BUREAU OF RECLAMATION

Draft Environmental Assessment for the Crawford Clipper Upper West Lateral Project A

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

Estimated Lead Agency total costs associated with developing and producing this Draft EA: $17,000

U.S. Department of the Interior

January 2021

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 for the Crawford Clipper Upper West Lateral Project A

Basinwide Salinity Control Program
Upper Colorado Basin: Interior Region 7
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Prepared for Reclamation by
Rare Earth Science, LLC

January 2021

Cover Photo: View of the part of the Crawford Clipper Upper West Lateral proposed for piping (Dawn Reeder/Rare Earth Science, LLC).

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CHAPTER 1 – INTRODUCTION

This Environmental Assessment (EA) has been prepared to disclose and evaluate the potential environmental effects of the Crawford Clipper Ditch Company's (CCDC's) proposed Clipper Upper West Lateral Project A ("Project," "Project A," or "Proposed Action"). The Federal action evaluated in this EA is whether the Bureau of Reclamation (Reclamation) would provide funding assistance for the Proposed Action. This document has been prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ's) NEPA regulations at 40 CFR Parts 1500 – 1508 (2020). If potentially significant impacts to environmental resources are identified, an Environmental Impact Statement (EIS) will be prepared. If no significant impacts are identified, a Finding of No Significant Impact (FONSI) will be issued.

1.1 – Project Location and Legal Description

The Project involves three locations, all within Delta County, Colorado (see Figure 1). The main (piping) component of the Project is located just west of the Town of Crawford, within Section 36, Township 15 South, Range 92 West (6th Principal Meridian) and Section 31, Township 15 South, Range 91 West (6th Principal Meridian). A staging area for the Project is located approximately 2 direct miles southeast of the Town of Hotchkiss near the intersection of State Highway 92 and Spurlin Mesa Road, within the northeast quarter of the northwest quarter of Section 4, Township 15 South, Range 92 West (6th Principal Meridian). The Habitat Replacement Site for the Project is located 5 direct miles northwest of the Town of Crawford in Section 23, Township 15 South, Range 92 West (6th Principal Meridian).

1.2 – Need for and Purpose of the Proposed Action

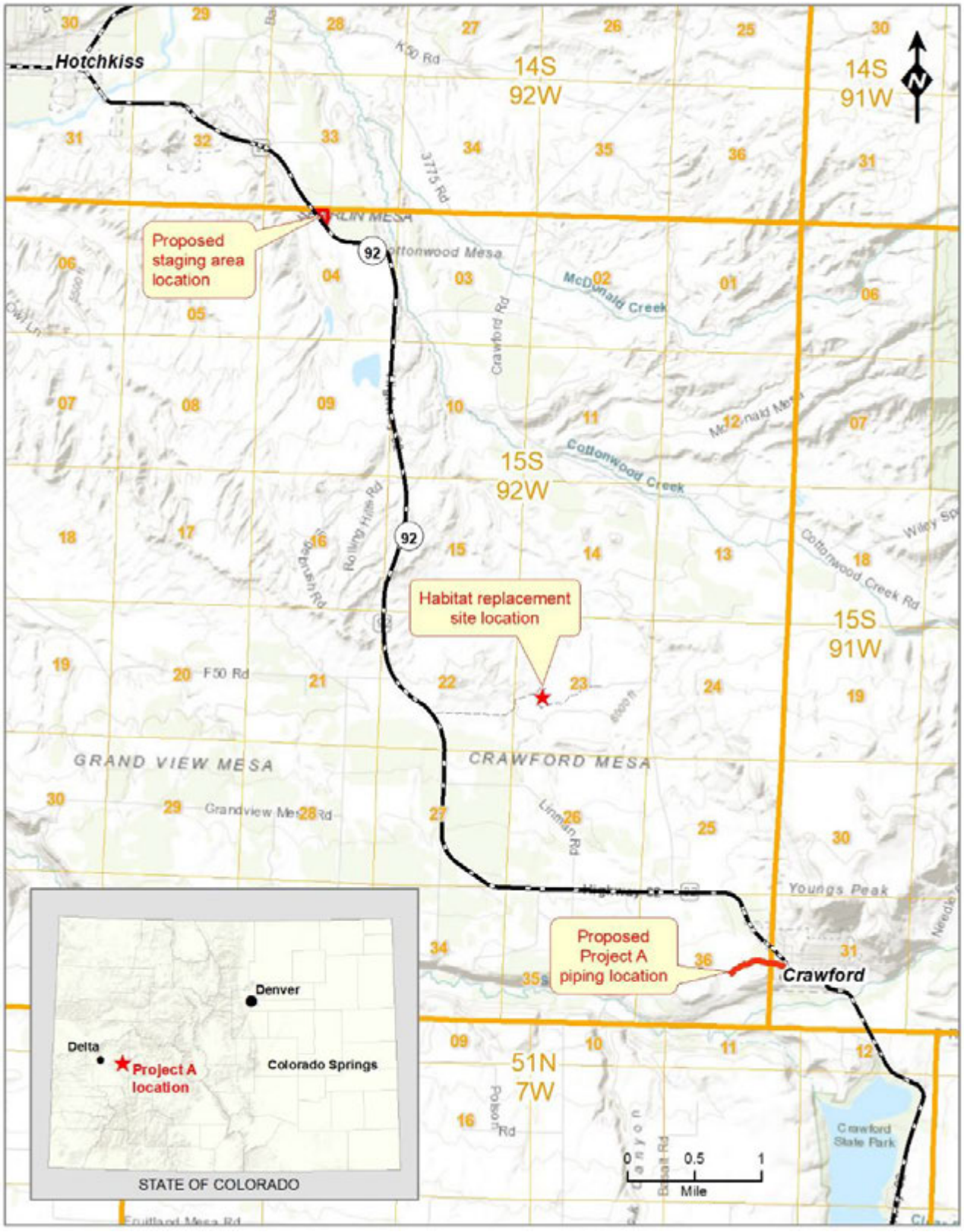
The need for the Proposed Action is to reduce salinity concentrations in the Colorado River basin. The purpose of the proposed action is to comply with the Colorado River Basin Salinity Control Act.

The Proposed Action would eliminate seepage loss from 0.46 miles of the open unlined portion of the upper part of the West Lateral of Crawford Clipper Ditch ("Upper West Lateral"), reducing salinity loading by 293.46 tons per year in the Lower Gunnison Basin and the Colorado River Basin. An additional beneficial effect of the Proposed Action would be the reduction of selenium in the Colorado River basin (SMPW 2011), although the amount of selenium reduction has not been quantified.

1.3 – Decision to be Made

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

Figure 1. Map of project location.



1.4 – Background

The threat of salinity loading in the Colorado River basin is a major concern in both the United States and Mexico (Reclamation 2017). 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 system (Reclamation 2017). Irrigation increases salinity in the system both by depleting in-stream flows, and by mobilizing salts found in underlying geologic formations into the system, especially during flood irrigation practices.

In June 1974, Congress enacted the Colorado River Basin Salinity Control Act, Public Law 93-320, which directed 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 United States and Republic of Mexico. Public Law 104-20 of July 28, 1995, authorizes the Secretary of the Interior, acting through the Bureau of 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, memoranda of agreement, commitments for grants, cooperative agreements, or advances of funds to non-federal entities under such terms and conditions as the Secretary may require.

The Basinwide Salinity Control Program funds salinity control projects with a one-time grant that is limited to an applicant's competitive bid. Once constructed, the facilities are owned, operated, maintained, and replaced by the applicant at their own expense.

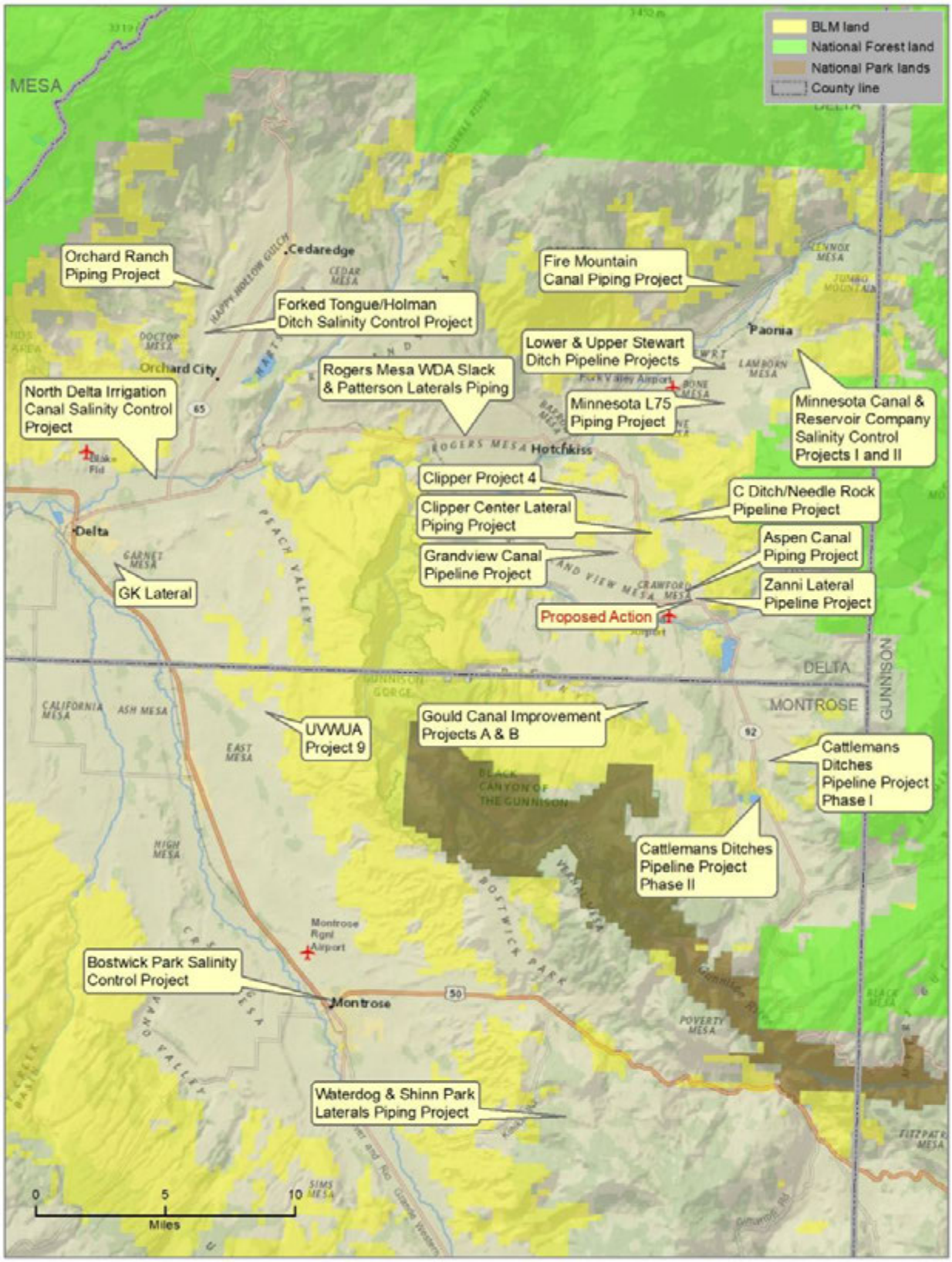
1.5 – Relationship to Other Projects

1.5.1 Salinity Control Program

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

- Bostwick Park Siphon Lateral Piping Project
- C Ditch/Needle Rock Piping Project
- Cattleman's Ditches Piping Project Phases I and II
- Clipper Center Lateral Piping Project
- Eastside Laterals Piping Projects ("UVWUA Project 9")
- Fire Mountain Canal Piping Project
- Forked Tongue/Holman Ditch Piping Project
- Gould Canal Improvement Projects A & B
- Grandview Canal Piping Project
- Upper and Lower Stewart Ditch Piping Projects
- Minnesota Canal Piping Project Phase I and II
- Minnesota L75 Piping Project

Figure 2. Regional salinity control projects & other nearby projects.



