UVWUA's waters were not delivered to Project 7, the waters would flow through UVWUA's South Canal to farmlands, which would then discharge tailwater to the Uncompahgre River. However, as the South Canal does not extend all the way to Ridgway Reservoir; there is an "exchange reach", shown in below, on the Uncompahgre River from the Ridgway Reservoir dam downstream, approximately 11.1 miles to the South Canal's tailwater discharge point on the Uncompahgre River. Along this 11.1-mile exchange reach, there would be an anticipated decrease of average annual streamflows by approximately 0 to 1.1 percent, but on a monthly basis, the reduction in streamflow would be between 0 and up to 11 percent; please see section **4.17 Uncompahgre River Streamflow and Water Quantity** in the **Environmental Assessment** for additional discussion. Below the exchange reach, there would be no meaningful change in streamflows from development of this project, as UVWUA waters would be discharged into the Uncompahgre River from the South Canal.

[3] Available at: *2022 Drought Response Operations Plan*

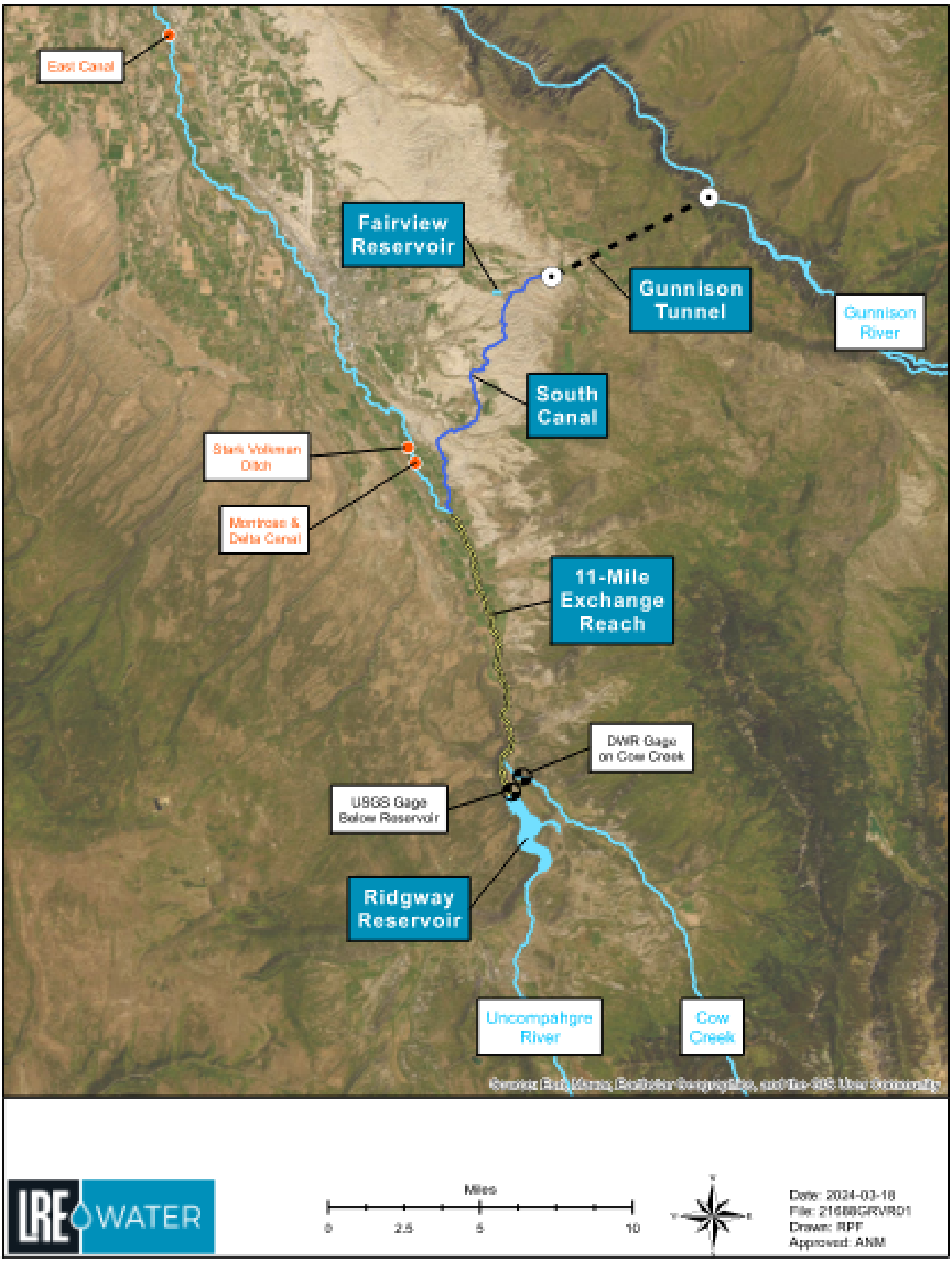


Figure 3: Water Resource Infrastructure in Project area

2 Assessment of Fish and Wildlife Resources Impacted by the Project

2.1 Project Setting

The project area is located in Ouray and Montrose counties. The proposed project area follows the Uncompahgre River valley, and most of the pipeline alignment is located within 100-feet of US-550. The lowest elevation of the route is approximately 6,117 feet above sea level at the northern end of the potable water pipeline, and the upper elevation of the route is towards the southern end, north of Ridgway State Park on private lands, at an elevation of approximately 6,733 feet. The project area is west of the Continental Divide, in the Colorado River Basin. Much of the pipeline alignment follows existing linear features including roads, a historic railroad grade, ditches, and US-550.

The project mostly occurs in irrigated pasturelands on private property. The pipeline would cross a few smaller areas of pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) woodlands, which are sometimes integrated with sagebrush (*Artemisia tridentata tridentata* and *A. t. wyomingensis*) vegetation types. The WTP would be located in a dry (non-irrigated) area, previously disturbed and currently dominated by upland grasses and widely scattered sagebrush, on land owned by Project 7.

