



— BUREAU OF —  
RECLAMATION

# **Draft Environmental Assessment for the Crawford Clipper Jerdon- West-Hamilton Laterals Piping Project**

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



## **Mission Statements**

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# **Draft Environmental Assessment for the Crawford Clipper Jerdon- West-Hamilton Laterals Piping Project**

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

*Prepared for the Bureau of Reclamation by  
Rare Earth Science, LLC*

**January 2023**

Cover Photo: View of the West Lateral, August 2020, Delta County, Colorado.  
(ERO Resources).

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# CHAPTER 1 - INTRODUCTION

This Environmental Assessment (EA) has been prepared to explain and evaluate the potential environmental effects of Crawford Clipper Ditch Company's (CCDC's) proposed Clipper Jerdon-West-Hamilton Laterals Piping Project ("Project" or "Proposed Action"). The Federal action evaluated in this EA is whether the Bureau of Reclamation (Reclamation) would provide funding assistance to CCDC (the "Applicant") for the Proposed Action. Reclamation is authorized by the Colorado River Basin Salinity Control Act's Colorado River Basinwide Salinity Control Program to fund the Proposed Action under the 2017 Funding Opportunity Announcement (FOA) BOR-UC-17-F003.

Reclamation has prepared this EA in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ's) NEPA regulations at 40 Code of Federal Regulations (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 is located in southeast Delta County, near the Town of Crawford, Colorado, and involves a "piping component" and a "habitat replacement component," which are in separate physical locations (Project Areas). The Project Areas involved in the Proposed Action and their general physical locations are listed in Table 1 and shown on Figure 1.

The Project lies on private land, with the following exception: a 60-foot-long segment of the Jerdon lateral is on public land administered by the U.S. Department of the Interior, Bureau of Land Management (BLM), Uncompahgre Field Office.

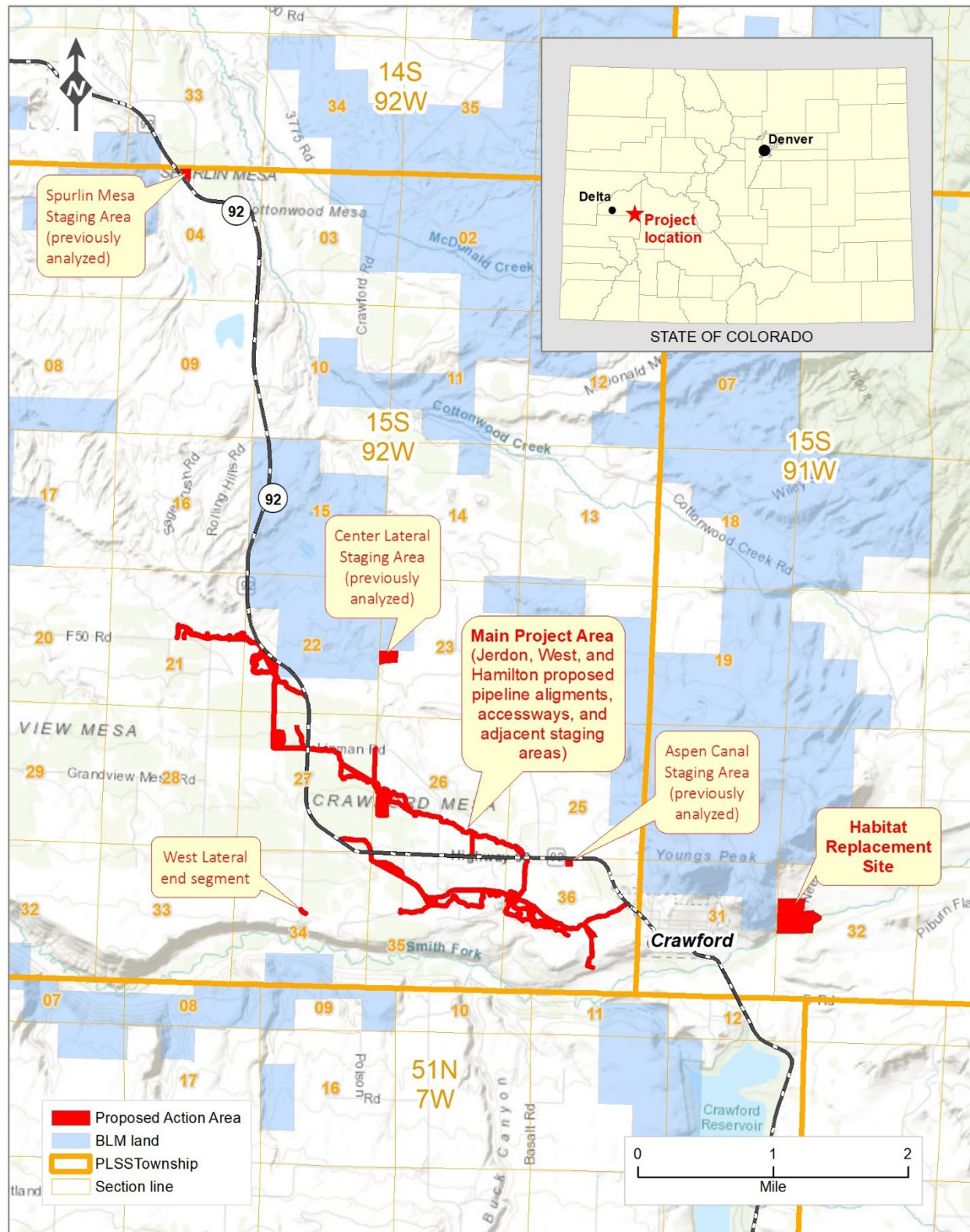
Table 1. Areas Involved in the Proposed Action

Project Area	Specific Project Element or Activity	General Physical Location	Previous Analyses Incorporated by Reference
Main Project Area	The piping component: West, Hamilton, and Jerdon laterals of the Crawford Clipper Ditch	T15S R92W of the 6 <sup>th</sup> PM: Sections 21, 22, 25, 26, 27, 34, 35, 36, all in Delta County.	--

<b>Project Area</b>	<b>Specific Project Element or Activity</b>	<b>General Physical Location</b>	<b>Previous Analyses Incorporated by Reference</b>
Habitat Replacement Site	Habitat replacement	T15S R91W of the 6 <sup>th</sup> PM: Section 32, in Delta County.	--
Aspen Canal Staging Area	Staging area for supplies and equipment to and during construction	T15S R92W of the 6 <sup>th</sup> PM: Section 36, in Delta County.	The “Aspen Canal Staging Area” in the general physical location of this Project Area was previously analyzed and authorized as part of the Aspen Canal Piping Project (see Section 1.6).
Spurlin Mesa Staging Area	Staging area for supplies and equipment to and during construction	T15S R92W of the 6 <sup>th</sup> PM: Section 4, in Delta County.	The “Spurlin Mesa Staging Area” was previously analyzed and authorized as part of the Clipper Center Lateral Piping Project (see Section 1.6).
Center Lateral Staging Area	Material for pipe bedding, if needed	T15S R92W of the 6 <sup>th</sup> PM: Section 23, in Delta County.	The “Center Lateral Staging Area” was previously analyzed and authorized as part of the Clipper Center Lateral Piping Project (see Section 1.6).



Figure 1. Map of project location.



## **1.2 - Need for and Purpose of the Proposed Action**

The need and purpose for the Proposed Action is to reduce salinity concentrations in the Colorado River basin in order to comply with the Colorado River Basin Salinity Control Act (Reclamation's federal nexus). The Proposed Action would eliminate seepage loss from approximately 6.5 miles of open unlined ditch laterals associated with the Crawford Clipper Ditch system, reducing salinity loading by 2,614 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 Project.