- North Delta Canal Piping Project
- Orchard Ranch Piping Project
- Slack and Patterson Lateral Piping Project
- Spurlin Mesa Lateral Piping Project ("Clipper Project 4")
- Waterdog and Shinn Park Laterals Piping Project
- Zanni Lateral Piping Project

1.5.2 CRSP Basin Funds

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

- Aspen Canal Piping Project
- GK Lateral Piping Project

1.5.3 RCPP Funds

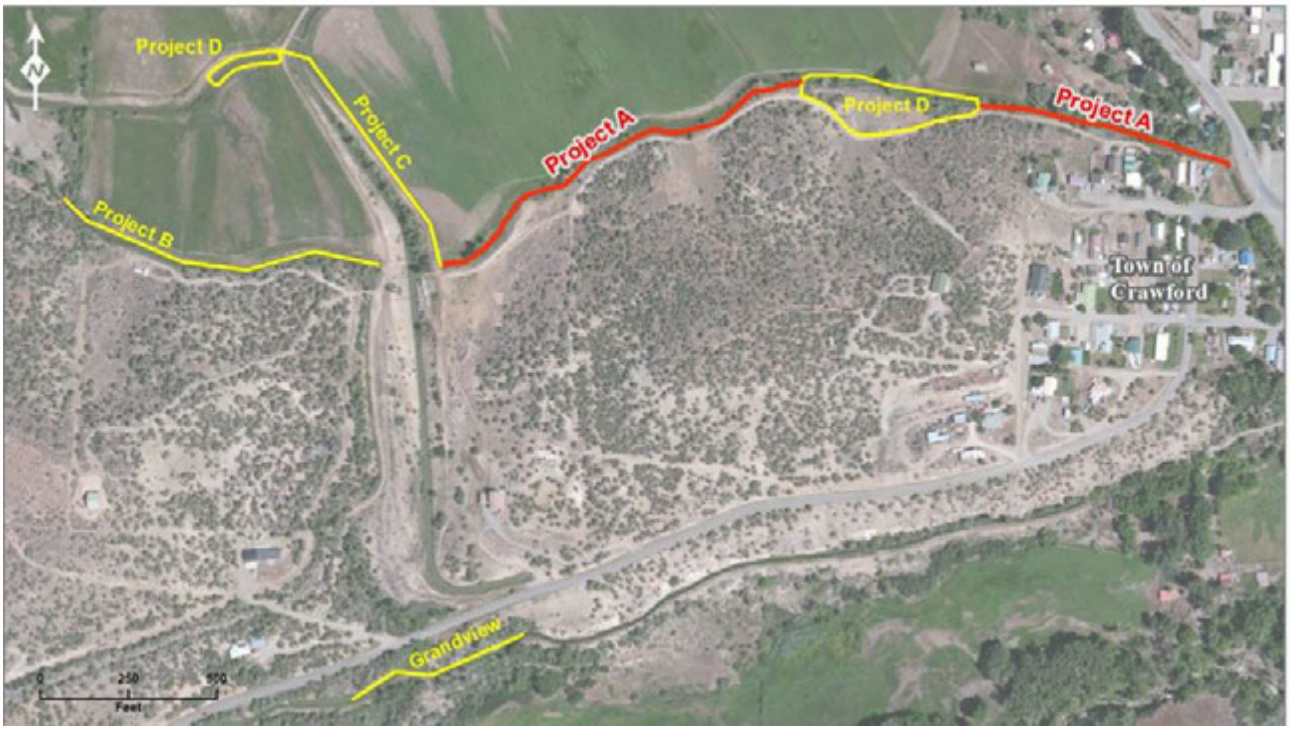
The U.S. Dept. of Agriculture Natural Resources Conservation Service (NRCS) issued a Regional Conservation Partnership Program (RCPP) grant administered by the Colorado River Water Conservation District under the Lower Gunnison Watershed Plan. RCPP irrigation infrastructure improvement projects planned in the vicinity of the Proposed Action include (Figure 3):

- Grandview Canal Piping Project
- CCDC Project B (see Section 1.5.4)
- CCDC Project D (see Section 1.5.4)

1.5.4 CCDC's Upper West Lateral Master Plan

The Proposed Action is a component of CCDC's Upper West Lateral Master Plan, which identifies four separate projects: A, B, C and D (see Figure 3). Project A (the Proposed Action) is undergoing a separate NEPA analysis from the other components because the proposed funding source (i.e. federal action) is different from the other components, and it is a separate and complete project with independent utility from the other three Master Plan components. The proposed funding source for Project A (the Proposed Action) is a surplus from the modified and extended Colorado River Basinwide Salinity Control Program Cooperative Agreement No. R16ACO0008, which funded the recently completed Clipper Center Lateral Pipeline Project (Figure 2). Project C (Dearmond Lateral & Drop Screen Pipeline) is anticipated to be funded with federal funds, although a funding source has not been secured at this time. Projects B and D would be funded by RCPP. Projects B and D are the Pipher Lateral Pipeline Project and the Upper West Lateral Reservoir and Sediment Basins Project, respectively. A component of Project D would be constructed between two segments of the Project A buried pipeline (see Figure 3). Project D is anticipated to occur subsequent to Project A, and would occur regardless of whether Project A is ever implemented.

Figure 3. Locations of CCDC's Upper West Lateral Master Plan Projects & the Grandview Project.



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

- Colorado State Historic Preservation Office, Denver, CO
- U.S. Army Corps of Engineers, Colorado West Regulatory Branch, Grand Junction, CO
- Southern Ute Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)

Concerns raised during recent similar projects and related informal consultations with Colorado Parks and Wildlife, Gunnison, Colorado, also helped identify potential concerns for the Proposed Action.

Issues determined to be of potential significance, and therefore appropriate for further impact analysis under this EA, are discussed in Chapter 3. The following issues were determined to be insignificant or not applicable, and are not analyzed in greater detail within this document:

Table 1. Resources Eliminated from Further Analysis

Resource	Rationale for Elimination from Further Analysis
Indian Trust Assets and Native American Religious Concerns	No Indian trust assets have been identified within the Proposed Action Area. No Native American sacred sites are known within the Proposed Action Area. Neither the No Action Alternative, nor the Proposed Action Alternative, will affect Indian trust assets or Native American sacred sites. To confirm this finding, Reclamation provided the Ute tribes with historic presence in the region with a description of the Proposed Action and a written request for comments regarding any potential effects on Indian trust assets or Native American sacred sites as a result of the Proposed Action Alternative. Consultation with the Ute Mountain Ute Tribe and the Ute Indian Tribe (Uintah and Ouray Reservation), and the Southern Ute Indian Tribe regarding the Proposed Action Alternative is in progress and no comments or concerns are anticipated, based on other similar projects in the region. Results of the consultations will be included in the Final EA.
Environmental Justice & Socioeconomic Issues	The Proposed Action Area does not occur on Indian reservation lands or within disproportionately adversely affected minority or low-income populations. The Proposed Action Alternative would not involve population relocation, health hazards, hazardous waste, property takings, or substantial economic impacts. Therefore, neither the No Action Alternative, nor the Proposed Action Alternative, would have an environmental justice effect.
Wild & Scenic Rivers, Land with Wilderness Characteristics, or Wilderness Study Areas	No Wild and Scenic Rivers, land with wilderness characteristics, or Wilderness Study Areas exist in the Proposed Action Area.

CHAPTER 2 – PROPOSED ACTION AND ALTERNATIVES

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

2.1. No Action Alternative

Under the No Action Alternative, Reclamation would not approve funding for Project A. The Project A portion of the Upper West Lateral would continue to flow in an open, earthen canal, and the resultant salt loading to the Lower Gunnison Basin and the Colorado River Basin would continue.

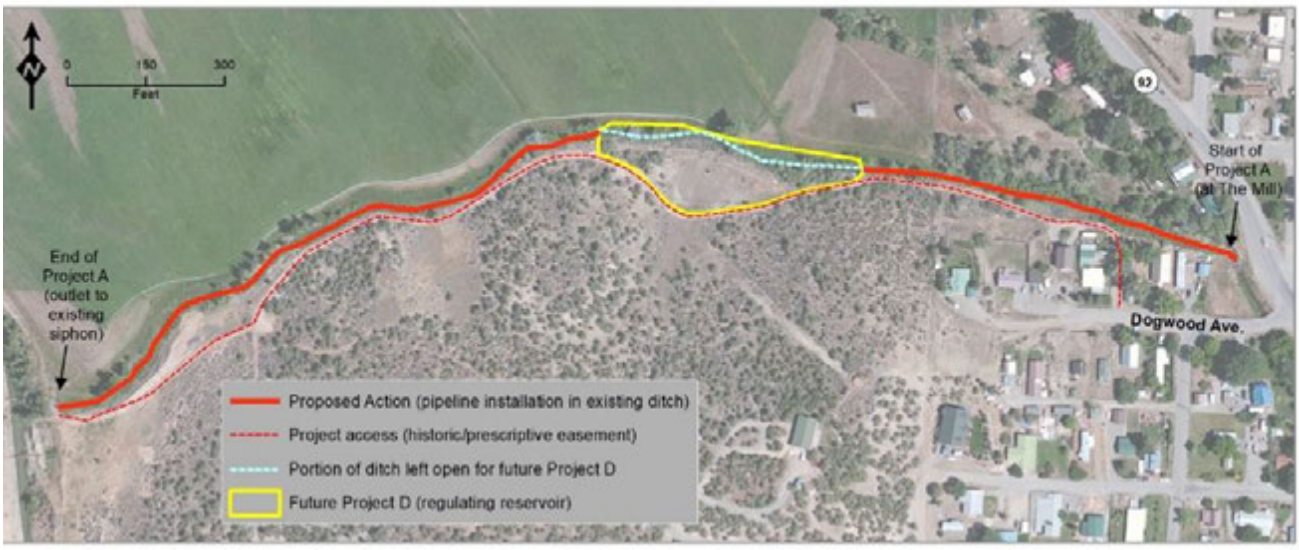
2.2. Proposed Action

Under the Proposed Action, Reclamation would authorize CCDC to use any funding remaining from the Clipper Center Lateral Pipeline Project to complete Project A of the Clipper Upper West Lateral Piping Project. Project A involves piping 0.46 mile of the Upper West Lateral of Clipper Ditch (see Figure 4).