Many of the irrigated lands the pipeline crosses support agriculturally induced wetlands, or at least lands which are saturated during the irrigation season. The pipeline would cross two large streams: the Uncompahgre River and Cow Creek, both of which are larger perennial features. The project crosses one intermittent stream named McKenzie Creek, one ephemeral stream named Wildcat Creek, and crosses several unnamed ephemeral draws.

2.2 Recreation

Ridgway State Park is one of the only public flat water boating areas in Ouray County and is one of the largest reservoirs in western Colorado, totaling 1,030 surface acres, with 13.2 miles of shoreline at full volume. The Park includes three recreation areas. Short and long-term impacts to Ridgway State Park and reservoir have been analyzed for the proposed action.

The Pa-Co-Chu-Puk Campground is the only recreation area (campground) that would be crossed or directly impacted by construction of the project. This area includes camping and day use facilities, and the Uncompahgre River here is a popular year-round stream fishing destination. Construction of the raw water pipeline would not go through the middle of the Pa-Co-Chu-Puk Campground but is located on the edge of the campground. Please see section **3.4 Recreation**, below, for a discussion on recreation impact mitigation activities.

2.3 Project Reviews

The Environmental Assessment covered Project 7's engineering feasibility studies and the formal alternatives analysis in **Chapters 2 and 3** of the Environmental Assessment. This process resulted in a selection of the Proposed Action (Alternative A), along with Environmental Commitments & Mitigations (see **Chapter 6** of the Environmental Assessment). The Environmental Commitments & Mitigations discusses the environmental commitments developed to protect resources and reduce unavoidable adverse impacts to a non-significant level. The environmental commitments would be implemented by CDPHE, Reclamation, and the BLM. The environmental commitments are also included in contractor bid specifications. Project 7 is required to document compliance with each environmental commitment, as part of their receiving of SRF and WIFIA funding, and as conditions of approval from Reclamation and the BLM for license and ROW agreements.

Natural Resource Protection Laws

Compliance with the following laws and Executive Orders are required prior to and during project implementation:

- Clean Air Act of 1963 (42 U.S.C. § 7401)
- Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1544, 87 Stat. 884)
- Clean Water Act of 1972 as amended (33 U.S.C. 1251 et seq.)
- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712)
- Executive Order 11988 Floodplain Management
- Executive Order 11990 Protection of Wetlands
- Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668- 668c)
- Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (and see EO 14030)

The following construction permits and plans have also been produced/acquired for this project:

- A stormwater management plan and a CDPHE Construction Stormwater Permit. As such, appropriate erosion and sediment controls would be utilized in accordance with the U.S. Army Corps of Engineers' General Condition #12 to properly stabilize the site and prevent erosion and siltation into other down-gradient waters and wetlands. These appropriate erosion and sediment controls would be installed around the project area prior to beginning earthmoving activities. Other pre-construction requirements, such as additional sensitive species surveys, may also be required (e.g., based on final pipeline alignments and the time of year of construction).
- Stormwater Management Plan, to be submitted to CDPHE by the construction contractor prior to construction disturbance.
- CDOT Stormwater Construction Permit. Permit for phasing requirements and for interim and permanent stabilization in CDOT ROWs.
- Ouray County Special Use Permit.
- Ouray County Floodplain Development Permit.
- Certification under CDPHE Water Quality Division Construction Dewatering Discharges Permit COG070000 (if any dewatering is to take place during construction).
- Spill Response Plan for areas of work where spilled contaminants could flow into water bodies.

As part of the Environmental Assessment, Project 7 completed a Biological Assessment for compliance with Section 7 of the Endangered Species Act, and received a Biological Opinion back from USFWS, completing the Section 7 consultation process. Project 7 has also applied for authorization under Section 404 of the Clean Water Act for Nationwide Permit 58 from the US Army Corps of Engineers for Utility Line Activities for Water and Other Substances, which included a Pre-Construction Notification Submittal Package that also includes the USFWS Biological Opinion, documenting compliance with the Endangered Species Act, and compliance with State Historic Preservation.

A list of protected species with the potential to occur within the project area was developed by reviewing the USFWS Information for Planning and Consultation (IPaC) system list and CPW threatened and

endangered species lists. Desktop-derived land cover and other relevant datasets were used along with field assessment observations to characterize land cover types in the project area that may provide habitat for protected species, and to evaluate the likelihood of the species presence within the project area.

Table 2: Threatened and Endangered Species Assessed

Species and Status	Species Range or Habitat Present?	Impact Determination	Rationale
MAMMALS			
Gray wolf *(Canis lupus)* Experimental, non-essential population	Yes	No Effect	No population in area; habitats are ineffective.
BIRDS			
Gunnison sage-grouse *(Centrocercus minimus)* Threatened	No	No Effect	Project outside of occupied range; habitats are unsuitable.
Mexican spotted Owl (*Strix occidentalis lucida*) Threatened	No	No Effect	Project outside of occupied range; habitats are unsuitable.
Yellow-billed cuckoo *(Coccyzus americanus)* Threatened	Yes	May Affect, Not Likely to Adversely Affect	Project is adjacent to potential habitat; habitat is unoccupied based on surveys.
FISHES			
Bonytail (*Gila elegans*) Endangered	Yes	May Affect, Likely to Adversely Affect	Project outside of occupied range; no net water depletions.
Colorado pikeminnow *(Ptychocheilus lucius)* Endangered	Yes	May Affect, Likely to Adversely Affect	Project outside of occupied range; no net water depletions.
Humpback chub (*Gila cypha*) Threatened	Yes	May Affect, Likely to Adversely Affect	Project outside of occupied range; no net water depletions.
Razorback sucker *(Xyrauchen texanus)* Endangered	Yes	May Affect, Likely to Adversely Affect	Project outside of occupied range; no net water depletions.
INSECTS			
Monarch butterfly (*Danaus plexippus*) Proposed Threatened	Yes	May Affect. Not Likely to Adversely Affect	Individuals may be impacted.
Silverspot (*Speyeria nokomis nokomis*) Threatened	Yes	No Effect	Project outside of known occupied habitats, no host plants present.
Suckley's cuckoo bumble bee (*Bombus suckleyi*) Proposed Endangered	Yes	Not Likely to Jeopardize	Individuals may be impacted, but unlikely

It is worth noting that mitigation and avoidance for aquatic and terrestrial wildlife have been evaluated with the support of CPW staff. The project area is classified as a critical winter range habitat for big game species, both elk and mule deer; because of this, construction along the pipeline corridor will be avoided during the avoidance window of December 1 through April 30. Additionally, the Uncompahgre River is a CPW-managed sport fishery. CPW identified Rainbow Trout and Bluehead Sucker most critical avoidance and sediment minimization windows of March 1-June 15 and May 1-July 15, respectively. To construct the pipeline river crossing safely, this must occur at low flows during the December 1- April 30 avoidance window. CPW confirmed that in-channel work during this time avoids/reduces impacts to rainbow trout and bluehead sucker spawning.