## **1.4 – Background**

### **1.4.1 – Salinity Control Program**

The threat of salinity loading in the Colorado River basin is a major concern in both the United States 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. Salinity control projects are awarded based on applications received on Funding Opportunity Announcements (FOAs) issued by Reclamation. As part of the FOAs, applicants are evaluated individually according to the following criteria: cost effectiveness, the ability to enable on-farm salinity control features, risk assessment, detailed project plan, costs & capability to implement the project, future operation & maintenance and management capabilities for the project, past performance, and Department of the Interior goals. Applications are ranked by an Application Review Committee made up of multiple disciplines, and high ranking projects are recommended to the Salinity Control Program Manager for consideration. The Salinity Control Program Manager then provides recommendations to the Grants Officer for

award. Once constructed, the facilities are operated, maintained, and replaced by the applicant at their own expense.

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

### **1.4.2 – The Applicant**

CCDC, the Applicant, is a privately owned, non-profit, mutually-funded irrigation company incorporated and operating in Delta County since 1885. 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. The irrigated crops associated with the system include hay crops and grass pasture.

## **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 is the process of or has recently utilized Salinity Control Program funds for the following salinity control projects in the vicinity of the proposed Project Area (Figure 2, below):

- Bostwick Park Siphon Lateral Piping Project
- C Ditch/Needle Rock Piping Project
- Cattleman's Ditches Piping Project Phases I and II
- Clipper Center Lateral Piping Project and Project A
- Eastside Laterals Piping Projects ("UVWUA Project 9" and "UVWUA Project 10")
- Fire Mountain Canal Piping Project
- Forked Tongue/Holman Ditch Piping Project
- Gould Canal Improvement Projects A & B
- Grandview Canal Upper Piping Project
- Grandview Canal Middle and Lower Piping Project
- Upper and Lower Stewart Ditch Piping Projects
- Minnesota Canal Piping Project Phase I and II
- Minnesota L75 Piping Project
- Needle Rock-Lone Rock Piping Project
- North Delta Canal Piping Project

- Orchard Ranch Piping Project
- Pilot Rock Ditch Piping Project
- Short Ditch Extension Piping Project
- Slack and Patterson Lateral Piping Project
- Spurlin Mesa Lateral Piping Project (“Clipper Project 4”)
- Turner-Lone Cabin Combination Piping Project
- Waterdog and Shinn Park Laterals Piping Project
- Zanni Lateral Piping Project

### **1.5.2 – CRSP Basin Funds**

Reclamation’s Western Colorado Area Office recently utilized Colorado River Storage Project (CRSP) Basin Funds to implement the Aspen Canal Piping Project and the GK Lateral Piping Project in the vicinity of the Proposed Action Area (Figure 2).

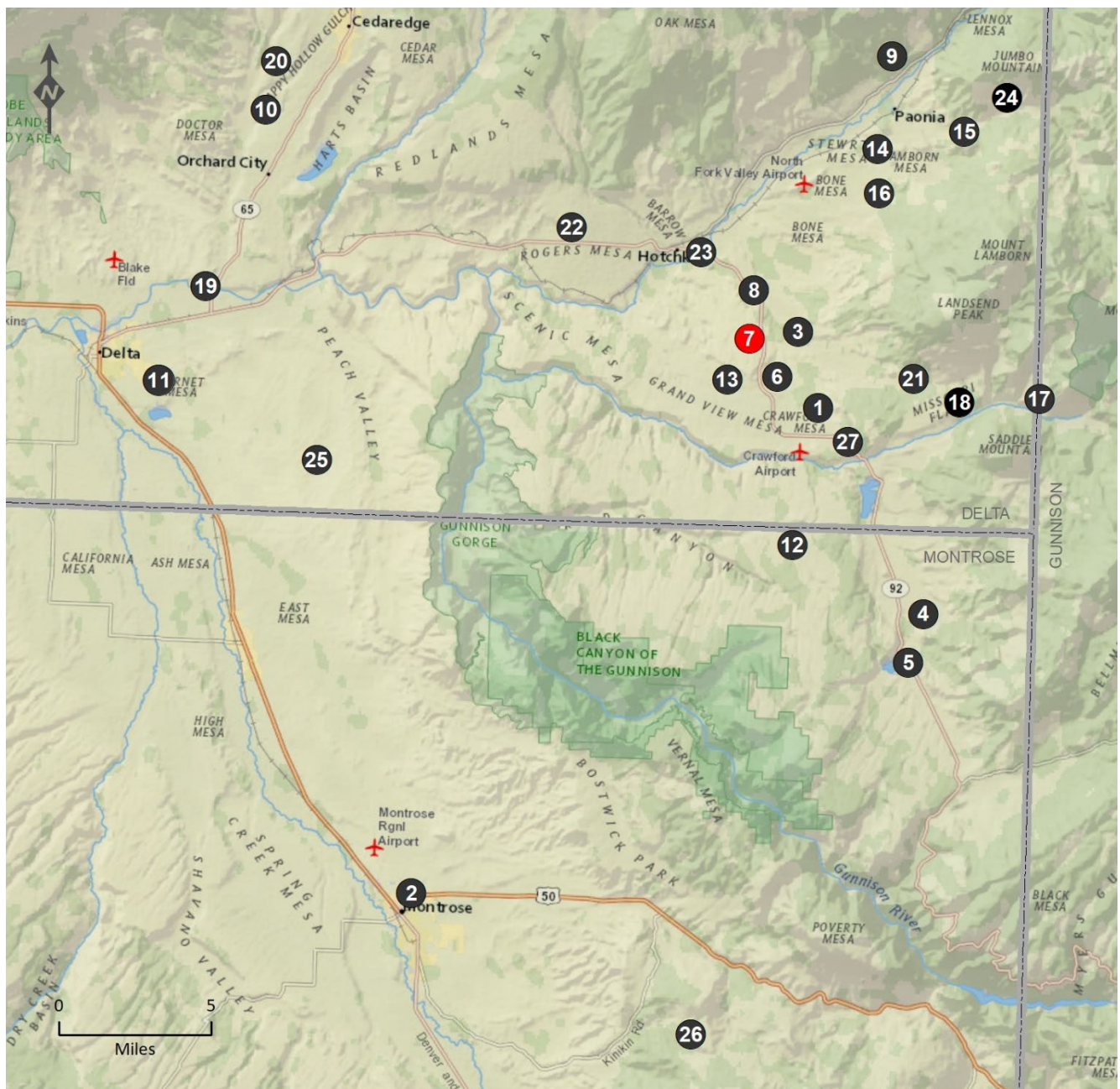
### **1.5.3 – RCPP Funds**

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 2):

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



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



- |  |  |  |
|--|--|--|
| 1 Aspen Canal Piping Project                   | 10 Forked Tongue/Holman Ditch Project          | 19 North Delta Canal Piping Project              |
| 2 Bostwick Park Salinity Control Project       | 11 GK Lateral Piping Project                   | 20 Orchard Ranch Piping Project                  |
| 3 C Ditch/Needle Rock Pipeline Project         | 12 Gould Canal Improvement Projects A & B      | 21 Pilot Rock Ditch Piping Project               |
| 4 Cattlemans Ditches Pipeline Project Phase I  | 13 Grandview Canal Piping Projects             | 22 Rogers Mesa WDA Slack & Patterson Laterals    |
| 5 Cattlemans Ditches Pipeline Project Phase II | 14 Lower & Upper Steward Ditch Pipelines       | 23 Short Ditch Extension Piping Project          |
| 6 Clipper Center Lateral Piping Project        | 15 Minnesota Canal & Reservoir Projects I & II | 24 Turner/Lone Cabin Combination Piping Project  |
| <b>7 Clipper Jerdon-West-Hamilton Piping</b>   | 16 Minnesota L75 Piping Project                | 25 UVWUA Phases 9 & 10                           |
| 8 Crawford Clipper Project 4                   | 17 Needle Rock Diversion Project               | 26 Waterdog & Shinn Park Laterals Piping Project |
| 9 Fire Mountain Canal Piping Project           | 18 Needle Rock/Lone Rock Piping Project        | 27 Zanni Lateral Pipeline Project                |

## 1.6 – NEPA Sufficiency Review

The 60-foot-long portion of the Project that lies on BLM land is in the Main Project Area in the southwest corner of Section 22, Township 15 South, Range 92 West (T15S R92W) of the 6<sup>th</sup> Principal Meridian (PM). This segment of the Jerdon lateral on BLM is planned for decommissioning, and the Applicant's historic prescriptive easement would be abandoned there. Reclamation confirmed with BLM that BLM authorization is not required for this activity. BLM Uncompahgre Field Office will review the EA for the Proposed Action, but has no connected action Proposed Action.