2.2.1 Pipeline Installation

Project A pipeline would start at the Mill, CCDC's 3-way splitter location in the town of Crawford. CCDC would replace a total of approximately 0.46 mile of the West Lateral canal with 42-inch-diameter Advanced Drainage Systems, Inc. storm drain pipe (or similar). Located at the beginning of the pipeline would be the first of two poured-in-place concrete trash rack structures. After installing approximately 730 feet of 42-inch pipeline, an approximately 550-foot section of canal would be left open in order to accommodate future construction of a regulating reservoir (part of Project D, a complete and separate project proposed to be funded by RCPP and would be analyzed in a separate EA; see Section 1.5.2). The open section would remain in use until the reservoir could be constructed. At the end of the Project D regulating reservoir space, the second poured-in-place concrete trash rack structure would be constructed and later be incorporated into the regulating reservoir outlet. The remaining approximately 1,150 feet pipe would be installed. The end of the 42-inch-diameter pipeline would remain open, allowing water to flow into the existing canal and into the existing Aspen crossing siphon pipeline. The Project A pipeline would have two shareholder metered outlets and one air vent—a fitting along the pipeline at the surface so that air can be evacuated from the pipeline.

Figure 4. Proposed Action Plan



Installation of the pipeline would involve using trackhoes and possibly a bulldozer to grub ditch bank vegetation and fill the existing ditch. An excavator would then trench in the prepared ditch prism to place the pipe. The pipe would be transported to the construction site on 50-foot flatbed trucks (or similar) and unloaded with front end loaders with pallet forks. A trackhoe would position the pipe in the trench. The pipe would be buried with fill material from within the ditch prism (see Photograph 1, below), and if necessary, with fill obtained from the 550-foot gap space for the Project D regulating reservoir (see above). Following pipe burial, the alignment would be smoothed with trackhoes to match the surrounding land contours and restore drainage patterns. Reserved topsoil would be replaced on the prepared surface using a trackhoe, without back-dragging the blade, in order to create a microtopography for reseeding. A one-lane dirt maintenance road or ATV trail (similar to the existing road on the ditch prism) would remain on the pipe alignment project following construction, with appropriately-sized culverts at drainage crossings. Construction Access

The section of the West Lateral involved in the Proposed Action is on CCDC land or in historic prescriptive easements on private lands. The width of the construction area for the Proposed Action is anticipated to be 40 feet or less from either side of the existing canal centerline or less. Only the area needed for construction within this 80-foot width would be disturbed, with the exception of the potential for material borrow in the future location of the Project D regulating reservoir (see Section 2.2.3).

All access ways for construction of the Proposed Action would be on an access road used by CCDC by prescriptive easement for the past several decades. The West Lateral access road is accessed from an existing road near the Mill location in Crawford, off Dogwood Avenue. No improvements to the ditch access road off of Dogwood Avenue would be necessary to complete Project construction.

Any private land easements for the Proposed Action and their specific locations would be clearly marked on the construction drawings.

Photograph 1. Example of the pipeline installation process on a different CCDC salinity control piping project. (Harward Engineering/Marcel Orton)

2.2.2 Staging and Borrow Activities

One approximately 3-acre staging area has been identified on private land within an irrigated pasture (Figure 1). This staging area was also used for the previous CCDC Clipper Center Lateral Pipeline Project and underwent NEPA analysis at that time. The staging area would be used to store pipe and other project supplies and equipment. Pipe arriving and leaving the staging area would be transported on 50-foot flatbed trucks (or similar). Front end loaders with pallet forks would likely be used to handle pipe in the staging area.

It is anticipated that adequate fill will be generated from within the construction footprint. To generate fill material onsite, a screen or crusher bucket may be used in the construction footprint to prepare the fill material. If additional fill is required, fill will be taken from within the ditch prism in the future location of the Project D regulating reservoir, which lies between the two segments of Project A. Fill would be borrowed such that the existing canal would be widened within the existing ditch prism, and borrow activity would be limited to within 100 feet of each side of the ditch centerline.

2.2.3 Post-Construction Revegetation & Weed Control

Restoration activities would occur on all surface disturbances caused by construction of the Proposed Action. Vegetation slash would be hauled off-site to the staging area and chipped or burned at that location or hauled to a county landfill. All non-irrigated disturbed areas would be seeded with a drought-tolerant seed mix approved by Reclamation (Appendix A), appropriate for the surrounding native vegetation. Where irrigated lands are revegetated, the seed mix would be a weed-free hay mix acceptable to the landowner. Reseeding success would be monitored subject to agreements between CCDC and individual landowners.

Noxious weeds would be controlled in disturbed areas in accordance with county standards (Delta County 2010). Woody noxious weeds within the Proposed Action Area would be mechanically removed during construction. After construction, the CCDC would control herbaceous noxious weeds as necessary for the life of the project through the use of herbicides.

2.2.4 Schedule

Construction would occur during the irrigation off-season (between late October and mid-April) to avoid interrupting irrigation activities of the shareholders. Construction is anticipated to last approximately 30 days, and would occur during daylight hours (typically 7 am to 4 pm), Monday through Saturday, on a sequenced basis in the Project area. Weather conditions could cause temporary time gaps in activity.

2.2.5 Habitat Replacement

In accordance with the Colorado River Basin Salinity Control Act, habitat replacement would be required to mitigate for riparian and wetland habitat lost as a result of the Proposed Action. As part of the Clipper Center Lateral Pipeline Project, CCDC developed a Habitat Replacement Site that generated enough excess credit to provide replacement habitat for the Proposed Action. The general location of the Habitat Replacement Site is shown on Figure 1.

2.2.6 Permits & Authorizations

Permits & Plans

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

- Clean Water Act (CWA) Section 404 Nationwide Permit 46, with a Pre-Construction Notice to be submitted to the U.S. Army Corps of Engineers by CCDC 45 days prior to commencing construction (the Corps authorization will be included with the Final EA).
- Stormwater Management Plan, to be submitted to Colorado Department of Public Health & Environment (CDPHE) by the construction contractor prior to construction disturbance.

- CWA Section 402 Storm Water Discharge Permit compliant with the National Pollutant Discharge Elimination System (NPDES), to be obtained from CDPHE by the construction contractor prior to construction disturbance (regardless of whether dewatering would take place during construction).
- Certification under CDPHE Water Quality Division Construction Dewatering Discharges Permit COG070000 (if any dewatering is to take place during construction).
- Spill Response Plan, to be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.
- Utility clearances, to be obtained by the construction contractor prior to construction activities from local utilities in the area.

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

Natural Resource Protection Laws

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

Cultural Resource Laws

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

Paleontological Resource Laws

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

CHAPTER 3 – AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

3.1 - Introduction

This chapter discusses resources that may be affected by the Proposed Action Alternative and the No Action Alternative. For each resource, the potentially affected area and/or interests are

identified, existing conditions described, and potential impacts predicted under the No Action and Proposed Action Alternatives. This section is concluded with a summary of impacts and a list of environmental commitments.

3.2 – Affected Environment and Environmental Consequences

3.2.1 – Water Rights & Use

The CCDC is a privately owned, non-profit, mutually-funded irrigation company incorporated and operating in Delta County since 1885, with several absolute decreed water rights totaling 164.3 cubic feet per second (cfs), most of which were appropriated between 1884 and 1930. A stock right of 10 cfs was appropriated in 1883 for use during the non-irrigation season. The total average rate of annual diversions of irrigation water through the Crawford Clipper Ditch system (including direct diversion from the Smith Fork River and water called from Crawford Reservoir) is approximately 18,000 acre-feet. The irrigation season is approximately 173 days long, and approximately 3,480 acres of hay crops and pasture are irrigated with the system. The Crawford Clipper Ditch system originates at a head gate on the Smith Fork River at a location just south of the Town of Crawford, and provides users with irrigation water and winter stock water across Crawford and Spurlin Mesas. Late season water called from Crawford Reservoir is also delivered in the Crawford Clipper Ditch system. Irrigation is primarily accomplished by flood methods directly from ditch laterals, and to a lesser extent with gated pipe and sprinklers. The system also carries winter stock water during the non-irrigation season for an annual average of 190 days.

The West Lateral is diverted from the system at the Crawford divider headgate (aka "The Mill"). The West Lateral conveys an average of approximately 20 cfs daily during the irrigation season to a current total of 36 shareholders. During winter, the West Lateral conveys a daily average of 2 cfs of stock water. The West Lateral irrigates approximately 2,752 acres consisting mostly of grass pasture and alfalfa.

There is an ongoing trend to pipe earthen irrigation ditches in the region (see Figure 2).

No Action Alternative: The No Action Alternative would have no effect on water rights and uses within the Gunnison River Basin. This portion of the water delivery system would continue to function as it has in the past.

Proposed Action: Under the Proposed Action Alternative, CCDC would have the ability to better manage irrigation water with efficiencies gained from eliminating seepage by improving the system. The new turnout structures include adequate controls and measuring devices which would further improve water management in the system. The Proposed Action would not include new water storage or the irrigation of new lands. No adverse effects on irrigation water rights in the Gunnison or Colorado River Basins would occur due to implementation of the Proposed Action. Winter stock water delivery to the CCDC's shareholders on the Clipper West Lateral will be temporarily impacted during construction of the Proposed Action. These shareholders would be given prior notice of construction and would need to arrange for a temporary alternate source of stock water at that time. The Proposed Action contributes to the growing amount of piped irrigation conveyances in the region, which are collectively reducing water seepage and improving irrigation water delivery efficiency on a larger scale.

3.2.2 – Water Quality

Irrigation practices in the region and on Crawford and Spurlin mesas are contributing to elevated downstream salinity levels and create an adverse effect on the water quality of the Gunnison River and in the greater Colorado River Basin. In addition, selenium occurs in the region's soils in soluble forms such as selenate, which is leached into waterways by runoff and irrigation practices, and is toxic to living organisms when present beyond trace amounts. There is a regional effort to reduce salinity in the lower Gunnison and Colorado River watersheds, resulting in improved water quality at a basinwide scale (see Section 1.4).

Although the Navigable Waters Protection Rule (NWPR), effective in June 2020, identifies most irrigation ditches as non-jurisdictional under the CWA, Colorado was granted an injunction against the new rule and still operates under the former definitions of Waters of the United States. Therefore, under the current regulatory environment in Colorado, most irrigation ditches are considered Waters of the U.S. and under the jurisdiction of the CWA. Prior to July 2020, most irrigation ditch construction and maintenance projects qualified for a permitting exemption under CWA Section 404(f) and the Corps Regulatory Guidance Letter 07-02. However, in July 2020, the Corps and EPA issued a joint memorandum (2020 Memorandum) concerning the Section 404(f) irrigation exemption and superseding Regulatory Guidance Letter 07-02. The 2020 Memorandum explicitly disqualifies the piping of jurisdictional irrigation ditches from the Section 404(f) exemption. Irrigation-induced wetlands are not under the jurisdiction of the CWA.