For additional information, please refer to the Biological Assessment, Biological Opinion, pre-construction biological survey reports, the wetland delineation report, and Environmental Assessment for additional information. The Environmental Assessment contains significant review and assessment of fish, wildlife, and habitats that may be impacted in the affected area. In particular, please see the following sections in the Environmental Assessment.

- 4.4 Agricultural Resources and Soils
- 4.7 Invasive Species and Noxious Weeds
- 4.10 Vegetation
- 4.15 Wetlands & Surface Waters
- 4.17 Ridgway Reservoir Uncompahgre River Impacts & Water Quantity
- 4.18 Water Quality
- 4.20 Wildlife – Aquatic and Terrestrial
- 4.21 Threatened and Endangered Species & USFWS Trust Resources

The federal agencies recommended conservation measures, which were incorporated into the Proposed Action. These measures will mitigate losses to fish and wildlife resources and were determined adequate by the CDPHE, Reclamation, and BLM in their Finding(s) of No Significant Impact.

Project 7 has agreed to produce this Fish and Wildlife Mitigation Plan (FWMP) at the request of CPW to meet the applicable and relevant need to minimize and mitigate the impacts of this project, in accordance with Colorado Revised Statute 37-60-122.2 and 2 CCR 406-16-1604 (Procedures for Arriving at an Official State Position on Mitigation).

In response to CPW's comment letters dated September 9, 2023, February 5, 2024, and May 3, 2024, and in response to CPW's request for a Fish and Wildlife Mitigation and Enhancement Plan, Project 7 presents the following activities.

3 Specific Mitigation Activities

3.1 Fish and Wildlife Mitigation Plan Compliance

Estimated costs and schedule for the mitigation components of this FWMP follow in section **3.2 Estimated Project Costs**. This FWMP includes a comprehensive description of all of Project 7's planned mitigation measures that are related to fish and wildlife. This plan presents Project 7's total estimated mitigation costs for all measures which are assumed to be attributable pursuant to CRS Section 37-60-122.2.

3.2 Estimated Project Costs

The project's construction costs are approximately $153,543,922. The mitigation value matrix for wildlife impact assessment and recommendations for mitigating losses outlines the estimated cost and assignment of development, operation, and maintenance of mitigation measures and monitoring. Total estimated costs from the mitigation value matrix are $2,995,860, please see Appendix A for a detailed breakdown.

3.3 Wetlands and Riparian Areas Restoration

This project would adhere to wetland and Water of the U.S. (WoTUS) impact avoidance, minimization, and USACE mitigation standards. A Wetland and Riparian Area Mitigation Plan has been developed by Project 7, outlining specific impacts and mitigation measures for each resource impacted by construction. The plan has been included for reference in Appendix B.

Wetland areas temporarily impacted by pipeline construction would be revegetated using local native wetland plants (both live plants and seeding) per the Wetlands and Riparian Areas Revegetation Plan and Nationwide Permit. Disturbed and revegetated wetlands and riparian areas would be annually monitored, and any deficiencies in revegetation, soil movement (erosion), or noxious weed invasion would be rectified by Project 7 at their sole expense.

3.4 Recreation

The two recreational areas within the project area are Pa-Co-Chu-Puk Campground and Ridgway State Park- Ridgway Reservoir, as seen in Figure 4 below.

Figure 4: Recreation Areas

Construction within the Pa-Co-Chu-Puk Campground will occur during the campground's off-season, which is defined as November to April. Construction will be coordinated with the on-site lessees of the Reclamation property: Tri-County Water Authority (TCW) and CPW. The approximate construction duration is 30 working days to cross the entrance area of the campground. During this time, access to the existing facilities will be maintained. Traffic control will be implemented, including but not limited to signage, installation of road plates to keep the access roads open, and Type 1, 2, and 3 barricades, as appropriate. Perimeter controls such as silt fencing, straw bales, and/or straw waddles will be placed along the perimeter of the work site to minimize sediment migration off-site or into existing drainage ditches. Figure 5 below shows the outlined area identified for construction activities, those activities include access routes and pipeline installation. All disturbed vegetated areas, primarily native grasses, will be restored in-kind by reseeding with the CPW-prescribed seed mix to restore disturbed areas to existing conditions. The blue-shaded area in Figure 5 is where the majority of vegetation disturbance will occur. There will be no tree removal of the trees located at the entrance of the park.

Figure 5: Pa-Co-Chu-Puk Campground Construction Activity Corridor

Ridgway State Park recreation revolves around the Ridgway Reservoir activities. The project will tie into the Ridgway Reservoir penstocks to access Ridgway Reservoir as the source water for the project. A detailed analysis of reservoir impacts indicated the worst-case single-year change in reservoir levels (i.e., drop in water amounts and levels) in Ridgway Reservoir could be as much as 3.9 ft. Worst case average drop in reservoir levels may be up to 2.22 feet. Conversely, based on how TCW "refills" or manages water content, reservoir levels may also be increased by an average of up to 0.82 ft due to the Proposed Action. The worst-case average reservoir surface area reduction could be approximately 19.2 acres during the summer months (or 1.8 percent of the surface area of the reservoir), and a 2,203 AF reduction in total reservoir content (which is approximately 2.7 percent of the 80,000 AF volume of the reservoir). Conversely, based on how TCW "refills" or manages water content, reservoir content may increase by an average of 681 AF, and the reservoir surface area may increase by an average of 5.92 acres.