Certain Project Areas and activities have already been analyzed and authorized under the NEPA process for related projects, and are proposed for continuing use under the Proposed Action. These include the Aspen Canal Staging Area, the Spurlin Mesa Staging Area, and the Center Lateral Staging Area.

The Aspen Canal Staging Area was used as a staging area for Reclamation's Aspen Canal Piping Project, and is currently proposed for that same use. No change in use would occur under the current Proposed Action which would change the environmental analysis contained in the 2019 EA for the Aspen Canal Piping Project (Reclamation 2019a). A FONSI was signed by the WCAO on February 27, 2019 documenting that there would be no significant impact resulting from utilizing this area for staging.

The Center Lateral Staging Area was used as a staging area for soil stockpiles generated during the Clipper Center Lateral Piping Project, and these soil stockpiles are currently proposed for use as pipe bedding (if necessary) for the Proposed Action. No change in use would occur under the current Proposed Action which would change the environmental analysis contained in the Clipper Center Lateral Piping Project EA (Reclamation 2019b). A FONSI was signed by the WCAO on October 18, 2019 documenting that there would be no significant impact resulting from utilizing this area for staging.

The Spurlin Mesa Staging Area was used as a staging area for Clipper Irrigation Salinity Control Project 4 and the Clipper Center Lateral Piping Project, and is currently proposed for that same use. No change in use would occur under the current Proposed Action which would change the environmental analysis contained in the 2014 EA for the Clipper Irrigation Salinity Control Project 4 (Reclamation 2014) or the Documentation of NEPA Adequacy for the Clipper Center Lateral Piping Project (Reclamation 2019c). A FONSI was signed by the WCAO on April 25, 2014 documenting that there would be no significant impact resulting from utilizing this area for staging.

## 1.7 - 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:

- U.S. Bureau of Land Management, Uncompahgre Field Office, Montrose, CO

- Colorado State Historic Preservation Office, Denver, CO
- U.S. Army Corps of Engineers, Northwestern Colorado Branch, Grand Junction, CO
- Southern Ute Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)
- U.S. Fish & Wildlife Service, Ecological Services, Grand Junction, CO
- Colorado Parks & Wildlife, Grand Junction, CO

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

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

Table 2. 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 were identified within the Proposed Action Area. Neither the No Action Alternative, nor the Proposed Action Alternative, would affect Indian trust assets or Native American sacred sites. To confirm this finding, Reclamation provided the Ute Mountain Ute Tribe, the Ute Indian Tribe (Uintah and Ouray Reservation), and the Southern Ute Indian Tribe with a description of the Proposed Action and a written request for comments regarding any potential effects on Indian trust assets or Native American sacred sites as a result of the Proposed Action Alternative. No comments were received.
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. Therefore, neither the No Action Alternative nor the Proposed Action Alternative, would have an effect on these resources.

Resource	Rationale for Elimination from Further Analysis
Public lands grazing and recreation	BLM land involved with the Proposed Action is restricted to approximately 60 feet of ditch to be decommissioned and abandoned. The location is at the southwest corner of Section 22, T15S R92W of the 6 <sup>th</sup> PM. This location is part of a 4.5-acre parcel that is physically separated from a larger 1,063-acre block of public land by State Highway 92. The BLM land involved with the Proposed Action is without public access for recreation or grazing, and therefore there is no recreation or grazing on the parcel. Therefore, neither the No Action Alternative, nor the Proposed Action Alternative, would have an effect on public lands grazing or recreation.

## 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 the Project. The ditches proposed for piping would continue to flow in open, earthen ditches, and the resultant salt loading to the Lower Gunnison Basin and the Colorado River Basin would continue.

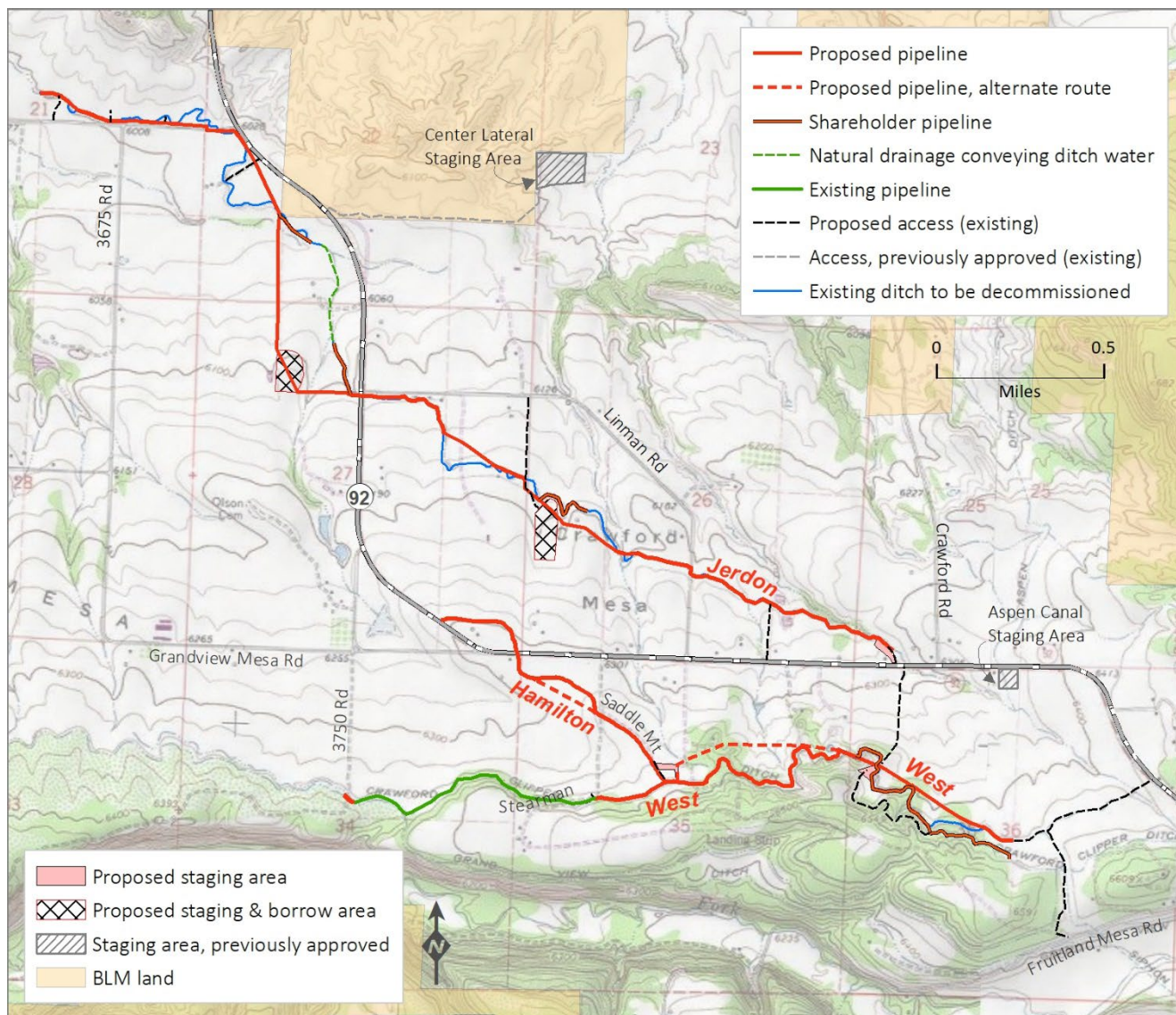
### 2.2 – Proposed Action

Under the Proposed Action, Reclamation would authorize funding to the Applicant to implement the Clipper Jerdon-West-Hamilton Laterals Piping Project. The Project would include converting approximately 6.6 miles of open irrigation ditches to buried pipeline (the “piping component”) and establishment of a 42.4-acre Habitat Replacement Site (the “habitat component”) to maintain the value of the riparian and wetland habitat which would be lost as a result of the piping component.