No Action Alternative: Under the No Action Alternative, the estimated 293.46 tons of salt annually contributed to the Colorado River Basin from the Clipper West Lateral would continue. Current selenium loading levels would continue.

Proposed Action: In the long term, the Proposed Action would eliminate seepage from a portion of the earthen Clipper West Lateral, reducing salt loading to the Colorado River Basin at an estimated rate of 293.46 tons per year. The Proposed Action is also expected to reduce selenium loading into the Gunnison River basin, although the amount of selenium loading reduction that could result from the Proposed Action has not been quantified. Improved water quality would likely benefit downstream aquatic species by reducing salt and selenium loading in the Gunnison River, an important Colorado River Basin tributary. Maintenance or improvement of water quality in the Gunnison River is of importance to users and to wildlife. The improved water quality resulting from the Proposed Action would contribute to the regional efforts underway to reduce salinity in the lower Gunnison and Colorado River watersheds.

Best management practices would be implemented during construction to minimize erosion and protect water quality. Project construction would take place in the ditch prism when water is not present. The construction contractor would be required to operate under a Stormwater Management Plan, a Stormwater Discharge Permit, a Spill Response Plan, and a Dewatering Permit (if dewatering is conducted) (see Section 2.3.8 and Section 4).

The Proposed Action would affect waters under the jurisdiction of CWA Section 404 (the ditch itself) and disturb irrigation-induced wetland and riparian vegetation associated with the ditch. Under the current CWA regulatory status in Colorado, the "irrigation exemption" from Section 404 of the Clean Water Act does not apply to the Proposed Action triggering the need for a CWA permit from the Corps. The Proposed Action fits under the guidelines of CWA Nationwide Permit

46 ("Discharges in Ditches"). CCDC is preparing the required Pre-Construction Notice for this Nationwide Permit 46, and the Corps authorization will be appended to the Final EA.

3.2.3 – Air Quality

The Clean Air Act specifies limits for criteria air pollutants. If the levels of a criteria pollutant in an area are higher than National Ambient Air Quality Standards (NAAQS), the airshed is designated as a nonattainment area. Areas that meet the NAAQS for criteria pollutants are designated as attainment areas. Delta County is in attainment for all criteria pollutants (EPA 2020). Minor impacts to air quality from routine maintenance of the Clipper West Lateral include dust from occasional travel in light vehicles along the Proposed Action corridor. A portion of the Aspen Canal Piping Project (Figure 2) and the Grandview project (Figure 3) are two nearby similar projects that could be occurring simultaneously with the Proposed Action.

No Action Alternative: There would be no effect on air quality in the Proposed Action Area from the No Action Alternative. The ditch would continue to operate in its current condition and dust and exhaust would occasionally be generated by vehicles and equipment conducting routine maintenance and operation.

Proposed Action: There would be no long-term impacts to air quality from the Proposed Action. Delta County would remain in attainment for all criteria pollutants. Dust from construction activities would be minimized by BMPs, and any residual dust would have a temporary, short-term effect on the air quality in the immediate Proposed Action Area. Following construction, impacts to air quality from routine maintenance and operation activities along the pipeline corridor would be similar in magnitude to those currently occurring for the existing ditch. The Aspen Canal Piping and Grandview projects may be constructed concurrently with the Proposed Action. The total combined impact on air quality in the area is expected to be temporary and would not rise to the level of non-attainment for any criteria pollutants in Delta County.

3.2.4 – Access, Transportation, & Construction Impacts

The CCDC currently operates on its own deeded land and in historic prescribed rights-of-way on private land (collectively, the "right-of-way") in the Project area.

The main transportation routes in the vicinity of the Proposed Action are Dogwood Avenue and Highway 92 (Figure 1). Private roads and county roads generally provide access and mobility for local residents traveling in and out of the Proposed Action Area.

Various overhead or buried utilities are present near the Proposed Action. The utility entities include the Town of Crawford (domestic water), Delta Montrose Electric Association (electricity and fiber optic internet), TDS Telecom, and Black Hills Energy (natural gas).

A moderate baseline level of noise and visual disturbance occurs in the Proposed Action area, associated with the Town of Crawford, farming and ranching activities, and CCDC's operation and routine maintenance of the ditch system. Operation and maintenance involve the use of light-duty trucks and, occasionally, heavy equipment. Farming and ranching activities involving the use of farming equipment, light vehicles, all-terrain vehicles, and occasionally heavy equipment are ongoing in the immediate area and surroundings of the Proposed Action. A portion of the Aspen Canal Piping Project (Figure 2) and the Grandview project (Figure 3) are two nearby similar projects that could be occurring simultaneously with the Proposed Action and generating noise in the area.

No Action Alternative: There would be no effect to public safety, transportation, or public access from the No Action Alternative.

Proposed Action: Short-term temporary impacts related to access, public transportation, and construction noise and visual disturbance would result from the Proposed Action. All construction activities related to the Proposed Action would take place entirely in the CCDC prescriptive right-of-way.

There would be no need for construction of new access roads outside the ditch right-of-way. There are no known bridges with weight restrictions that would be used by construction vehicles.

Some short-term disruption of traffic at the intersection of Highway 92 and Dogwood Avenue and at the intersection of Dogwood Avenue and the West Lateral access road is expected to occur when equipment and materials are hauled into the Project location. Appropriate traffic signage would be used to notify drivers of active construction ingress/egress. CCDC and the construction contractor would coordinate with the county and sheriff departments if traffic or access would be delayed or substantially re-routed.

All utilities would be located and marked, and if necessary, relocated or raised, prior to any construction activities in the Project area.

Proposed Action construction activities would generate noise and visual disturbance to residents near the Proposed Action. These disturbances would occur during daylight hours (typically 7 am to 4 pm), Monday through Saturday, on a sequenced basis along the ditch section involved with the Proposed Action. Some construction noise (operating heavy equipment) from the two nearby similar projects (Aspen Canal Piping and Grandview projects) has the potential to reach areas near the Proposed Action. Noise generated by these other projects combined with the Proposed Action would be short-term and temporary, and would not occur outside daylight hours.

To ensure public safety, pipe trenches left open while unattended (e.g. overnight) would be covered.

3.2.5 – Vegetation Resources & Weeds

Beginning at the proposed pipeline inlet at "the Mill", the ditch contours through a Town of Crawford residential area, then enters undeveloped and residential land. The ditch itself is flanked by a narrow margin of coyote willow, reed canarygrass, and pasture grasses, with scattered stands of narrowleaf cottonwoods on the ditch prism, especially in the eastern extents. West of the residential area, the ditch prism is mostly flanked by pinyon-juniper woodlands to the south, and irrigated grass pasture to the north. CCDC occasionally grubs vegetation out of the ditch and from the ditch banks with heavy machinery. The staging area is an irrigated grass pasture.

Weeds present within the Proposed Action Area include herbaceous weeds such as Russian knapweed (*Acroptilon repens*), whitetop (*Cardaria draba*), and Canada thistle (*Cirsium arvense*). Flowing water in the canal is a vector for the continued spread of weeds. Vehicles, people and their dogs, livestock, and wildlife traveling on the ditch prism can also contribute to the spread of weeds. CCDC manages noxious weeds on the ditch prism by spot-spraying seasonally, as resources permit.

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

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

No Action Alternative: There would be no effect on existing vegetation from the No Action Alternative.

Proposed Action: The Proposed Action would directly disturb and result in the permanent loss of approximately 0.47 acres of riparian and wetland vegetation associated with the open ditch and seepage from the ditch. Following construction, the riparian and wetland areas and open water associated with the ditch would be replaced by upland vegetation compatible with the pinyon-juniper woodland-type vegetation community, both by reseeding and natural recolonization. Construction activities would directly disturb other previously disturbed areas, such as the staging area. Dust from operating equipment and vehicles could also temporarily affect nearby vegetation. Across the entire project, vegetation removal and construction footprints would be confined to the smallest portion of the ditch prism or construction ROW necessary for safe completion of the work. Following construction, the disturbed areas would be recontoured and reseeded with a Reclamation-approved drought-tolerant seed mix (Appendix A) appropriate for the surrounding habitat. Disturbed agricultural areas would be smoothed and reseeded with compatible hay or pasture seed mixes. Agricultural areas are expected to return to a condition similar to or better than their pre-construction condition within a year of construction. Although a mature pinyon-juniper woodland overstory would require a few decades to become re-established, understory vegetation consisting of semi-desert native shrubs and grasses is expected to become re-established within a few years following construction in revegetated woodland areas.

Recognizing that the wetland and riparian vegetation associated with ditch margins supports or contributes to the support of aquatic and terrestrial wildlife and migratory birds, the Colorado River Basin Salinity Control Act requires mitigation of its loss. An evaluation[1] was performed to quantify potential wetland and riparian habitat values that would be lost due to implementation of the Proposed Action (ERO 2020). CCDC developed a Habitat Replacement Site for a previous salinity control project in 2019—the Clipper Center Lateral Pipeline Project. Excess habitat credit was developed at the site, and this project would utilize those excess credits to replace the habitat value lost by the current Proposed Action.

The Proposed Action would contribute to the larger-scale loss of artificially sustained riparian and wetland areas collectively resulting from piping projects around the region. Consistent with the Colorado River Basin Salinity Control Act, habitat replacement projects compensate for the loss of riparian and wetland habitat values.

To curtail the spread of noxious weeds, environmental commitments (such as cleaning vehicles and equipment prior to bringing them onsite—see Section 4 of this EA) would help minimize the risk of such infestations, and ongoing weed management efforts by CCDC would be implemented during revegetation of construction alignments. In the long-term, piping this ditch, along with other salinity

[1] The evaluation followed methodology outlined in Reclamation's *Basinwide Salinity Control Program: Procedures for Habitat Replacement* (April 2018). In accordance with the evaluation method, a Total Habitat Value (THV) is calculated for each affected wetland or riparian habitat area by multiplying its acreage by its habitat quality score (HQS), which is assigned based on a series of physical and biological criteria.

control projects in the region, would remove an important vector of weed seed transport—open water. Seeps from the earthen ditch that currently support herbaceous and woody noxious weeds would be dried and the ability of the environment to support these weeds would be diminished.

3.2.6 – Wildlife Resources

Vegetation communities supported by the open ditch, in association with nearby irrigated land, and native woodlands and shrublands, provide nesting, breeding, foraging, cover, and movement corridors for an array of wildlife.