Based on the size of the reservoir, these amounts are expected to be insignificant. Water level decreases are not anticipated to meaningfully impact boat ramp use or boat slip operations or reduce the reservoir's attractiveness to boaters. With a less than 2 percent drop in reservoir surface area, no loss in user days would be anticipated.

3.5 River Crossing Best Management Practices

The proposed project will cross Cow Creek and the Uncompahgre River twice. Geotechnical investigations were conducted in 2023 to determine the best way to perform these crossings. Based on those investigations (Buckhorn Engineering 2023), open-cutting the river/creek would be the least impactful method due to the underlying geology. Boring the rivers was ruled out given the cobbly substrates, whereby inadvertent return of drilling mud could occur (i.e., drilling mud surfacing in rivers), or drill bit advancing could be halted by large boulders.

General Crossing Method

All water crossings will occur in two phases, where one-half of the in-channel work will be performed at a time to allow natural water flows to be maintained for aquatic species. Cofferdams using super sacks approximately 4'x4'x4' will be implemented to isolate work areas from the water bodies for construction. Cofferdams will consist of clean sand or gravel in heavy-duty polypropylene bags of varying sizes. Wattles or other appropriate BMPs will be placed adjacent to river embankment areas to minimize sediment migration from the embankment area into the river. Additionally, temporary construction fencing will be installed to clearly identify the limits of disturbance. Once isolated from the river, the workspaces will be dewatered. An open trench will be excavated and constructed within the isolated workspace, with trench materials sidecast onto the banks of the river in matted areas with BMPs to prevent soil movement and minimize impacts to wetlands. No excess soil from the trench excavation will be placed within the limits of the ordinary high-water mark. Soil will be stored in upland areas away from this work area and will not be discharged into the river. Trenches will need to be dewatered, and trench waters will be pumped into upland areas (outside of any wetlands) for filtering and discharge per construction permits defined within this section. Casing pipes will be installed within the first half of the crossing. After the casing pipes are installed, the side cast materials stockpiled on the riverbanks will be returned to the trench line, and the trenching area will be recontoured. The super sacks would then be removed before moving to the second half of the crossing and repeating the method described. After all in-channel work is completed, the pipeline will be installed through the casing pipe and anchored into the steep slopes of the riverbanks.

The selected construction contractor will be required to produce a stormwater management plan and obtain a CDPHE Construction Dewatering Permit (COG080000; Discharges from Short-term Construction Dewatering Activities). As such, appropriate erosion and sediment controls would be utilized in accordance with General Condition #12 to properly stabilize the site and prevent erosion and siltation into other down-gradient waters and wetlands. These appropriate erosion and sediment controls would be installed around the project area prior to beginning earthmoving activities.

Uncompahgre River Crossing near Ridgway Dam

The crossing near the dam will be constructed in two phases, such that the cofferdammed area extends from one bank to the intermediate island in the middle of the river, approximately 60 feet in length and 60 feet wide creating an isolated work area. One-half of the casing pipe will be installed; then, the cofferdam will be removed from one side of the island and constructed on the other side of the island. Once the casing pipe installation is completed, a 24" carrier pipe will then be installed through the casing pipe. The cofferdam would be constructed using approximately 34 (thirty-four), 4' x 4' x 4' super sacks (81 cubic yards of material). Crossing the Uncompahgre River at this location is estimated to be 12 days.

Uncompahgre River Crossing downstream of Ridgway Dam

A cofferdam would be constructed on the southern half of the river, extending approximately 25 feet into the river and 60 feet wide creating an isolated work area. The cofferdam would be constructed using approximately 18 super sacks (40 cubic yards of material). Crossing the Uncompahgre River at this location is estimated to be 26 days.

Cow Creek Crossing

The crossing will be constructed in two phases, with a cofferdam installed during phase 2. Phase 1 installation includes the majority of Cow Creek, which is dry during low flow periods. The cofferdam will be installed to divert the low flows into another of the braided channels of Cow Creek. The 36" casing pipe installation will be completed, and a 24" carrier pipe will then be installed through the casing pipe. The

temporary dam would be constructed of super sacks, totaling approximately three super sacks (six cubic yards of material). Crossing Cow Creek is estimated to be 5 days.

As discussed, the construction of river crossings will be conducted during the winter months to minimize impacts on important fish species (such as rainbow trout and bluehead sucker). Critical avoidance windows, specifically for avoidance impacts to rainbow trout and bluehead sucker, are March 1st – June 15th and May 1st – July 15th, respectively. River crossings conducted during low flow and before spring releases from the dam will allow for residual sediment flushing in the spring. Construction methods were modified to use super sacks to reduce the potential for excessive fine sediment mobilization from coffer dams and temporary dams.

3.6 Endangered Species Impact Avoidance and Mitigation

Impact Avoidance. Woody vegetation removal will not occur between April 1 and August 31 to avoid effects on raptors and migratory birds, and pre-construction raptor and migratory bird surveys will occur if any vegetation-clearing activities are required between April 1 and August 31.

Raptors. A nesting raptor survey will be conducted within 0.25 to 0.5 miles of the project area during the year(s) of construction; CPW raptor nest buffer guidelines will be followed with CDOT concurrence.

Yellow-billed cuckoo. Pre-construction yellow-billed cuckoo surveys have already occurred, per USFWS guidance (Red Mountain Environmental 2023). As no yellow-billed cuckoos were detected, and as the project is relatively far from known occupied habitats, the USFWS has indicated that no further survey efforts would be needed. If a yellow-billed cuckoo is detected, the USFWS will be contacted, and consultation would be reinitiated if necessary.

3.7 Migratory Birds and Raptors - Nesting Impact Avoidance

Impact Avoidance. Woody vegetation removal will not occur between April 1 and August 31, to the extent practicable, to avoid effects to raptors and migratory birds. Pre-construction raptor and migratory bird surveys will be required if any vegetation clearing activities are required between April 1 and August 31 due to project contingencies.