The open ditches to be converted to buried pipeline are the West lateral, the Hamilton lateral, and the Jerdon lateral of the Crawford Clipper Ditch system (Figure 3).



Figure 3. Main project area plan.



The alignments of the proposed pipelines would follow a combination of existing ditch alignments and new alignments (outside the existing ditch primis) where such realignments would shorten piped distances and landowners have agreed to the realignments.

The Jerdon lateral pipeline would just north of Highway 92 and upstream of where the current Jerdon lateral is divided from the Center lateral. The Jerdon lateral pipeline would continue northwesterly across Crawford Mesa, to the end of the current CCDC-maintained Jerdon lateral northwest of the intersection of F50 and 3675 Roads. The Jerdon lateral pipeline would cross three public roads (Highway 92, Linman Road, and F50 Road) and three seasonal or ephemeral drainages. Two shareholder and/or winter stockwater pipelines would depart from the Jerdon lateral pipeline and follow the existing Jerdon ditch to their outlets. An additional shareholder pipeline would initiate on a Jerdon Lateral tailwater feeder ditch (“Alum Ditch”) and then follow the same trench as the Jerdon lateral pipeline after collecting tailwater from the Alum drainage. The use of a segment of

natural drainage as a conveyance for shareholder water and winter stock water in the west part of the Jerdon project area would continue following completion of the Project.

The West lateral pipeline would connect on its east (upstream) end to the Upper West lateral pipeline (a related project proposed for funding by NRCS), and extend westerly to connect to an existing buried pipeline segment of the West lateral near Stearman Road. If enough funds are available, an additional approximately 400-foot segment of the West lateral (the “West lateral end segment”) would be added to the existing piped part of the West lateral near 3750 Road (Figure 3). The proposed West lateral pipeline would cross one public road (Saddle Mountain Lane), and the proposed West lateral end segment pipeline would cross 3750 Road. A shareholder pipeline related to the West lateral would connect to a branch of the Upper West lateral pipeline (a related project proposed for funding by NRCS) and follow the existing West lateral ditch alignment to the shareholder’s outlet location (Figure 3). An alternate route is under consideration for a portion of the West lateral (Figure 3) and is being analyzed by this EA in case the landowner decides to execute a pipeline easement with CCDC prior to construction.

The Hamilton lateral pipeline would initiate at the existing location of the Hamilton lateral split on the West lateral and extend northwesterly, making one crossing of Highway 92 and one crossing of Stearman Road, and ending at the CCDC-maintained terminus of the existing Hamilton lateral. An alternate route is under consideration for a portion of the Hamilton lateral (Figure 3) and is being analyzed by this EA in case the landowner decides to execute a pipeline easement with CCDC prior to construction.

Overall, approximately 7.1 miles of buried pipeline alignments would result from the Project. Pipelines would be installed in approximately 5 miles of existing ditch prisms (i.e., direct conversion of the ditch to pipe), and about 2.1 miles of pipeline alignments outside the existing ditch prisms would be created. Following construction, approximately 1.6 miles of existing ditches would be abandoned.

If the two alternate route segments (Figure 3) under consideration for the West and Hamilton pipelines are both adopted, a total of approximately 7 miles of pipelines would be installed in approximately 4.1 miles of existing ditch prisms (direct conversion of ditch to pipe), about 2.9 miles of pipeline alignments would be created outside the existing ditch prisms, and 2.5 miles of ditches would be abandoned. The alternate route segment under consideration on the Hamilton Lateral would leave the existing ditch prism for a distance of 0.2 mile, bypassing about 0.24 mile of existing ditch, and the alternate route segment under consideration on the West lateral would leave the existing ditch prism for a distance of 0.6 miles, bypassing about 0.7 mile of existing ditch. Both alternate routes would cross irrigated farmlands.

The pipelines would be polyvinylchloride (PVC) irrigation pipe, high-density polyethylene (HDPE) (or similar). The pipe diameter would vary from 36 inches (main lines) to 2 inches (certain shareholder distribution lines). A variety of control structures (valves, air vents, meters, etc.) and outlets (farm turnouts) would be installed on the pipelines. No new water storage, pump stations, compressor stations, or new irrigated farm areas would be associated with the Proposed Action.

The habitat replacement component of the Proposed Action consists of conveying a perpetual conservation easement on CCDC-owned lands to a local land trust, to protect the property’s wildlife

conservation values from subdivision and development. No physical activity or ground disturbance would be associated with the habitat component of the Proposed Action (see Section 2.2.8).

Table 3, below, is a summary of project elements (distances and estimated acreages involved are approximate). Distances of pipelines given in Table 3 are disturbance footprints, not linear distances of pipelines, because in some areas, multiple pipes (main pipes along with shareholder delivery lines) would be installed in the same trench. These elements were compiled from a review of the engineer's construction design drawings and a GIS analysis using Esri® ArcGIS Desktop software.

Table 3. Summary of Project Elements for the Proposed Action

Element	Total Area Involved	Comment
Ditches involved with the Proposed Action	6.6 mi	The existing Jerdon (3.8 mi), West (1.8 mi), Hamilton (0.9 mi) laterals of the Crawford Clipper Ditch system. In addition, an approximately 0.1-mile stretch of a tailwater collection ditch would be piped as a shareholder conveyance. Approximately 0.3 mi of the Jerdon lateral uses a natural drainage as a conveyance. Use of the natural drainage as a conveyance for shareholder water and winter stock water would continue following completion of the Project.
Total pipeline alignments to be installed (disturbance footprint)	7.1 mi (51.6 acres)	Pipelines would be installed directly in approximately 5 miles of existing ditch prisms, and approximately 2.1 miles of pipeline alignments would be installed outside existing ditch prisms. The width of the construction footprint would vary from approximately 25 to 60 feet depending on site characteristics (disturbance footprint acreage is based on the maximum disturbance footprint width of 60 feet).
Existing ditch to be abandoned & decommissioned	1.6 mi (11.6 acres)	Total miles of segments of ditch/prism proposed for abandonment and decommissioning because of realignments. The involved acreage estimates are based on a maximum disturbance footprint width of 60 feet (although the disturbance width could be as narrow as 25 feet).
Alternate routes scenario: total pipeline alignments to be installed (disturbance footprint)	7 mi (50.9 acres)	If both alternate configurations are piped, the total amount of pipe alignment would be reduced by approximately 0.1 mile. Pipe would be installed in approximately 4.1 miles of existing ditch prisms and approximately 2.9 miles of pipeline would be installed in alignments outside the existing ditch prisms. The width of the construction footprint would vary from approximately 25 to 60 feet depending on site characteristics (disturbance footprint acreage is based on the maximum disturbance footprint width of 60 feet).