The Proposed Action Area falls within the overall range of black bear, mountain lion, elk, mule deer, and wild turkey (CPW 2020). Colorado Parks & Wildlife (CPW) describes the east part of the Proposed Action area (in the Town of Crawford) as a black bear summer concentration/human conflict area. The entire Proposed Action area falls within elk winter range and severe winter range mule deer summer range, winter range, severe winter range, and a resident population area, and wild turkey winter range, a winter concentration area, and a production area (CPW 2020). These game animals in the Proposed Action Area experience a baseline level of disturbance from residential activities, domestic dogs, people and vehicles traveling on public and private roads, and ranching and farming activities. Proximity to the Town of Crawford and the increased amount of development and human activity on the mesas immediately surrounding the town have led to a diminished presence of wintering elk. A portion of the Aspen Canal Piping Project (Figure 2) and the Grandview project (Figure 3) are two nearby similar projects that could be occurring simultaneously with the Proposed Action and contributing to wildlife disturbance in the area.

A variety of small mammals, reptiles, and amphibians also inhabit the general area. Those that would be likely to use the ditch corridor or adjacent areas include small ground-dwelling mammals, such as badger, white-tailed prairie dog, several species of mice, voles, shrews, and cottontail rabbit. Striped skunk, raccoon, red fox, coyote, bobcat, beaver, western terrestrial garter snake, smooth green snake, Woodhouse's toad, western chorus frog, northern leopard frog and tiger salamander could also be using the area.

The primary nesting season for migratory songbirds in the Proposed Action Area is April 1 through July 15. The core nesting season for raptors in the area is April 1 through July 15; however, individuals—especially red-tailed hawk and great-horned owl—may begin courtship and nest construction as early as February 15 (CPW 2008). A nesting raptor survey was conducted in the Proposed Action Area during May 2019, and reconfirmed during March and April of 2020, to identify active raptor nests with the potential to be disturbed by the Proposed Action—none were identified. Bald eagle nesting season is between October 15 and July 31 (CPW 2008). The entire Proposed Action area lies within CPW-mapped bald eagle winter range and winter forage range (CPW 2020). CPW-mapped bald eagle communal roosts and nests in Delta County (CPW 2020) lie outside the recommended buffer distances for human encroachment (CPW 2008). Migratory birds and raptors in the area experience a baseline level of disturbance from residential activities, road traffic, and farming and ranching activities.

There is a regional effort to reduce salinity in the lower Gunnison and Colorado River watersheds, resulting in an ongoing area-wide conversion of artificially-created riparian and wetland habitat to uplands. Wildlife distribution across the landscape, especially wildlife that depend on riparian and wetland habitat, is changing in response to these habitat changes. Consistent with the Colorado

River Basin Salinity Control Act, projects to replace riparian and wetland habitat losses are completed in conjunction with the piping projects.

No Action Alternative: There would be no effect on wildlife resources from the No Action Alternative.

Proposed Action: Upland wildlife habitat impacted by the Proposed Action would result in minor temporary impacts to wildlife species within the Proposed Action Area. Impacts to game animals would include short-term disturbances and periodic displacement while construction is underway. Disturbances to big game in their sensitive winter ranges (i.e. severe winter range, winter concentration areas) during harsh winter months would cause the greatest harm due to the lack of food availability and expenditure of energy. However, given the existing level of human disturbance, big game in this area would be somewhat habituated to disturbances. Additionally, during times of extreme weather conditions (e.g. deep snow cover, extreme freezing temperatures, excessively muddy conditions), construction activities would be limited due to logistics. The Proposed Action would create incremental disturbance throughout the Project area, allowing big game near the construction activity to find refuge and limit the amount of energy expended. During construction, pipeline trenches left open overnight would be kept to a minimum and covered to reduce potential for entrainment of big game or livestock and public safety problems. Covers would be secured in place and strong enough to prevent wildlife from falling through. Where trench covers would not be practical, wildlife escape ramps would be utilized.

Other similar projects in the area (Aspen Canal Piping and Grandview projects) could be constructed concurrently with the Proposed Action. These projects have the potential to temporarily affect the land use and movement patterns of big game in the area during construction. Due to the spatially incremental and concentrated nature of the projects, and the extent and availability of big game range and habitat in the area, measurable impacts to big game due to project construction activities are not anticipated.

Construction impacts to small animals, especially burrowing amphibians, reptiles, and small mammals, could include direct mortality and displacement during construction activities, both in the irrigated pasture areas and the exiting ditch alignment. However, these species and habitats are relatively common throughout the area and population-level impacts would not be likely; therefore, impacts would be minor. There would be no direct effect to nesting songbirds since pre-construction vegetation grubbing would occur outside the primary nesting season (potential nesting habitat including scattered shrubs and a few trees along the ditch would be grubbed and removed outside the period of April 1 through July 15). No raptor nests were identified within the recommended buffer distances for Colorado nesting raptors (CPW 2008), and therefore there would be no measurable effects on raptors. If a new active raptor nest is discovered within 1/3 mile of the Proposed Action during construction, or bald eagle roost site or nest site is discovered within ¼ mile of the Proposed Action during construction, construction would cease until Reclamation could complete evaluations and consultations with FWS and CPW.

Bird and amphibian species dependent on wetland and riparian habitats would experience a long-term (greater than five years) loss of habitat as described in Section 3.2.5. In compliance with the Colorado River Basin Salinity Control Act, the wetland and riparian habitat value that would be lost due to implementation of the Proposed Action would be replaced with a nearby Habitat Replacement Site (see Section 2.2.6).

The Proposed Action would contribute to the larger-scale spatial relocation of riparian and wetland wildlife habitat collectively resulting from piping projects around the region. The distribution patterns of wildlife dependent on riparian and wetland habitat are changing along with the distribution of riparian and wetland habitat across the landscape, as habitat replacement sites are developed to compensate for losses caused by the piping projects.

3.2.7 – Threatened & Endangered Species

The only species listed as threatened or endangered under the Endangered Species Act of 1973 as amended with the potential to be affected by the Proposed Action are the four endangered Colorado River basin fish species: the bonytail, the Colorado pikeminnow, the humpback chub, and the razorback sucker. None of the four endangered Colorado River fishes occurs in the Proposed Action Area and the Proposed Action Area does not occur within or adjacent to designated critical habitat. However, because water depletions in the Gunnison Basin diminish backwater spawning areas for the Colorado River endangered fishes in downstream designated critical habitat, impacts to the endangered fishes result from continuing irrigation practices in the Gunnison Basin. The historic depletion rate from CCDC's system operations is estimated as 5,776 acre-feet per year. Some of these depletions are from a federal facility (Crawford Reservoir), and some of these depletions are direct diversions from the Smith Fork Creek. Historic depletions by federal facilities in the Gunnison Basin are covered under the umbrella of the Gunnison Basin Programmatic Biological Opinion (PBO) (FWS 2009), which avoids the likelihood of jeopardy and/or adverse modification of critical habitat for the endangered fishes. As part of a previous salinity control project, Reclamation consulted with FWS on CCDC's annual depletion from the Smith Fork Creek (File ES/JG-6-CO-09-F-001-GP029 TAILS 06E24100-2016-F-0022). As a result of that consultation, FWS executed a Recovery Agreement with CCDC stating CCDC's historic depletions are covered under the PBO, to ensure compliance with the U.S. Endangered Species Act for CCDC's depletions to the Gunnison River Basin (Appendix B).

No Action Alternative: There would be no effect on the four Colorado River endangered fishes or their designated downstream critical habitat from the No Action Alternative.

Proposed Action: The potential reduction in selenium loading to the Colorado River and Gunnison River basins as a result of the cumulative efforts of the Colorado River Basin Salinity Control Program is improving water quality within designated critical habitat for the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail throughout the Colorado river and Gunnison river basins (SMPW 2011), as well as improving habitat for amphibians, birds, and other fish. The annual depletion rate would not change as a result of the Proposed Action, and therefore CCDC's depletions would continue to be covered under the Recovery Agreement (Appendix B).

3.2.8 – 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.

Alpine Archaeological Consultants conducted Class III cultural resource inventories of the Proposed Action Area. All ditch reaches involved with the Proposed Action were inventoried in a 200-foot-wide corridor. The inventories resulted in the documentation of a segment of the Crawford Clipper

Ditch Upper West Lateral that supports its eligibility for listing in the National Register of Historic Places (NRHP). The proposed staging area (Figure 1), the habitat replacement site (Figure 1), and the Project access (Figure 4) were surveyed as part of previously-approved salinity control projects.

There is an ongoing trend to pipe earthen irrigation ditches in the region (see Figure 2), many of which are eligible for listing in the NRHP. This conversion is typically viewed as an adverse effect on the eligible cultural resource. These adverse effects area mitigated through a variety of measures developed and agreed to in consultation with the Colorado SHPO. *No Action Alternative:* The No Action Alternative would have no effect on cultural resources.

Proposed Action: As a result of the Class III cultural resources inventory of the Proposed Action Area, and in consultation with the Colorado State Historic Preservation Officer (Colorado SHPO), Reclamation has determined that the Proposed Action would have an adverse effect on the documented segment of the Crawford Clipper Ditch involved with the Proposed Action, which is a resource that is eligible for listing in the NRHP. It is expected that a Memorandum of Agreement (MOA) would be executed between Reclamation and the Colorado SHPO, with CCDC participating as an invited party, outlining appropriate actions to mitigate the adverse effects of the Proposed Action (the MOA would be included in the Final EA). The MOA would also establish that any post-review discoveries trigger an Unanticipated Discovery Plan (UDP). The UDP would outline procedures that would be followed in order to protect potential archaeological materials or cultural resources discovered during implementation of the Proposed Action. The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources which is occurring as a result of irrigation piping projects. These adverse effects are addressed with mitigative measures required by the Colorado SHPO.

3.2.9 – Soils & Farmlands of Agricultural Significance

The soils units mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in the Proposed Action Area are generally sandy or stony loams that are a source of salinity in irrigation water in the region. There is an ongoing trend to pipe earthen irrigation ditches in such soils in the region (see Figure 2).

None of the soils associated with the Proposed Action are characterized as agriculturally significant (prime farmland, unique farmland, or farmland of statewide importance) under the Farmland Protection Policy Act (NRCS 2007).

No Action Alternative: The No Action Alternative would have no effect on soils characterized by NRCS as agriculturally significant. Farmlands in the Proposed Action Area would continue to produce as in the past. Salinity loading from irrigation water contact with saline soils in this segment of the Upper West Lateral would continue as it has in the past.

Proposed Action: Under the Proposed Action Alternative, installation of the buried pipe would disturb soils in the previously-disturbed ditch prism. Staging activities would take place on an existing irrigated pasture. Project activities would cause temporary disturbance to soils that are either not in irrigated agricultural production, or soils directly adjacent to irrigated agricultural lands. None of the irrigated agricultural lands are designated as agriculturally significant by NRCS (see description above). No farmlands would be permanently altered or removed from production as a result of the Proposed Action, and no interruption to agricultural production would occur. The Upper West Lateral conveys irrigation water to agriculturally significant lands across Crawford Mesa; however,

no change in the configuration of irrigated lands would occur because of the Proposed Action. No part of the irrigation season is expected to be lost during implementation of the Proposed Action.