Raptors. A nesting raptor survey will be conducted within 0.25 to 0.5 miles of the project area the year(s) of construction; CPW raptor nest buffer guidelines would be followed with CDOT concurrence.

3.8 Local Wildlife Protection

Bear-proof Containers. During construction, the contractors shall be required to use bearproof containers for food and trash storage. After construction is complete, Project 7 shall promote bear proof trash and food storage at the WTP, and any Project 7 owned waste receptacles shall be wildlife and bear-proof.

Dogs. Contractors and Project 7 staff shall not bring pet dogs onto construction sites. At the WTP, dogs are not allowed during the winter months (December 1 – April 30) to avoid harassment of wintering wildlife species.

Nuisance Aquatic Species. All construction equipment previously used in wet areas must be cleaned, disinfected, and completely dried prior to bringing it to the construction area. This is to avoid the spread of aquatic nuisance species and diseases (e.g., invasive animals and plants, whirling disease, chytrid fungus, etc.).

If heavy equipment acquired or used previously worked in another stream, river, lake, pond, or wetland, one of the following disinfection practices will be performed before this equipment is used in another stream,

river, lake, pond, or wetland to prevent the spread of New Zealand mud snails and other aquatic hitchhikers into drainages. The practice is also necessary after project completion:

- Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with a 1:15 solution of Super HDQ Neutral institutional cleaner and water. Keep equipment moist for at least 10 minutes

  - Or -

- Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with water greater than 140 degrees F for at least 10 minutes. Clean hand tools, boots, and any other equipment that will be used in the water using one of the above options as well. Super HDQ Neutral (Spartan Chemical Company, Inc.) is available in the Denver area from Waxie Denver at (303) 749-8000 or (800) 377-4128, High Country Chemical at (303) 287-6700 and AmSan Colorado Chemical at (303) 388-9331.

CDOT Big Game Fencing. Construction will avoid impacting newly installed big game fencing along US-550. Any inadvertent or necessary impacts to fencing will be replaced by Project 7 in a timely manner, prior to the winter season (starting December 1).

3.9 Winter Timing Stipulations to Protect Big Game Species

During the big game winter period (December 1 through April 30, when both elk and mule deer would be utilizing winter ranges), construction of the pipeline would be halted aside from on Reclamation lands (to avoid the busy recreation season), river crossings, and at the WTP. As the majority of the pipeline construction would not occur in the big game winter season, impacts to wintering big game species would be minor, and generally localized to Reclamation lands and at the WTP. The project is within ½ mile of CPW designated wildlife "pinch points", where wildlife can cross US-550; these pinch points have CPW prescribed year-round no surface occupancy (NSO) requirements. Given the location of the pipeline, adherence to the year round NSO is not possible, and CPW has provided Project 7 with a number of mitigation requirements to minimize impacts, including:

- Construction will only occur at one wildlife crossing structure at a time.
- Time spent with heavy equipment within a half mile of the underpass will be limited to the lowest amount possible to accomplish the project.
- All wildlife exclusion fencing will remain functional during construction to prevent ungulates from entering the road corridor.
- All open trenches will have wildlife escape ramps at a minimum of one ramp per ¼ mile of trench.
- All open trenches within a half mile of a wildlife underpass will be covered when construction is not actively occurring

Project 7's selected contractor will adhere to these mitigation requirements to minimize impacts to wildlife.

3.10 Noxious Weed Management and Habitat Protection

Timely and consistent weed treatment will occur within the project area. For example, pre-construction treatment (mowing) will be used to minimize weeds spreading from construction. Restoration of the pipeline corridor relegation will be timely to reduce and suppress weeds. Post-construction, weeds will be treated (sprayed) twice a year until infestations are managed. All construction equipment will be power-washed

and free of soil and debris prior to entering the construction site to reduce the spread of noxious and invasive weeds.

Project 7 will continue to be responsible for complying with the Colorado Noxious Weed Act and will obtain appropriate pesticide use permits in accordance with Section 402 of the Clean Water Act.

3.11 Maintenance of Streamflows

An analysis was conducted to determine the timing and magnitude of impacts to Ridgway Reservoir content and streamflow in the Uncompahgre River along the 11.1-mile exchange reach between Ridgway Reservoir and the discharge point of the South Canal on the Uncompahgre River. The amount of water released from Ridgway dam varies depending on a number of factors, including (1) inflow to the reservoir, (2) contract obligations associated with municipal demands for Project 7, irrigation demands for the UVWUA, and augmentation requirements for CPW, (3) Bureau of Reclamation uses, (4) hydroelectric power generation, and (5) minimum fishery flows for maintenance of aquatic sportfish habitats (primarily to meet spawning and overwintering needs for a variety of sport-fish species).

Releases from the dam to meet minimum fishery flows and for aquatic species habitat are coordinated based on flows coming from Cow Creek, which flows into the Uncompahgre River approximately 1.25 miles downstream from the dam. Minimum fishery flow obligations in the Uncompahgre River below Cow Creek are 75 cfs during the non-winter months (spring, summer and fall). Minimum wintertime streamflow obligations below the dam but above Cow Creek are 30 cfs , and 45 cfs below the confluence with Cow Creek. If Cow Creek freezes over or cannot supply enough water, dam releases are adjusted to augment a lack of Cow Creek flow contributions to meet the 45 cfs flow obligation below the confluence with Cow Creek (USBR 1976).

TCW controls the water rights for storage in Ridgway Reservoir and is the operator of dam facilities. As such, TCW manages and has discretion regarding the operations to fill the reservoir and meet its contract obligations including releases for contract obligations and flood control, hydropower generation, and the administration of storage contracts.

Unlike TCW and Reclamation, Project 7 does not own water rights in Ridgway Reservoir but instead has contracted for a set volume of water available for release each year from TCW. Project 7 has no direct control over when inflow supplies are stored, when inflow supplies are bypassed, or when storage supplies are released from pools other than the volume contracted by Project 7. As such, beyond the use of its contract supply, Project 7 has no control over the storage levels in Ridgway Reservoir or streamflow conditions in the Uncompahgre River below the reservoir.