Element	Total Area Involved	Comment
Alternate routes scenario: existing ditch to be abandoned & decommissioned	2.5 mi (21.8 acres)	If the alternate configurations explained above are piped, an additional approximately 0.94 mile of ditch would be bypassed, and decommissioned and abandoned. The involved acreage estimates are based on a maximum disturbance footprint width of 60 feet (although the disturbance width could be as narrow as 25 feet).
Staging and borrow areas (8 total areas)	33.8 acres total	There are six staging areas and two combination staging/borrow areas proposed for the Project. Three of the staging areas (the Spurlin Mesa Staging Area [7.6 acres], the Center Lateral Staging Area [8.5 acres] and the Aspen Canal Staging Area [2.1 acres]) were previously approved for related projects (see Section 1.6). The other three staging areas (totaling 2.8 acres) proposed for the Project are on pastures or previously disturbed ground. The two proposed combination borrow/staging areas are 6.9 acres and 5.9 acres, respectively, on a combination of disturbed ground and dryland pastures in the Jerdon Lateral area. The 8.5-acre Center Lateral Staging Area is where spoil piles reserved from constructing a regulating pond for the previously-analyzed Clipper Center Lateral Piping Project are stored. These piles are proposed to be used for pipe bedding material for the Proposed Action, if necessary.
Access routes	4.4 mi	Fourteen separate accessways totaling 3.7 miles are proposed for the Project. These are all existing private roads leading from county roads or Highway 92 to construction alignments. A 0.7-mile existing road on BLM land leads to the Center Lateral Staging Area and is part of CCDC's operating and maintenance access for the Center Lateral. This accessway was previously approved for the Center Lateral Piping Project.
Habitat replacement	42.4 acres	Riparian/wetland habitat values affected as a result of piping the ditches would be maintained with a perpetual conservation easement on land owned by CCDC on the Smith Fork River. The conservation easement prohibits subdivision or development of the land. Ongoing maintenance activities such as weed control and grazing would be permitted to maintain the riparian and wetland conservation values of the land.

The following subsections explain the construction methods and describe other aspects (staging, schedule, post-construction activities, habitat replacement) of the Proposed Action. For all aspects of the Proposed Action, Best Management Practices (BMPs) would minimize impacts of the project

on the human and ecological environments. BMPs and other protective measures are incorporated as part of the Proposed Action, are described and analyzed as part of the Proposed Action in CHAPTER 3 (Affected Environment & Environmental Consequences), and are summarized in CHAPTER 4 (Environmental Commitments).

### **2.2.1 – Pipeline Installation**

Pipeline installation would first involve using trackhoes and bulldozers to grub ditch bank vegetation. Woody vegetation on the side-slopes of ditch prisms, especially in natural areas, would be left intact as much as possible. Grubbed shrubs, trees and stumps would be cut, chipped, or burned onsite or at one of the staging areas, or hauled to a local landfill.

Following grubbing, trackhoes and bulldozers would be used to reserve existing topsoil or subsurface soil, depending on the post-construction revegetation method (see Section 2.2.6) and fill the existing ditch with material from the existing ditch prism. An excavator would then trench to the appropriate depth in the prism, adjacent to the previous location of the ditch, and prepare the pipe bed. Following installation of the pipe, an excavator would backfill the pipe trench and a dozer would grade the pipe alignment to match the surrounding land contours and restore drainage patterns. Appropriately-sized culverts would be placed at drainage crossings. Alternatively, low water crossings and/or rolling dips would be installed where appropriate, instead of culverts. A one-lane dirt maintenance road or ATV trail would remain on the pipe alignments following construction.

Pipe and supplies would be transported to the construction site on flatbed trucks (or similar) and unloaded with front end loaders with pallet forks. A trackhoe would position the pipe in the trench, and segments of pipe would be fused or joined together in place or alongside the prepared pipe trench. The pipe would be bedded and buried with fill material from within the ditch prism or, if necessary, with bedding or fill obtained from one of the proposed borrow sites. As a last option, fill or bedding material would be obtained from a commercial sand and gravel pit. The pipeline burial depth would be below frost line.

There is the possibility of encountering large boulders or bedrock in pipe trenches that cannot be moved with excavating equipment. In this case, conventional blasting would be used to break rock into pieces manageable with heavy equipment. Blasting would be performed by a state-licensed blasting contractor. Blasting would entail drilling a hole or holes in the (below grade) rock, placing a charge and detonator in each drill hole, and detonating the charge. The blasting activity would take place below grade entirely within the pipeline trench.

There are 5 points where the buried pipe alignments would cross public roads. These crossings would be either trenched or directionally drilled across or under the roads, or sleeved in existing culvert crossings. Road surfaces would be restored to their preexisting condition, per Delta County Road and Bridge District #3 or Colorado Department of Transportation specifications, following construction.

### **2.2.2 – Abandoned Ditch Segments Decommissioning**

For those ditch segments that would be abandoned because of realignment paths (where the pipe alignment departs from the existing ditch prism [see Figure 3]), an excavator would be used to fill the abandoned ditch with material from the existing ditch prism, then a trackhoe would contour the filled ditch alignment to match the surrounding land, including natural drainage patterns that cross the alignment. In farmed areas, these segments would be finished with retained topsoil and



revegetated using methods described in Section 2.2.6. In natural areas or unfarmed areas, the finishing method would be the sterile topsoiling and natural revegetation method, unless reseeding is requested by the landowner. Seed mixes are described in Section 2.2.6. No maintenance access road or trail would remain in these areas.

### **2.2.3 – Access**

All access ways for construction of the Proposed Action would be on the existing ditch prisms, in the proposed new pipe corridors, on existing private roads, or directly to these areas from public roads (Figure 3). Some proposed access ways on existing private roads would require improvement (minor grading, smoothing, and widening up to 15 feet wide) in order to accommodate pipe hauling. Accessways and road crossings would be returned to the same or better condition than they were prior to construction. The access ways authorized for the Proposed Action would be clearly marked on the construction drawings.

CCDC existing ditch alignments involved in the Proposed Action are in historic prescriptive easements. All landowners in the footprint of the Proposed Action where activities would take place outside the historic prescriptive easement have formally agreed (or will have formally agreed prior to construction) to allow the activities of the Proposed Action to be conducted on their lands.

The anticipated average width of the construction area for the Proposed Action would be 40 feet, but could be as wide as 60 feet under certain conditions. The width of the construction footprint would depend on site conditions (slope, nearby infrastructure, nearby sensitive resources) and the ability to operate equipment safely. The authorized construction area widths would not be constrained by the existing ditch centerline, but rather would be adjustable to site conditions in order to complete the work safely and with the smallest possible disturbance footprint. Construction footprints would be limited to only those necessary to safely implement the Proposed Action. The authorized construction width would not be mechanically cleared to its maximum outer limits as a part of site preparation.

### **2.2.4 – Staging**

Five staging areas and two combination staging/borrow areas have been identified for the Proposed Action. Their locations are shown on Figure 3 and their sizes are summarized in Table 3. The staging areas would be used to store pipe and other project supplies and equipment. Pipe arriving and leaving the staging areas 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 areas. Slash (grubbed shrubs, trees and stumps) may be processed by burning or chipping in staging areas. Any burning would be conducted in accordance with Delta County burning ordinances.

To conserve fuel and for the sake of work efficiency, working equipment would remain at active construction locations overnight, on weekends, and during times of brief work gaps due to weather conditions.

### **2.2.5 – Borrow Activities**

The necessary pipe bedding and trench fill would be generated from within the construction footprint. To generate fill material onsite, a screening or portable crusher may be used in the construction footprint to prepare the fill material. If additional fill is required, fill would be obtained from either of the designated borrow sites for the Project, or from the Center Lateral Staging Area

(Figure 3), where soil piles generated from a different project are staged. Borrow material may also be used to improve or repair accessways used for the Proposed Action. Borrow material would be loaded to end-dump trucks using an excavator and hauled to the construction site via approved access ways. As a last option, borrow material would be acquired from a commercial source and hauled to the Project Area.

### **2.2.6 – Weed Control & Post-Construction Revegetation**

To prevent the spread of weeds during construction, all equipment and vehicles would be cleaned prior to arriving on work sites. Woody noxious weeds within the Proposed Action Area would be mechanically removed during construction preparation. The Applicant would control noxious weeds in disturbed areas, including staging and borrow areas, following construction in accordance with county standards.