Overall, the Proposed Action would give the CCDC the ability to better manage the irrigation water with efficiencies gained from piping the system. Soil erosion from irrigation water conveyances would be substantially reduced where ditch reaches are proposed for replacement with buried pipe. Therefore, no direct adverse effects on soils or agriculturally significant lands are expected to occur due to implementation of the Proposed Action. The Proposed Action contributes to the growing amount of piped irrigation conveyances in the region, which are collectively reducing soil erosion on a larger scale.

3.3 – Summary

Table 4 provides a summary of environmental consequences for the resources evaluated in this EA. Resource impacts are outlined for both the No Action and the Proposed Action Alternatives. Mitigation, if required, is also described.

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

Resource	**Impacts: No Action Alternative**	**Impacts: Proposed Action Alternative**
Water Rights and Use	No Effect	No effect or possible beneficial long-term effect of improving irrigation water delivery efficiencies and management. There would be a short-term temporary effect on winter stock water delivery during construction.
Water Quality	Salt and selenium loading from the Proposed Action Area would continue to affect water quality in the Colorado River Basin	An estimated salt loading reduction of 293.46 tons per year to the Colorado River Basin will result from implementation of the Proposed Action. The Proposed Action is also expected to reduce selenium loading into the Gunnison River (the amount has not been quantified). Improved water quality would likely benefit downstream aquatic species by reducing salt and selenium loading in the Gunnison and Colorado rivers. The Proposed Action contributes to ongoing regional efforts to improve water quality and reduce salinity basinwide.
Air Quality	No Effect	Minor short-term effects due to dust and exhaust created by construction equipment; no long-term effect or possible beneficial long-term effect due to a reduction in maintenance vehicle trips.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
Access, Transportation & Construction Impacts	No Effect	Minor temporary disruptions to local public roadways from construction traffic entering and existing roadways. No long-term effects. Short-term noise impacts to neighbors during daylight hours, along with two other similar projects taking place simultaneously in the local area.
Vegetative Resources and Weeds	No Effect	Impacts to vegetation where construction would occur in upland areas. Estimated long-term loss of riparian/wetland habitat due to elimination of seepage from the involved canal segments would be replaced with a Habitat Replacement Site (see Section 2.3.7). The Proposed Action would contribute to a regional trend resulting in relocation of artificially-created riparian and wetland values from earthen irrigation conveyances to habitat replacement sites. Weed control measures would be implemented as a part of the Proposed Action, and piping of the canal would remove open water and seepage from the Proposed Action Area—both important contributors to the spread and propagation of weeds.
Wildlife Resources	No effect on terrestrial and avian wildlife; salt and selenium loading from the Proposed Action Area would continue to affect aquatic dependent species	Short-term temporary adverse effect to local wildlife during construction. Short-term localized effects of the Proposed Action combined with other nearby concurrent projects are not expected to adversely impact big game. Long-term effects include loss of riparian habitat. A Habitat Replacement Site has been constructed to mitigate for the long-term loss of riparian habitat due to the Proposed Action (see Section 2.3.7). No "take" of nesting migratory birds since vegetation grubbing would take place outside the primary nesting season. Long-term impacts due to loss of riparian nesting habitat for both migratory birds and raptors along the current ditch has been offset with a Habitat Replacement Site (see Section 2.3.7). A raptor survey conducted during April and May 2020 found no nesting raptors within CPW-recommended buffer distances (CPW 2008). The Proposed Action would contribute to a regional trend resulting in relocation of artificially-created riparian and wetland values from earthen irrigation conveyances to habitat replacement sites. These activities are resulting in the redistribution of riparian and wetland-dependent wildlife across the landscape.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
Threatened & Endangered Species	Salt and selenium loading from the Proposed Action Area would continue to affect the four Colorado River basin endangered fishes and their critical habitat downstream.	Water depletions would continue at historic levels, and would continue to adversely affect downstream designated critical habitat for the four Colorado River federally endangered fishes. However, under the PBO, the Upper Colorado River Endangered Fish Recovery Program serves as mitigation for these impacts, and a Recovery Agreement has been executed between FWS and CCDC to ensure compliance with the ESA (Appendix B). The Proposed Action would improve habitat quality by contributing to the reduction of salt and selenium loading in the Gunnison and Colorado rivers.
Cultural Resources	No Effect	The Proposed Action would have an adverse effect on an NRHP eligible cultural resource. The adverse effect would be mitigated with a MOA between Reclamation and the Colorado SHPO. The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources, all of which are being addressed with mitigative measures required by the Colorado SHPO.
Agricultural Resources and Soils	No Effect	The Proposed Action would temporarily disturb the ground surface in the Action Area. BMPs would conserve soils and minimize the potential for erosion in the Proposed Action Area. The Proposed Action would not permanently affect productive irrigated farm areas or soils of agricultural significance. The Proposed Action would contribute to the growing amount of piped irrigation conveyances in the region, which helps reduce soil erosion on a larger scale.

CHAPTER 4 – ENVIRONMENTAL COMMITMENTS

This section summarizes the environmental commitments to protect resources and mitigate adverse impacts from the Proposed Action to a non-significant level. The actions in the following environmental commitment checklist will be implemented as an integral part of the Proposed Action and shall be included in the contractor bid specifications. If the Proposed Action is approved, CCDC shall use this checklist to document compliance with each environmental

commitment. CCDC shall submit the relevant component of the completed checklist to Reclamation immediately following each phase of the Project, i.e., Pre-Construction, During Construction, and Post-Construction, along with documents generated to meet environmental commitments.

Note that any construction activities proposed outside of the inventoried Proposed Action Area or the planned timeframes would first require additional review by Reclamation to determine if the existing surveys and information are adequate to evaluate additional impacts to special status plants and wildlife, including threatened, endangered, or migratory bird species.

Table 3. Environmental Commitments

Environmental Commitment	Affected Resource	Authority	Initials and Date
Pre-Construction			
A Spill Response Plan shall be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.	Water Quality	Clean Water Act of 1972 as amended	
A Stormwater Management Plan shall be prepared and submitted to CDPHE by the construction contractor prior to construction disturbance.	Water Quality	Clean Water Act of 1972 as amended	
A CWA Section 402 Storm Water Discharge Permit compliant with the National Pollutant Discharge Elimination System (NPDES) shall be obtained from CDPHE by the construction contractor prior to construction disturbance (regardless of whether dewatering would take place during construction).	Water Quality	Clean Water Act of 1972 as amended	
Certification under CDPHE Water Quality Division Construction Dewatering Discharges Permit COG070000 shall be obtained by the construction contractor prior to any dewatering activities related to construction.	Water Quality	Clean Water Act of 1972 as amended	

Environmental Commitment	Affected Resource	Authority	Initials and Date
A Memorandum of Agreement (MOA) would be executed in order to mitigate the Proposed Action's adverse effects to cultural resources and included with the Final EA.	Cultural Resources	National Historic Preservation Act of 1966 Archaeological Resources Protection Act of 1979 Paleontological Resources Preservation Act of 2009	
CCDC shall ensure that shareholders on the West Lateral are given notice prior to construction that winter stock water will not be available during construction.	Water Rights	Colorado Revised Statutes Title 37. Water and Irrigation	
Construction limits shall be clearly flagged onsite to avoid unnecessary plant loss or ground disturbance.	Vegetation, Weeds, Habitat, Wildlife	Delta County Weed Management Plan (2020)	
All equipment shall be cleaned before it is brought to the construction area, to minimize transport of new weed species to the construction area.	Vegetation, Weeds, Habitat, Wildlife	Delta County Weed Management Plan (2020)	
Prior to construction, vegetative material shall be removed by mowing or chopping, and either reserved for mulch onsite, or hauled to the County landfill or to a proposed staging area to be burned, chipped, and/or mulched. Stumps shall be grubbed and hauled to the County landfill or a proposed staging area to be burned.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	
Vegetation removal shall be confined to the smallest portion of the Proposed Action Area necessary for completion of the work.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	
Vegetation removal shall avoid the primary nesting season of migratory birds (April 1 – July 15). This timing restriction shall be noted on Project construction drawings.	Wildlife	Migratory Bird Treaty Act of 1918	

Environmental Commitment	Affected Resource	Authority	Initials and Date
Topsoil, if present, shall be stockpiled and then redistributed as top dressing after completion of construction activities.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	
During Construction			
Straw wattles, silt curtains, cofferdams, dikes, straw bales, or other suitable erosion control measures shall be used to prevent erosion from entering water bodies during construction.	Water Quality, Soil	Clean Water Act of 1972 as amended	
Any concrete pours shall occur in forms and/or behind cofferdams to prevent discharge into waterways. Any wastewater from concrete-batching, vehicle wash down, and aggregate processing shall be contained and treated or removed for off-site disposal.	Water Quality	Clean Water Act of 1972 as amended	
The construction contractor shall transport, handle, and store any fuels, lubricants, or other hazardous substances involved with the Proposed Action in an appropriate manner that prevents them from contaminating soil and water resources.	Water Quality, Soil	Clean Water Act of 1972 as amended	
Equipment shall be inspected daily and immediately repaired as necessary to ensure equipment is free of petrochemical leaks.	Water Quality, Soil	Clean Water Act of 1972 as amended	
Ground disturbances and construction areas shall be limited to only those areas necessary to safely implement the Proposed Action.	Soil, Vegetation, Weeds, Habitat, Wildlife	Archaeological Resources Protection Act of 1979 Paleontological Resources Preservation Act of 2009	

Environmental Commitment	Affected Resource	Authority	Initials and Date
If additional fill is required, fill will be taken from within the ditch prism in the future location of the Project D regulating reservoir, which lies between the two segments of Project A. Fill would be borrowed such that the existing canal would be widened within the existing ditch prism, and borrow activity would be limited to within 100 feet on either side of the ditch centerline (the extents of the cultural survey).	Cultural Resources	Archaeological Resources Protection Act of 1979 Paleontological Resources Preservation Act of 2009	
Pipeline trenches left open overnight shall be kept to a minimum and covered to reduce potential for hazards to the public and to wildlife. Covers shall be secured in place and strong enough to prevent people livestock or wildlife from falling through. Where trench covers would not be practical, wildlife escape ramps shall be used.	Wildlife, Public Safety	C.R.S. 33-1-101 to 125 Parks and Wildlife Article 1: Wildlife	
If previously undiscovered cultural or paleontological resources are discovered during construction, construction activities must immediately cease in the vicinity of the discovery and Reclamation must be notified. In this event, the SHPO shall be consulted, and work shall not be resumed until consultation has been completed, as outlined in the Unanticipated Discovery Plan in the anticipated MOA (to be included in the final EA). Stipulations in the MOA shall be incorporated into the final EA by reference. Additional surveys shall be required for cultural resources if construction plans or proposed disturbance areas are changed.	Cultural Resources	National Historic Preservation Act of 1966 Archaeological Resources Protection Act of 1979 Paleontological Resources Preservation Act of 2009	