In response to an agency review of a draft version of the Proposed Action, CPW conducted a fishery habitat analysis using the R2Cross model, a site-specific procedure driven by actual stream conditions that helps model hydraulic parameters of average depth, wetted perimeter and average velocity for aquatic habitats (CPW 2024). Their results indicated that winter habitat conditions are the primary stressor for fish in the Uncompahgre River below Ridgeway Dam (CPW 2024). CPW further stated that minimum flows in the Uncompahgre River between the outlet of Ridgway Reservoir and the confluence with Cow Creek should be 45 cfs at a minimum to support a viable fishery but recommended 60 cfs as a more protective standard for a healthier fishery and better aquatic habitat maintenance. CPW manages the fishery in the Uncompahgre River from the Ridgway Reservoir dam through the City of Montrose as a sport fishery. The sport fishery is an extremely popular destination for local residents and visitors, which benefits businesses and helps diversify the local economies of Ridgway and Montrose. CPW has been advocating for increased winter flows in the tailwater section of the Uncompahgre River for decades and feels that the current flow conditions are suitable only to maintain a catchable fishery rather than promote a healthy, sustainable wild

fishery (CPW 2023). Changing the minimum streamflow requirements from the 1976 EIS is outside the scope of this project and the project's EA.

Based on requests from CPW fisheries staff for a more detailed daily analysis of impacts to streamflows, daily reservoir operations were analyzed for the past 5 years (2018-2022) using data from the Colorado Division of Water Resources (DWR 2024, LRE 2024a, b). The recent 5-year study period was used to quantify the impacts of the project, as this period reflects recent and relevant demands on the reservoir and includes hydrologic conditions from 2018, 2020, and 2022, which were relatively dry years for the Uncompahgre River basin. During these dry years, the Uncompahgre River downstream of Ridgway Reservoir was "under administration" starting from mid-to-late June, and extending through mid-to-late August, wherein senior water rights placed a "call" on the river that required all upstream junior water rights, such as the storage water rights for Ridgway Reservoir, to either curtail or replace their "out of priority" diversions. Of note, streamflow in the Uncompahgre River below Cow Creek was below the minimum fishery flow obligation/ recommendation in September and October of 2018, and again in October of 2020. Hence, the chosen study period represents a recent period characterized by years in which hydrologic conditions were stressed and demands on storage supplies were greater than normal, and consequently, the study period provides a conservative baseline for evaluation of any potential impacts due to project implementation, including potential conditions in the future due to climate change (whereby more dry years would be anticipated).

Daily operations under existing conditions and diversions from the project were then summarized into monthly and annual totals related to storage content and reservoir releases to provide a more meaningful assessment. Additionally, based on comments from reviewing agencies regarding an earlier version of the Draft Environmental Assessment and LRE's report (CPW 2/5/2024, 5/3/2024), peak demand at the South WTP was increased from 6 MGD to 10 MGD for the analysis. Under the proposed conditions, it was assumed that the total potable demand for Project 7 would be held to the existing total potable demand ratios and distributed between the proposed South WTP and the existing Montrose WTP accordingly.

The daily modeling results were then summarized in a monthly time step in order to estimate the impacts of the project on streamflow conditions in the Uncompahgre River below the reservoir. The existing conditions model was based on DWR's daily accounting of reservoir operations and the potable demand data for the proposed conditions model was based on monthly projections, distributed evenly throughout the month. While the model is based on daily DWR data, evaluating the proposed conditions against existing conditions on a *daily* timestep provides neither an appropriate nor meaningful comparison. However, *monthly* summaries of the daily results accurately capture the net effect of releases, evaporation, changes in storage, and inflows on reservoir levels and streamflow in the Uncompahgre River with sufficient resolution to evaluate the impacts of the project (LRE 2024a, b). **Table 4** summarizes the releases from the reservoir as well as bypass flow amounts (also termed "released inflow" (DWR 2024, LRE 2024a, b).

Of note, DWR records of reservoir releases were based on contemporaneous provisional streamflow measurements collected at the outlet of Ridgway Reservoir (USGS Gage No. 09147025), which is reviewed by USGS staff for accuracy and quality. Through that review process, provisional data may be modified before it is published as accepted and verified data. Therefore, recently downloaded streamflow values from the USGS or DWR website may vary from those used by DWR in the past due to the USGS internal quality assurance and control review process applied to all of their data products (LRE 2024a, b).

Table 3: Summary of Existing Annual Releases from Ridgway Reservoir (acre feet)

Water Year	Project 7 South WTP (percent)	UVWUA (percent)	Others (BOR, CPW, TCW and unallocated) (percent)	Bypass Flows (percent)	Total Outflow
2018	0	21,149 (29%)	1,627 (2%)	50,354 (69%)	73,131
2019	0	17,534 (12%)	5,818 (4%)	128,728 (85%)	152,081
2020	0	26,008 (29%)	1,798 (2%)	62,589 (69%)	90,665
2021	0	7,199 (9%)	10,645 (13%)	61,809 (78%)	79,653
2022	0	17,265 (17%)	2,514 (3%)	79,018 (80%)	98,797

Notes: Numbers in brown designate dry years.

"Others" combines the releases for BOR, CPW, TCW and from unallocated storage,

"Bypass" refers to a portion of outflow that is unstored inflow that is not attributed to a storage pool. DWR describes Bypass as "released inflow." It is a portion of total releases to the Uncompahgre River.

The project's impacts were modeled and compared to existing conditions over a 5-year period from 2018 to 2022, comparing the total outflow from the reservoir and releases from the reservoir to the Uncompahgre River (**Table 4**).