Following construction, disturbed ground would be revegetated in one of two ways: the sterile topsoiling and natural revegetation method, or the conventional method.

In the conventional revegetation method, reserved topsoil would be replaced on the prepared ground surface using a trackhoe, without back-dragging the blade (i.e., without smoothing), to create microtopography for reseeding.

In the sterile topsoiling and natural revegetation method, sub-surface soil would be reserved during pipe installation and spread on the surface following construction. Sub-surface soils do not contain a pre-existing weed seed bank, and finishing the construction site with sub-surface soils would therefore help curtail the spread of weeds following construction. Areas finished with sub-surface soils would not be reseeded since conditions for seed germination would be poor. Native plants from surrounding plant communities would naturally colonize the site over time without excessive competition from a pre-existing weed seed bank. The sterile topsoiling and natural revegetation method would be the default method of revegetation in non-farmed disturbed areas unless the underlying landowner specifically requests the conventional revegetation method.

Where conventional revegetation is required or requested, weed-free seed mixes appropriate for the surroundings would be used. For instance, where irrigated lands are revegetated, the seed mix would be a weed-free hay mix (or similar) acceptable to the landowner. Where the disturbed ground is adjacent to natural vegetation and reseeding is requested, the weed-free seed mix would include drought-tolerant and locally ubiquitous native grass such as western wheatgrass. The Project construction drawings would indicate where each revegetation method is to be used, and to specify the seed mix, where appropriate.

### **2.2.7 – Schedule**

Construction in existing ditch alignments would occur during the irrigation off-season, to avoid interrupting irrigation activities of the shareholders. Irrigation off-season varies annually depending on weather patterns, but is typically late September or October through mid-April. Construction in the realignments and decommissioning of abandoned ditch alignments would not need to avoid irrigation season and could occur during any time of the year. Revegetation activities and weed treatments would occur during seasons when those activities have the best opportunity for success.

Construction would occur incrementally or in a sequenced fashion across the Project areas over a period of approximately three years, mostly during the irrigation off-season. When construction is

underway, it would occur during daylight hours (typically 7 am to 4 pm), Monday through Saturday. Weather conditions could cause gaps in activity.

Timing restrictions would apply to certain project activities and locations, to protect nesting migratory birds and raptors, as explained in the Wildlife Section (Section 3.2.9). The timing restrictions are specified in the Environmental Commitments of this EA (CHAPTER 4) and summarized in Table 4. Specific areas with construction timing restrictions, and the nature of those restrictions, would be prominently marked on construction drawings.

Table 4. Project Schedule Timing Restrictions Summary

Location	Activity	Timing Restriction	Reason
All Project Areas	Vegetation grubbing or clearing	Avoid April 1 - July 15	Protect migratory songbirds during their core nesting season
Buffered areas around documented raptor nests	All	Variable, between February 15 - July 31 See species-specific requirements in Section <b>Error!</b> <b>Reference source not found..</b>	Protect nesting raptors during their core nesting season (note: location information is restricted from publicly-available maps but would be displayed on construction drawings)

## 2.2.8 – Habitat Replacement

In accordance with the Colorado River Basin Salinity Control Act, a habitat replacement site would be required to maintain riparian and wetland habitat affected as a result of the Proposed Action. This would be accomplished by conveying a conservation easement to Colorado West Land Trust on 42.5 acres of land with high-quality riparian woodlands and wetlands owned by CCDC on the Smith Fork River (Figure 1). The conservation easement would prohibit the impending subdivision and/or development of the land which had been planned. CCDC's ordinary ongoing maintenance activities such as weed control and grazing would be permitted to maintain the riparian and wetland conservation values of the land. No construction activities would occur at the Habitat Replacement Site as a result of the Proposed Action.

Colorado West Land Trust would monitor the land annually to ensure the terms of the conservation easement are being upheld and that the conservation and habitat values of the land remain intact. Unlike habitat replacement sites that are “improved” or “enhanced” to create net habitat replacement value for a period of 50 years in accordance with the Colorado River Basin Salinity Control Act, the Habitat Replacement Site for the Proposed Action would remain under a conservation easement in perpetuity.



## 2.2.9 – Permits & Authorizations

### *Agreements & Authorizations*

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

- Memorandum of Agreement executed between Reclamation and the Colorado SHPO.
- Clean Water Act (CWA) Section 404 Regional General Permit 5 for Ditch Related Activities in the State of Colorado: 30-Day Advance of Construction Submittal Package (to include “(1) the respective agency’s documentation for compliance with the Endangered Species Act and National Historic Preservation Act and/or the lead Federal Agency NEPA document containing the same, (2) a project description, (3) project plans, and (4) a location map.”).

### *Construction Permits & Plans*

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

- Stormwater Management Plan, to be submitted to Colorado Department of Public Health & Environment (CDPHE) by the construction contractor prior to construction disturbance.
- CWA Section 402 Storm Water Discharge Permit compliant with the National Pollutant Discharge Elimination System (NPDES), to be obtained from CDPHE by the construction contractor prior to construction disturbance (regardless of whether dewatering would take place during construction).
- Certification under CDPHE Water Quality Division Construction Dewatering Discharges Permit COG070000 (if any dewatering is to take place during construction).
- Spill Response Plan, to be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.
- Utility clearances, to be obtained by the construction contractor prior to construction activities from local utilities in the area.
- Any construction, access, or use permits which may be required by the Delta County Planning Department, County Engineering and County Road & Bridge District #3 (North Fork 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)
- Farmland Protection Policy Act (7 U.S.C. 4201, et seq.)

### *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 affected area and/or interests are identified, existing conditions described, and impacts are disclosed under the No Action and Proposed Action Alternatives. This section is concluded with a summary of impacts.

### **3.2 – Affected Environment & Environmental Consequences**

#### **3.2.1 – Water Rights & Use**

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; however, delivery of this water is only possible during times when the water is not frozen.

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

Currently, regional efforts are underway in the Lower Gunnison and Colorado River watersheds to reduce water lost to seepage and evaporation (see Figure 2), like that which is lost from open, unlined irrigation canals. These efforts are primarily focused on improving the efficiency of irrigation systems.

*No Action Alternative:* The No Action Alternative would have no effect on water rights and uses within the Gunnison River Basin. 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 new turnout structures would include adequate controls and measuring devices which would further improve water management in the system. The availability of pressurized water to the stockholders would encourage future installation of high-efficiency on-farm sprinklers.

Winter stock water delivery to shareholders would be temporarily affected by the Proposed Action. Shareholders would be notified prior to construction activities affecting winter stock water delivery so they can make individual temporary arrangements for stock water during the construction period. Alternative arrangements for winter stock water are common due to the inability of the ditch system to deliver the stock water when temperatures are low enough that the stock water freezes. Winter stock water would be unavailable for each shareholder for one winter season. Due to the temporary nature of the unavailability of winter stock water and due to the availability of temporary alternative stock water arrangements, the Proposed Action's effects on winter stock water would not rise to the level of significant.

The Proposed Action contributes to the growing amount of piped irrigation conveyances in the region, which are cumulatively reducing water seepage and improving irrigation water delivery efficiency on a larger scale. The Proposed Action would not include new water storage or the irrigation of new farmlands. No adverse cumulative effects on irrigation water rights or winter stock water delivery in the Gunnison or Colorado River Basins would occur due to implementation of the Proposed Action.

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

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

### 3.2.2 – Water Quality

Irrigation practices in the region and in the Proposed Action area 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). There are also ongoing regional efforts to reduce selenium loading in the lower Gunnison and Colorado river basins (SMPW 2011, Reclamation 2020).

Most irrigation ditches are considered Waters of the U.S., and are under the jurisdiction of the Clean Water Act (CWA). In 2021, the Corps issued Regional General Permit 5 (RGP-5) for Ditch Related Activities in the State of Colorado.