Environmental Commitment	Affected Resource	Authority	Initials and Date
In the event that threatened or endangered species are encountered during construction, CCDC shall stop construction activities until Reclamation has consulted with FWS to ensure that adequate measures are in place to avoid or reduce impacts to the species.	Wildlife	Endangered Species Act of 1973 as amended	
Construction activities shall take place only in accordance with the schedule outlined in this EA.	Wildlife	Migratory Bird Treaty Act of 1918 Bald and Golden Eagle Protection Act of 1940	
If an active bald eagle nest or bald eagle roost site is discovered within ¼ mile of the Proposed Action during construction, or if any other active raptor nest is discovered within 1/3-mile of the Proposed Action Area during construction, construction shall cease until Reclamation can complete consultations with FWS and CPW.	Wildlife	Migratory Bird Treaty Act of 1918 Bald and Golden Eagle Protection Act of 1940	
Post-Construction			
Following construction, all disturbed areas shall be smoothed with tracked equipment (without back dragging blade), shaped, and contoured to as near to their pre-project conditions as practicable.	Soil, Vegetation, Weeds, Habitat	Clean Water Act of 1972 as amended	
All drainage patterns that intersect the ditch shall be shaped to their natural flow patterns following ditch piping.	Soil, Vegetation, Habitat	Clean Water Act of 1972 as amended	
All equipment shall be cleaned before it is transported to another job site, to avoid introducing weed species from the construction area to another job site.	Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	

Environmental Commitment	Affected Resource	Authority	Initials and Date
Re-seeding in areas surrounded by native vegetation shall occur following Project construction at appropriate times and with appropriate methods, using a drought tolerant, weed-free seed mix per Reclamation specifications (see Appendix A of the EA). CCDC shall coordinate with landowners to reseed any disturbances to irrigated areas.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	
Weed control shall be implemented by CCDC or its contractor in accordance with current Delta County weed control standards.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (2020)	

CHAPTER 5 – CONSULTATION AND COORDINATION

5.1 – Introduction

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

5.2 – Public Involvement

Notice of the public review period and availability of the Draft EA will be distributed to private landowners adjacent to the Proposed Action, and the organizations and agencies listed in Appendix C. The Final EA will also be available on Reclamation's website. Publicly-available electronic versions of the Draft and Final EA will meet the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the documents can be accessed by people with disabilities using accessibility software tools.

CHAPTER 6 – PREPARERS

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

Name	Title	Areas of Responsibility
Lesley McWhirter	Environmental and Planning Group Chief	EA review, vegetation, wildlife
Jenny Ward	Environmental Protection Specialist	EA review, cultural resources

CHAPTER 7 – REFERENCES

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CHAPTER 8 – ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Definition
BMP	Best management practice
CAA	Clean Air Act
CCDC	Crawford Clipper Ditch Company
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
cfs	cubic feet per second
CPW	Colorado Parks and Wildlife
C.R.S.	Colorado Revised Statute
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
E.O.	Executive Order
EPA	Environmental Protection Agency
FOA	Funding Opportunity Announcement
FONSI	Finding of No Significant Impact
FWS	U.S. Fish & Wildlife Service
Interior	U.S. Department of the Interior
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act

Abbreviation or Acronym	Definition
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PBO	Programmatic Biological Opinion
PM	Particulate matter
Reclamation	U.S. Bureau of Reclamation
ROW	Right-of-way
SHPO	State Historic Preservation Officer
USACE	U.S. Army Corps of Engineers

APPENDIX A – SEED LIST

MENU-BASED NATIVE SEED MIXES BY HABITAT TYPE
FOR INTERIM AND FINAL RECLAMATION

- All seed shall be tested by a registered seed analyst for viability/germination and noxious weeds at official state seed analysis lab, within a year of acceptance date.
- Certification shall include a minimum germination rate of 80%, a minimum purity of 90%, source-identification, no noxious weed seeds and no more than 0.5% weight of other weed seeds. Mulch shall be certified weed free.

Seeding rates are for drilled seed. Double seeding rate when broadcast seeding.

Mid Elevation Wyoming Big Sagebrush Shrubland (12"-16" annual precip) *November 2014*

Grass Components (Required)

Common Name	Species Name	Variety or Species	Soil Preference	Lb/ac (PLS)
Plant at Least Three of the Following				
Bluebunch Wheatgrass	*Pseudoroegneria spicata*	Native Colorado or Utah sources preferred, then Anatone or Goldar	No Limitation	2.8
Western Wheatgrass	*Pascopyrum smithii*	Native Colorado or Utah source only	No Limitation	2.8
Thickspike Wheatgrass	*Elymus lanceolatus, Agropyron dasystachyum*	Critana, Schwendimar	No Limitation Some Salt Tolerance	3.3
Indian Ricegrass	*Achnatherum [Oryzopsis] hymenoides*	Native Colorado or Utah source preferred. If not, then Nezpar, Paloma, Rimrock	No Limitation Good for dry, rocky sites	2.7
And at Least Two of the Following				
Slender wheatgrass	*Elymus trachycaulus, Agropyron trachycaulum*	San Luis	No Limitation	3.5
Bottlebrush squirreltail	*Elymus elymoides, Sitanion hystrix*	Fish Creek, Toe Jam, Wapiti	No Limitation	2.0
Sandberg bluegrass	*Poa sandbergii, Poa secunda*	UP* Colorado-Sims Mesa	No Limitation	0.3
And at Least Two of the Following				
Sand Dropseed**	*Sporobolus cryptandrus*	UP* Dolores, if available. Native Colorado or Utah sources preferred	No Limitation	0.1
Needle and Thread Grasses (Letterman, Columbia or comata)	*Hesperostipa comata, Achnatherum nelsonii or lettemanii or columbiana*	Native source within 500 miles	No Limitation Good in Sandy	0.3
Galleta	*Pleuraphis jamesii*	Native Colorado or Utah sources preferred	No Limitation	1.0

Forb and Shrub Components (Required)

Common Name	Species Name	Variety or Species	Soil Preference	Lb/ac (PLS)
Plant Three to Five of the Following				
Scarlet globemallow	*Sphaeralcea coccinea*	Native Colorado or Utah sources preferred	No Limitation	0.5
Sulfur buckwheat	*Eriogonum umbellatum*	UP* Burn Canyon	No Limitation	0.5
Winterfat	*Krascheninnikovia lanata*	Native Colorado or Utah sources preferred	No Limitation	2.4
Western yarrow	*Achillea millefolium*	UP* Dry Fork	No Limitation	0.3
Bluestem or Dusty Penstemon	*Penstemon cyanocaulis or Penstemon comarrhenus*	UP* San Miguel or UP* Delta	No Limitation	1.0
Broom Snakeweed	*Gutierrizia sarothrae*	Native Colorado or Utah sources preferred	No Limitation	0.2
Utah sweetvetch	*Hedysarum boreale*	Upper Colorado Environmental Plant Center***	No Limitation	2.0
Fernleaf biscuitroot	*Lomatium dissectum*	Native Colorado or Utah sources preferred	No Limitation	0.3
Rocky mountain beeplant	*Cleome serrulata*	Native Colorado or Utah sources preferred	No Limitation	0.5
Hairy golden aster	*Chrysopsis villosa*	Native Colorado or Utah sources preferred	No Limitation	0.5
4-Wing Saltbush	*Atriplex canescens*	Native Colorado or Utah sources preferred	No Limitation	1.0
Showy fleabane**	*Erigeron speciosus*	UP* Dry Fork	No Limitation	0.1
Lewis/Blue flax	*Linum lewisii*	Maple Grove. Native Colorado or Utah sources preferred	No Limitation	0.5

*NOTE: the following native seed resources may be out of date:
Uncompahgre Project (UP), Kathy See, nativeplant@upartnership.org , 970-240-9498, 970-901-8247
UP seed - commercial growers/distributors:
- Granite Seed, http://www.graniteseed.com/ 888-577-5650
- Southwest Seed, Walt Hennes, http://www.southwestseed.com/ 970-565-8722
- Benson Farms, Jerry Benson, http://www.bfinativeseeds.com/ 509-765-6348
- L & H Seed, Paul Herman, http://www.lhseeds.com/ 509-234-1010
- Seed-rite, Keith Schafer, http://www.seedrite.com/ 509-982-2400
- Bear Tooth Seed (was Heart Mountain Seed), Brian Duyck, 307-272-7779

** If planning to drill seed, small seeds must be packaged separately to allow for separate application. Small seeds, such as alkali sacaton, fleabane, flax and sand dropseed shall be planted no deeper than 0.25 inch or broadcast. If an entire site will be broadcast, the small seeds can go in the mix.

***Upper Colorado Environmental Plant Center, Meeker, CO; 970-878-5003

**** John Proctor, White River National Forest. (sedimentary soils @ 9500'elev)
http://www.fs.fed.us/wildflowers/Native_Plant_Materials/developing/whiteriver.shtml

Considerations for reclamation planning: (not necessarily for operators to read, but reclaim team for sure)
- Native seed mix always first choice. Introduced/non-native seed used only when judged necessary,
(1) at sites pre-determined to be difficult or (2) where correctly done native seeding has failed
    - insufficient seedbed prep, so good mixes still fail
    - drill seeding too deep (e.g., call for ¼ to ½ inch, but drilled to 1 inch), so good mixes can fail (esp problematic in very fine very loose soils)
- Truax seed drills or modified rangeland drills optional, to seed each species from different seed boxes and at different planting depths
- soil testing desirable, in some cases more than others (e.g., high SAR)
- no specific spring/fall seeding schedule
- require mulch
- small seeds, such as alkali sacaton, sand dropseed, sage (maybe Junegrass, bluegrasses?) should be planted at a depth no deeper than 0.25 inch or broadcast. If the entire site will be broadcast, they could go in the mix...

APPENDIX B – ENDANGERED SPECIES ACT COMPLIANCE DOCUMENTATION

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
445 West Gunnison, Suite 240
Grand Junction, Colorado 81501-5711

IN REPLY REFER TO:
ES/GJ-6-CO-09-F-001-GP029
TAILS 06E24100-2016-F-0022

February 17, 2016

Memorandum

To: Area Manager, Bureau of Reclamation, Upper Colorado Region, Western Colorado Area Office

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

Subject: Consultation under Section 7 of the Endangered Species Act for the Zanni Lateral Pipeline Project for Gunnison Basin Programmatic Biological Opinion (PBO)

In accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.), and the Interagency Cooperation Regulations (50 CFR 402), the Fish and Wildlife Service (Service) transmits this correspondence to serve as the final biological opinion (BO) for the Zanni Lateral Pipeline Project and associated Historic Depletions for Gunnison Basin PBO.