As it relates to streamflow conditions below Ridgway Reservoir, a new demand that delivers water supplies from Project 7's M&I storage pool directly to the proposed South WTP will not meaningfully increase nor decrease releases to the Uncompahgre River. Historically, Project 7 has not released water from its M&I storage pool, and under the proposed project it will deliver storage supplies directly to the treatment plant and not to the Uncompahgre River. However, with less available storage from the book over exchange, UVWUA will release less water under the proposed project, which will reduce flows below Ridgway Reservoir. The magnitude of this reduction then depends on the hydrologic year-type (e.g., wet, dry, or average)3. In dry years, the UVWUA typically releases all of its available storage, which would equate to a reduction equal to the South WTP demand that was not booked over. In average and wet years, the demand for storage is less, and as such, the reduction in streamflow would be less. Furthermore, this impact is limited to the 11-mile reach between Ridgway Reservoir and where the South Canal discharges irrigation supplies to the Uncompahgre River. It is assumed that UVWUA will replace any reduction in available storage with additional irrigation supplies from the Gunnison Tunnel. There will be no change to the Gunnison River since the water used has historically been used by either Project 7 or UVUWA; this project would reduce UVUWA's credits in Ridgway proportionally to the new South WTP usage, but UVUWA would use the Gunnison River to make up for the Ridgway reduction.

The analysis prepared did not address dam operations changes because Project 7 has no authority to authorize operational changes. TCW, who operates the dam, has been made aware of potential reductions in streamflow due to the project pulling from the reservoir directly instead of UVWUA calling for water to be released to the river. TCW has confirmed that they are contractually obligated to fulfill the minimum fishery maintenance flows per Reclamation agreements and intend to fulfill it whether the project is constructed or not.

Table 5 (below) shows the existing (Ex.) flows and proposed (Prop.) flows throughout the year over the modeled 5-year period based on the hydrology model. This table identifies which month the minimum flow

occurred and what the minimum flow was for that month. **Table 6** (at the end of this section) details monthly impacts to streamflows.

Table 4: Change in Minimum Streamflow (cfs) in Uncompahgre River from Project

WY	November through May					June through October				
	Ex.	Prop.	% Change		Min. Month	Ex.	Prop.	% Change		Min. Month
Below Dam, Above Confluence with Cow Creek										
2018	42.8	42.8	0	0%	Mar	51.8	51.8	0	0%	Oct
2019	39.2	39.2	0	0%	Nov	70.4	70.4	0	0%	Oct
2020	43.3	43.3	0	0%	Jan - Mar	57.9	51.6	-6.3	-11%	Oct
2021	36.2	36.2	0	0%	Feb	66.5	64.7	-1.7	-3%	Oct
2022	45.8	45.8	0	0%	Jan - Feb	67.0	67.0	0	0%	Oct
Below Confluence with Cow Creek [3]										
2018	55.9	55.9	0	0%	Mar	**58.4**	**58.4**	0	0%	Oct
2019	51.2	51.2	0	0%	Nov	80.0	80.0	0	0%	Oct
2020	55.4	55.4	0	0%	Jan - Mar	**62.0**	**55.7**	-6.3	-10%	Oct
2021	46.0	46.0	0	0%	Feb	82.0	80.3	-1.7	-2%	Oct
2022	63.1	63.1	0	0%	Jan - Feb	87.9	87.9	0	0%	Oct

Notes: Numbers in brown designate dry years.
Existing conditions are based on DWR and USGS data from water years 2018-2022.
Proposed conditions are assuming the proposed Project 7 WTP was operating from water years 2018 -
Data highlighted in **red** indicates that the minimum flow did not meet the minimum fishery flow requirement.

The analysis showed that under the proposed conditions, the minimum streamflow conditions below Ridgway Reservoir in the Uncompahgre River could be reduced by as much as 67 cfs in July and August. Still, given baseline flows range from 800 cfs (during average water years) to around 200 cfs (during dry years), these reductions would have minimal impacts given the low percentage of decreased streamflows. Modeled streamflows in October (which is technically still in the "summertime" flow period) averaged 57 cfs during dry years and 68 cfs during average precipitation years (**Tables 5** and **6**). Across all 5-years of the study period, streamflows in October averaged 61 cfs, which, on average, equates to a 1.6 cfs reduction from existing conditions. This equates to a 2.7% reduction from existing conditions. While the analysis shows that the project would result in streamflow reductions, the minimum streamflow requirements that govern this section of the river will still be maintained by TCW, which is contractually obligated to meet the 1976 EIS mitigation requirements. As indicated in **Tables 5** and **6**, in 2018 and 2020, below the confluence of Cow Creek, the minimum flow of 75 cfs was not met in the month of October, and if this project had been in place, the minimum flow would still not have been met. Project implementation would have caused a further flow reduction only in 2020, by an additional 3.7%.

Streamflow in the Uncompahgre River would not change during the winter months, from November through March (**Tables 5** and **6**). The estimated reductions to streamflow during the irrigation season are attributed to the reduced exchange from Project 7 to UVWUA under proposed conditions. This reduced exchange would result in UVWUA having less storage water available for release to the Uncompahgre River during the summer irrigation season.

In summary, the project would have no net impact on existing wintertime streamflow conditions from November through May, and then in April and May, there would be an average reduction of in streamflows 8.5% and 3.5% (respectively). However, the project still maintains streamflow conditions well above the 1976 EIS recommendations and above CPW's 2024 recommendations. In most of the summer months (May 15 through September), streamflow conditions would be reduced, but are still well above the 1976

EIS recommendations, and also above CPW's 2024 recommendations. Only during the month of October would the project reduce streamflows to be (further) below the 75 cfs recommendations set forth in the 1976 EIS. The impacts to streamflows in October would be, on average, a 1.6 cfs reduction, which would be a 2.99% reduction from current conditions. However, it is unlikely that those reductions would have a direct impact on EIS streamflow minimums because TCW will continue to manage and operate the dam as required by Reclamation to maintain flow obligations stated in the 1976 EIS.

Because of these findings, no additional water releases for potential fishery impacts are proposed.