*No Action Alternative:* Under the No Action Alternative, the estimated 2,614 tons of salt annually contributed to the Colorado River Basin from the ditch laterals involved with the Project would continue. Current selenium loading levels would continue.

*Proposed Action:* In the long term, the Proposed Action would eliminate seepage from the involved ditch systems, reducing salt loading to the Colorado River Basin at an estimated rate of 2,614 tons per year. The Proposed Action would reduce selenium loading into the Gunnison River basin, although the amount of selenium loading reduction that would result from the Proposed Action has not been quantified. Improved water quality would 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 high importance to users and to wildlife. The beneficial effects of improved water quality resulting from the Proposed Action would contribute to the regional efforts underway to reduce salinity and selenium in the lower Gunnison and Colorado River watersheds.

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

BMPs would be implemented during construction to minimize erosion and further protect water quality. Project construction would take place in the ditch prism when water is not present. Pipeline

crossings of any drainages would be conducted in accordance with CDPHE's Water Quality Control Division Dewatering General Permit to protect water quality in streams. 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 (when dewatering is conducted) (see Section 2.2.9 and CHAPTER 4).

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

### **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 2022). Minor impacts to air quality from routine maintenance of the ditch system involved with the Proposed Action include dust and exhaust from occasional travel in light vehicles along the Proposed Action corridor, and occasional ditch cleaning and maintenance activities involving heavy equipment.

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

*Proposed Action:* Exhaust and dust from construction activities would have a minor, short-term effect on the air quality in the immediate Proposed Action Area. There would be no long-term significant impacts to air quality from the Proposed Action, as Delta County would remain in attainment for all criteria pollutants. BMPs would be implemented to further minimize dust in the Project Area. Following construction, impacts to air quality from routine maintenance and operation activities along the pipeline corridor would be insignificant, as they would be similar or less in magnitude to those currently occurring for the existing ditch. The potential exists for other ditch piping projects in the region currently in NEPA review to be constructed concurrently with the Proposed Action. Even if other projects occur concurrently with the Proposed Action, the cumulative impact on air quality in the area would be temporary and would not rise to the level of significant, as the area would remain in attainment for any criteria pollutants in Delta County.

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

### **3.2.4 – Public Access, Transportation, & Safety**

CCDC currently operates in historic prescribed rights-of-way (collectively, the “prescribed ROW”) in the Proposed Action area.

Private and public roads generally provide access and mobility for residents traveling in and out of the Proposed Action Area. The main public transportation routes that intersect the Proposed Action are Colorado State Highway 92, and the following county roads: Linman Road, Stearman Road, Saddle Mountain Lane, F50 Road, and 3750 Road, and 3675 Road. The previously analyzed borrow and staging areas are accessed from Spurlin Mesa Road, a BLM route that already serves as a regular CCDC operating and maintenance route, and Highway 92. Highway 92 is the main regional route between the towns of Crawford and Hotchkiss and receives moderate to heavy traffic depending on time of day and time of year.

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

There are safety risks associated with sources of open, moving water. The Proposed Action Area is served by the Delta County Sheriff, The Delta County Ambulance District, and the Delta County Fire Protection District 5.

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

*Proposed Action:* All construction activities related to the Proposed Action would take place entirely in the approved and prescriptive project rights-of-way. There would be no need for construction of new access roads outside of the construction areas. There are no known bridges with weight restrictions that would be used by construction vehicles.

Where the proposed pipe alignment goes outside the existing ditch prism, CCDC has executed or is in the process of executing ROW agreements with landowners.

Some short-term disruption of traffic at the involved public roads is expected to occur when equipment and materials are hauled into the Project location, and when pipe crossings are constructed across public roads. Appropriate traffic signage would be used to notify drivers of active construction ingress/egress. The construction contractor and/or CCDC would coordinate with the county and sheriff department if traffic or access would be delayed or substantially re-routed. Due to the temporary nature of the traffic disruptions and the traffic management provided by coordination with the county and sheriff department, the impacts on traffic would not rise to the level of significant.

All utilities would be located and marked and, if necessary, relocated or raised, prior to any construction activities in the Project area. If relocation or raising of utilities is necessary during construction, a brief interruption of utility services would occur. Due to the temporary nature of the interruptions, the impacts on utilities would not rise to the level of significant.

Under the Proposed Action, the safety risks associated with sources of open, moving water would no longer occur within the Project Area. The Delta County Sheriff, Delta County Ambulance District, and the Delta Fire Protection District 5 would continue to cover the Project Area for emergency response, and would not be hindered in their response. Active construction areas would be adequately marked and barricaded to prevent public access. Trenches left open overnight would be limited to the extent practicable. In the case that a trench is left open overnight, it would be covered to adequately prevent entrapment of people, livestock, or wildlife. Therefore, there would be no significant effect on public safety.

Any required construction, access, or use permits would be obtained from the Delta County Planning Department, County Engineering and County Road & Bridge District #3. The proposed irrigation pipe crossings of Highway 92 would be coordinated with Colorado Department of Transportation.

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

### **3.2.5 – Noise**

A moderate baseline level of noise occurs in the Proposed Action area, associated with farming and ranching activities, regular traffic on public roads, county and state highway maintenance activities, and the CCDC's operation and routine maintenance of the ditch system. Operation and maintenance involve the use of light-duty trucks, all-terrain vehicles 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.

*No Action Alternative:* There would be no noise effects from the No Action Alternative.

*Proposed Action:* Proposed Action construction activities would generate a temporary source of noise audible to residents near the piping component of the Proposed Action. Sources of noise would include heavy equipment moving earth or crushing rock, trucks hauling pipe and other materials, and heavy equipment grubbing vegetation. As explained in Section 0, blasting may also be required to help prepare the pipe trench if bedrock is encountered. Blasting would occur inside the trench and below grade. The noise associated with such blasting would resemble a muffled “pop” from a firearm. 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. There would be no project-related noise at the Habitat Replacement Site, since no construction activities would take place there. Noise associated with construction of the Proposed Action would be short-term and would not raise the noise level of the area above the moderate noise baseline; therefore, the short-term increase in noise would not be significant.

The Proposed Action would not contribute to long-term local or regional increases in noise levels, and therefore no long-term cumulative noise impacts would occur. There is the potential for other similar ditch-piping projects to occur concurrently in the local area, which would create short-term cumulative elevations in noise. Noise associated with implementation of these projects would not cumulatively raise the noise level of the area above the moderate noise baseline, and therefore this impact would not rise to the level of significant.

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

### **3.2.6 – Visual Resources**

The Proposed Action is in an area of pastoral beauty, with a pleasing array of colors and textures across the relatively open landscape—a mosaic of irrigated agricultural fields, rural residential areas, natural shrublands and badlands, and wooded riparian corridors—against a backdrop of near and distant foothills and mountains. The ditches that traverse the area are linear features, often bermed and with an attendant access road and soil spoil piles remaining alongside or on the bermed area (ditch prism). The ditches support bands of shrub willows and occasional mature cottonwood trees which are visible on the relatively open and flat landscape.

A baseline level of visual disturbance occurs in the Proposed Action Area, associated with local ranching and farming, local construction projects, and the Applicant's operation and routine

maintenance of the ditch system. These activities can involve vehicles, machinery, earth moving, field and ditch burning, and can generate dust and smoke.

*No Action Alternative:* There would be no visual impacts from the No Action Alternative.

*Proposed Action:* Temporary impacts related to visual disturbance during and after construction would result from the Proposed Action. Machinery would be operating on the open landscape and highly visible from public roads in certain locations on a spatially incremental basis mostly during winter months. Following construction in the pipeline and abandoned ditch reaches, the disturbance footprint would be a linear area of bare ground, similar in appearance to its current condition. Within a few growing seasons, revegetation would help the disturbed ground blend with the surroundings. This impact would not rise to the level of significant. There would be no visual change to the Habitat Replacement Site, since no construction activities would take place there.