Under the Colorado River Salinity Control Act Basin States Program, Bureau of Reclamation (Reclamation) will provide funding assistance for the proposed Zanni Lateral Pipeline Project (project) in order to reduce salt loading into the Colorado River. Contracts and funding for this Basin States-funded project pass through the State of Colorado to the Crawford Clipper Ditch Company (Company). The pipeline component of the proposed action is located immediately southeast of the Town of Crawford in southeastern Delta County. The proposed action includes all activities associated with the piping project, including borrow and staging areas, and the habitat replacement site. The proposed piping project will replace approximately 8,885 linear feet of unlined open irrigation ditch with approximately 14,114 linear feet of buried pipe, including 8,647 linear feet for irrigation, and 5,647 linear feet for winter stock water delivery. All buried pipe will be installed in the existing ditch or ditch prism, with the exception of the last 1,600 feet of pipeline and a 490-foot pipeline spur, which will cross irrigated ground and semi-desert shrub lands. Approximately 1,575 feet of the existing irrigation ditch would be decommissioned by backfilling. Construction activities would be limited to 30-foot-wide construction rights-of-way (or narrower in residential areas). Proposed borrow sites and staging areas totaling approximately 7.6 acres are located on private lands near the proposed project. The proposed action will result in no change to the Company's historic depletions to the

Colorado River Basin of approximately 5,776 acre-feet per year (AF/yr), and there are no new depletions.

In accordance with Basin States Program requirements, the replacement of wildlife values foregone as the result of impacts from salinity control activities is a component of this salinity control project. The Reclamation-approved Habitat Replacement Site is located in northeastern Montrose County approximately 3.5 miles south-by-southeast of the Town of Crawford. The Habitat Replacement site is located in an area of existing man-made ponds in the Alkali Creek drainage on nearby private land protected by a conservation easement (Hart Ranch). Access to the pipeline alignment and the Habitat Replacement Site is on existing roads, so no new roads will be constructed as a result of the proposed action. Habitat replacement activities will include cleaning and enlargement of existing pothole ponds, installation of a water control structure/s, plantings of native riparian woody vegetation, and weed management.

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated on January 22, 1988. The Recovery Program was intended to be the reasonable and prudent alternative for individual projects to avoid the likelihood of jeopardy to the endangered fishes from impacts of depletions to the Upper Colorado River Basin. In order to further define and clarify the process in the Recovery Program, a section 7 agreement was implemented on October 15, 1993, by the Recovery Program participants. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan (RIPRAP) which identifies actions currently believed to be required to recover the endangered fishes in the most expeditious manner.

On December 4, 2009, the Service issued a final Gunnison River Basin Programmatic Biological Opinion (PBO) (this document is available for viewing at the following internet address: http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/GUPBO.pdf). The Service has determined that projects that fit under the umbrella of the Gunnison River PBO would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts. The Gunnison River PBO states that in order for actions to fall within the umbrella of the PBO and rely on the RIPRAP to offset its depletion, the following criteria must be met.

1. A Recovery Agreement must be offered and signed prior to conclusion of section 7 consultation.

2. A fee to fund recovery actions will be submitted as described in the proposed action for new depletion projects greater than 100 AF/yr. The 2016 fee is $20.87 per AF and is adjusted each year for inflation.

3. Reinitiation stipulations will be included in all individual consultations under the umbrella of this programmatic.

4. The Service and project proponents will request that discretionary Federal control be retained for all consultations under this programmatic.

The Recovery Agreement was signed by the Service and the Water User. The depletions associated with this project are historic depletions which do not make contributions to fund recovery actions. The Reclamation has agreed to condition its approval documents to retain jurisdiction should section 7 consultation need to be reinitiated. Therefore, the Service concludes that the subject project meets the criteria to rely on the Gunnison PBO to offset depletion impacts and is not likely to jeopardize the continued existence of the species and is not likely to destroy or adversely modify designated critical habitat.

The reinitiation criteria for the Gunnison PBO apply to all projects under the umbrella of the PBO. For your information the reinitiation notice from the Gunnison River PBO is presented below.

REINITIATION NOTICE

This concludes formal consultation on the subject action. The proposed action includes adaptive management because additional information, changing priorities, and the development of the States' entitlement may require modification of the Recovery Action Plan. Therefore, the Recovery Action Plan is reviewed annually and updated and changed when necessary and the required time frames include changes in timing approved by means of the normal procedures of the Recovery Program, as explained in the description of the proposed action. Every 2 years, for the life of the Recovery Program, the Service and Recovery Program will review implementation of the Recovery Action Plan actions that are included in this BO to determine timely compliance with applicable schedules. As provided in 50 CFR sec. 402.16, reinitiation of formal consultation is required for new projects where discretionary Federal Agency involvement or control over the action has been retained (or is authorized by law) and under the following conditions:

1. **The amount or extent of take specified in the incidental take statement for this opinion is exceeded.** The terms and conditions outlined in the incidental take statement are not implemented. The implementation of the proposed reoperation of Aspinall and the Selenium Management Program will further decrease the likelihood of take caused by water depletion impacts.

2. **New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion**, such as impacts due to climate change. In preparing this opinion, the Service describes the positive and negative effects of the action it anticipates and considered in the section of the opinion entitled "EFFECTS OF THE ACTION."

3. **The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the BO.** It would be considered a change in the action subject to consultation if the reoperation of Aspinall and the Selenium Management Program described in this opinion are not implemented within the required timeframes. If a draft Selenium Management Program document is not completed within 18 months of the final PBO and a final document within 24 months, reinitiation of consultation will be required. Reinitiating consultation could consist of an

exchange of memoranda examining the progress made on the plan and evaluating the consequences of extending the timeframe. Also, at any time, if funding is not available to implement the Selenium Management Program reinitiation of consultation will be required.

The analysis for this BO assumed implementation of the Colorado River Mainstem Action Plan of the RIPRAP because the Colorado pikeminnow (*Ptychocheilus lucius)* and razorback sucker *(Xyrauchen texanus*) that occur in the Gunnison River use the Colorado River and are considered one population. The essential elements of the Colorado River Plan are as follows: 1) provide and protect instream flows; 2) restore floodplain habitat; 3) reduce impacts of nonnative fishes; 4) augment or restore populations; and 5) monitor populations and conduct research to support recovery actions. The analysis for the non-jeopardy determination of the proposed action that includes about 37,900 AF/yr of new water depletions from the Gunnison River Basin relies on the Recovery Program to provide and protect flows on the Gunnison and Colorado Rivers.

4. **The Service lists new species or designates new or additional critical habitat, where the level or pattern of depletions covered under this opinion may have an adverse impact on the newly listed species or habitat.** If the species or habitat may be adversely affected by depletions, the Service will reinitiate consultation on the PBO as required by its section 7 regulations. The Service will first determine whether the Recovery Program can avoid such impact or can be amended to avoid the likelihood of jeopardy and/or adverse modification of critical habitat for such depletion impacts. If the Recovery Program can avoid the likelihood of jeopardy and/or adverse modification of critical habitat no additional recovery actions for individual projects would be required, if the avoidance actions are included in the Recovery Action Plan. If the Recovery Program can't avoid the likelihood of jeopardy and/or adverse modification of critical habitat then the Service will reinitiate consultation and develop reasonable and prudent alternatives.

If the annual assessment from Reclamation's reports indicates that the operation of the Aspinall Unit to meet flow targets or that the Selenium Management Program, as specified in this opinion has not been implemented as proposed, Reclamation will be required to reinitiate consultation to specify additional measures to be taken by Reclamation or the Recovery Program to avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletions and water quality. Also, if the status of all four fish species has not sufficiently improved, as determined by the Service in a formal sufficient progress finding under provisions of the Recovery Program, Reclamation will be required to reinitiate consultation. If other measures are determined by the Service or the Recovery Program to be needed for recovery prior to the review, they can be added to the Recovery Action Plan according to standard procedures. If the Recovery Program is unable to complete those actions which the Service has determined to be required, Reclamation will be required to reinitiate consultation in accordance with ESA regulations and this opinion's reinitiation requirements.

All individual consultations conducted under this programmatic opinion will contain language requesting the applicable Federal agency to retain sufficient authority to reinitiate consultation should reinitiation become necessary. The recovery agreements to be signed by non-Federal entities who rely on the Recovery Program to avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts related to their projects will provide that such non-Federal entities also must request the Federal agency to retain such authority. Non-Federal entities will agree by means of recovery agreements to participate during reinitiated consultations in finding solutions to the problem which triggered the reinitiation of consultation.

We concur that the proposed action associated with the Zanni Lateral Pipeline Project may affect but is not likely to adversely affect the Yellow-billed cuckoo (*Coccyzus americanus*). Regarding its proposed critical habitat, we acknowledge your determination of no effect, but neither 7(a) (3) of the Act, nor implementing regulations under section 7(a) (2) of the Act require the Service to review or concur with this determination. However, we do appreciate you informing us of your analysis for western yellow-billed cuckoo critical habitat even if not required to do so under the Act.

If you have any questions regarding this consultation or would like to discuss it in more detail, please contact Barb Osmundson of our Grand Junction Ecological Services Field Office at (970)628-7189.

Attachment

cc: FWS/UCREFRP, Lakewood

GUNNISON RIVER RECOVERY AGREEMENT

This RECOVERY AGREEMENT is entered into this 8th day of January, 2014, by and between the United States Fish and Wildlife Service (Service) and **Crawford Clipper Ditch Company** (Water User).

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

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

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

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

WHEREAS, Water User is the **Crawford Clipper Ditch Company**, which causes or will cause depletions to the Gunnison River subbasin from its **Crawford Clipper Ditch System diversion on the Smith Fork of the Gunnison River** with the implementation of **Salinity Control Projects** (Water Projects); and

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

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

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

1. The Service agrees that implementation of the Recovery Elements specified in the 2009 Opinion will avoid the likelihood of jeopardy and adverse modification under section 7 of the ESA, for depletion impacts caused by Water User's Water Project. Any consultations under

section 7 regarding Water Project's depletions are to be governed by the provisions of the 2009 Opinion. The Service agrees that, except as provided in the 2009 Opinion, no other measure or action shall be required or imposed on Water Project to comply with section 7 or section 9 of the ESA with regard to Water Project's depletion impacts or other impacts covered by the 2009 Opinion. Water User is entitled to rely on this Agreement in making the commitment described in paragraph 2.

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

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

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

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

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

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

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

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

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

1-6-16

Crawford Clipper Ditch Company Date

Water User Representative

2/2/16

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

APPENDIX C – DISTRIBUTION LIST

All landowners adjacent to the Proposed Action
Citizens for a Healthy Community
Colorado Office of Archaeology and Historic Preservation
Colorado Parks and Wildlife
Colorado River Water Conservation District
Colorado Water Conservation Board
Crawford Area Chamber of Commerce
Delta Montrose Electric Association
Delta County Road & Bridge Department
Delta County Independent
Town of Crawford
Trout Unlimited
U.S. Army Corps of Engineers
U.S. Department of Agriculture Natural Resources Conservation Service
U.S. Fish and Wildlife Service
Western Slope Conservation Center