4 Proposed Mitigation

In summary, Project 7 is committed to implementing the following measures to avoid and minimize impacts to fish and wildlife:

- Pre-construction yellow-billed cuckoo surveys will be required if any riparian vegetation clearing activities are required between June 15 and August 15 due to project contingencies.
- Cofferdams will contain sediment during river crossings. The crossing will be performed during low flow ahead of spring flows from the dam, which will provide residual sediment flushing.
- Installation of a positive barrier fish screen at any diversion structures or pumps to prevent entrainment of fish.
- Construction of pipeline crossings of Cow Creek and Uncompahgre River will occur during a period of low water flow.
- Woody vegetation removal will not occur between April 1 and August 31 to avoid effects on raptors and migratory birds. Pre-construction raptor and migratory bird surveys will be required if any vegetation-clearing activities are required between April 1 and August 31 due to project contingencies.
- A nesting raptor survey will be conducted within 0.25 to 0.5 miles of CDOT ROW the year of construction; CPW raptor nest buffer guidelines will be followed with CDOT concurrence.
- Follow CPW-recommended buffer zones and seasonal restrictions within certain distances of nest sites for raptors in accordance with MBTA. Follow MBTA regulations and permits for incidental and unavoidable takes.
- Construction will only occur at one CPW-designated wildlife "pinch point" crossing structure at a time.
- Time spent with heavy equipment within a half mile of a wildlife underpass will be limited to the lowest amount possible to accomplish the project.
- All wildlife exclusion fencing will remain functional during construction to prevent ungulates from entering the road corridor
- When construction is not actively occurring, all open trenches within a half mile of a wildlife underpass will be covered.
- All open trenches will have wildlife escape ramps at a minimum of one ramp per ¼ mile of trench.
- All construction equipment previously used in wet areas must be cleaned, disinfected, and completely dried prior to bringing it to the construction area. This is to avoid the spread of aquatic nuisance species and diseases (e.g., invasive animals and plants, whirling disease, chytrid fungus, etc.).
- A Storm Water Management Plan will be developed and filed with the Colorado Department of Public Health and Environment. In accordance with the Storm Water Management Plan, Best Management Practices, including storm water drainage, erosion control, and sediment control will be implemented to prevent or reduce point source pollution during and following construction. A copy of this plan will be provided to CDPHE, Reclamation, CDOT, and BLM.
- Concrete pours at or above ground surface will occur in forms to prevent discharge into waterways. Any wastewater from concrete batching, vehicle wash down, and aggregate processing will be contained and treated or removed for off-site disposal.
- Equipment will be inspected daily and repaired as necessary to ensure equipment is free of petrochemical leaks. Construction crews will carry spill kits for emergency use.
- Adhere to all wetland and riparian area restoration requirements in the Wetland and Riparian Areas Mitigation Plan (Appendix B).

- Adhere to CPW reclamation and revegetation requirements on Reclamation property, including using a CPW-recommended and approved seed mix.
- All construction equipment will be power-washed and free of soil and debris prior to entering the construction site to reduce the spread of noxious and invasive weeds.
- Timely and consistent weed treatment will occur within the project area. For example, pre-construction treatment (mowing) will be used to minimize weed spreading during construction.
- Project 7 will continue to be responsible for complying with the Colorado Noxious Weed Act and will obtain appropriate pesticide use permits in accordance with Section 402 of the Clean Water Act.

For further details, including itemized capitalized costs, see the Mitigation Matrix located in Appendix A.

Table 5: Summary of Changes to Streamflow (cfs) Below Ridgway Reservoir Above Cow Creek from Existing Conditions by Water Year.

Water Year		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
2018	Existing	56.93	53.74	46.65	42.79	42.77	57.30	207.74	214.43	234.16	143.35	54.19	51.78
	Proposed	56.93	53.74	46.65	42.79	42.77	56.78	185.71	183.19	167.35	143.35	54.19	51.78
	% change	0.00%	0.00%	0.00%	0.00%	0.00%	-0.92%	-11.86%	-17.06%	-39.92%	0.00%	0.00%	0.00%
2019	Existing	39.25	41.53	42.97	44.18	44.05	83.71	207.03	609.87	601.06	440.42	286.00	70.40
	Proposed	39.25	41.53	42.97	44.18	44.05	83.71	207.03	609.87	601.06	377.59	249.63	70.40
	% change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-16.64%	-14.57%	0.00%
2020	Existing	44.72	43.50	43.30	43.30	43.30	90.75	247.10	206.47	293.52	275.32	102.44	57.93
	Proposed	44.72	43.50	43.30	43.30	43.30	72.67	240.56	197.81	256.15	257.25	95.41	51.60
	% change	0.00%	0.00%	0.00%	0.00%	0.00%	-24.88%	-2.72%	-4.38%	-14.59%	-7.03%	-7.37%	-12.27%
2021	Existing	40.15	40.77	39.59	36.23	37.06	47.81	166.45	168.06	227.97	290.68	150.81	66.46
	Proposed	40.15	40.77	39.59	36.23	37.06	47.81	163.25	168.06	200.56	272.21	124.26	64.72
	% change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.96%	0.00%	-13.67%	-6.78%	-21.37%	-2.68%
2022	Existing	46.41	46.00	45.80	45.80	45.81	211.95	249.88	256.97	255.58	234.39	126.26	67.04
	Proposed	46.41	46.00	45.80	45.80	45.81	182.04	247.24	256.85	223.57	219.31	121.54	67.04
	% change	0.00%	0.00%	0.00%	0.00%	0.00%	-16.43%	-1.07%	-0.05%	-14.32%	-6.87%	-3.88%	0.00%
Average cfs Reductions		0.00	0.00	0.00	0.00	0.00	9.70	6.88	8.01	32.72	22.89	14.93	1.61
Average Percent Reductions[1]		0.00%	0.00%	0.00%	0.00%	0.00%	-8.45%	-3.52%	-4.30%	-16.50%	-7.46%	-9.44%	-2.99%
Average Monthly Reductions[2] (dry years only)		0.00%	0.00%	0.00%	0.00%	0.00%	-14.08%	-5.22%	-7.16%	-22.94%	-4.63%	-3.75%	-4.09%

Notes: Numbers in brown designate dry years. Streamflows obligations are 30 cfs from 1976 FEIS recommendations.
Source: LRE Water 2024. Streamflow is reported below Ridgway Reservoir but above the confluence with Cow Creek.
[1] Average monthly reduction is across all 5 years of modeled time period. [2] Average monthly reduction during dry years averages the reductions during the dry years only.

Appendix A – Mitigation Matrix

Appendix B – Wetlands and Riparian Areas Mitigation Plan