Overall, the long-term level of change to the visual characteristics of the landscape in and around the Proposed Action Area during and following construction would be minor and not out of character with the surrounding landforms or with the rural and agricultural character of the vicinity.

The Proposed Action would not contribute to cumulative impacts to visual resources, as the post-project landscape would maintain the existing character of the surrounding landforms or the rural and agricultural character of the vicinity.

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

### **3.2.7 - Vegetation**

The Proposed Action Area is a mix of farmlands (irrigated hayfields and grass pastures), developed farmstead areas, and natural areas in mixed saltbush or pinyon (*Pinus edulis*)-juniper (*Juniperus osteosperma*) woodlands. The proposed staging areas are on farmed or previously disturbed ground, and borrow sites are on previously disturbed ground or land previously cleared of brush.

The ditch banks involved with the Proposed Action support intermittent narrow corridors of irrigation-induced riparian and wetland vegetation, including stands of coyote willow (*Salix exigua*), cattails (*Typha* sp.), sedges (*Carex* and *Elyocharis* spp.), and rushes (*Juncus* spp.), and occasional cottonwoods (*Populus* spp.), and scattered non-native trees including Russian olive (*Elaeagnus angustifolia*) and salt cedar (*Tamarix* sp.). Vegetation along the ditches involved with the Proposed Action is disturbed by routine maintenance, which includes periodic mechanical clearing with heavy equipment and occasional burning or application of herbicides.

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:* Construction activities would directly disturb the staging and borrow areas, irrigated agricultural areas, and roadsides. Construction of the pipeline would also result in a minor impact to



upland native vegetation located within the construction corridor. The impact would be evident in the project area for a period of several years. The impacted upland native vegetation is abundant in the surrounding areas. Impacts to the previously-analyzed Aspen Canal, Spurlin Mesa Staging Area, and Center Lateral Staging areas did not rise to the level of significant, as documented in the respective EAs (Reclamation 2014, 2019a, 2019b). Dust from operating equipment and vehicles would also affect nearby vegetation, however increased dust would be minor and temporary, and therefore the impact to nearby vegetation would be minor and temporary. 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. Construction of the Proposed Action would follow BMPs to further minimize temporary impacts, to protect water quality, and to further minimize dust and soil erosion.

Following pipeline construction, farmed areas would be reseeded, and disturbed areas in the pipeline alignment would be recontoured and either topsoiled and reseeded with a seed mix appropriate for the surrounding vegetation community or finished with sterile subsurface soil and unseeded, depending on the wishes of the underlying landowner. Where applicable, the seed mix for the reseeded areas would be a native drought-tolerant weed-free seed mix approved by Reclamation, or the underlying private landowner and appropriate for the surrounding habitat (approved seed mixes will be appended to the final EA). Disturbed agricultural areas would be contoured to the surrounding grade 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. The unseeded areas would require several years to recolonize the subsurface sterile soil that would be placed on the final graded surface. Natural colonization of native plants is preferable to reseeded on reserved topsoil in these areas. Redistributed topsoil has a low probability of success in germinating commercial seed mixes following construction, especially in drought conditions, and instead has germinated its own existing seed banks of ruderal weeds adapted to ground disturbance. Finishing the ground surface with subsurface soil would help eliminate the weed seed bank in the construction area. Surrounding native vegetation would colonize the construction corridor over a period of several years as the new topsoil becomes weathered. Because the upland native vegetation is abundant in the surrounding areas and would colonize the construction corridor, the minor impact to upland native vegetation would not rise to the level of significant and the impacts would not contribute to a cumulative impact on the resource.

A habitat evaluation was performed for the Proposed Action Area to quantify the fish and wildlife values that would be lost due to implementation of the Proposed Action (ERO 2020). The evaluation followed the methodology outlined in Reclamation's April 2018 *Basinwide Salinity Control Program: Procedures for Habitat Replacement*. The Proposed Action would result in the permanent loss of approximately 4.2 acres of riparian and wetland vegetation associated with the unlined ditches, or the equivalent of 31.1 habitat value units (ERO 2020). However, as stipulated by the Salinity Control Act, a habitat replacement project (see Section 2.2.8) is included as a component of the Proposed Action to ensure there would be no net loss of fish and wildlife values (in this case, riparian and wetland vegetation) associated with implementation of the Proposed Action. Because there would be no loss of riparian and wetland values associated with implementation of the Proposed Action, the effects of the loss of riparian and wetland vegetation would be insignificant. The region has experienced the permanent loss of riparian and wetland vegetation associated with piping and lining earthen ditches over the past fifteen to twenty years. Because there would be no loss of riparian and wetland values associated with implementation of the Proposed Action, the Proposed Action would not contribute to cumulative effects on riparian and wetland vegetation within the region.

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

### **3.2.8 – Noxious Weeds**

The most conspicuous herbaceous noxious weeds present within the Proposed Action Area are whitetop (*Lepidium draba*), Russian knapweed (*Acroptilon repens*), and Canada thistle (*Cirsium arvense*) (ERO 2020). Non-native shrubs or trees scattered on the ditch banks include Russian olive (*Elaeagnus angustifolia*) and salt cedar (*Tamarisk* spp.). CCDC manages noxious weeds on the ditch prisms by spot-spraying or mowing seasonally, or by mechanical removal with heavy equipment, as resources permit. Flowing water in irrigation ditches is also a vector for the continued spread of weeds. Livestock grazing also contributes to the propagation of weeds in the Project area.

*No Action Alternative:* There would be no effect on noxious weeds from the No Action Alternative.

*Proposed Action:* The piping component of the Proposed Action would remove segments of flowing open water in the ditch system, a key element of invasive seed transport. Finishing the unfarmed construction areas with subsurface soil would help slow invasive weeds from colonizing areas disturbed by construction activities. Certain segments of the ditch would no longer require regular maintenance, lowering the potential for the continued spread and establishment of weeds by vehicles and surface disturbances. Downgradient herbaceous and woody noxious weeds which rely on ditch seepage would no longer be supported. Despite these beneficial effects to noxious weed presence, noxious weeds would continue to be present throughout the Project Area. Because noxious weeds are currently present in the Project Area, their ongoing presence within the Project Area would not constitute a significant impact.

To further curtail the spread of noxious weeds, environmental commitments (CHAPTER 4) such as cleaning vehicles and equipment prior to bringing them onsite and conducting weed management following construction would help minimize the risk of increasing weed infestations. After construction and reclamation of the Project Area, noxious weed presence would be monitored subject to agreements between the Applicant and individual landowners, and regulated by Delta County in accordance with county standards (Delta County 2020).

In the long-term, piping the ditch laterals involved with the Proposed Action, along with other salinity control projects in the region, would cumulatively remove an important vector of weed seed transport in the vicinity—open water. Seeps from the earthen ditches that currently support herbaceous and woody noxious weeds would be dried and the cumulative ability of the environment to support these weeds would be diminished.

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

### **3.2.9 – Wildlife Resources**

The riparian vegetation supported by the open ditches, in association with nearby irrigated land, and surrounding uplands with native shrublands and woodlands, provide nesting, breeding, foraging, cover, and movement corridors for an array of wildlife.

The Proposed Action Area falls within overall range of elk, mule deer, mountain lion, and black bear. The entire Proposed Action Area falls within elk and mule deer severe winter range mapped by Colorado Parks and Wildlife (CPW 2022). The entire Proposed Action Area is also a CPW-mapped

mule deer concentration area. Mule deer are relatively common and present year-round in the area, whereas elk are present in fewer numbers and only intermittently during winter.

A variety of small mammals, reptiles, and amphibians inhabit the general Proposed Action 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, cottontail rabbit, white-tailed jackrabbit, woodrat, several species of lizards, mice, voles, and shrews. Striped skunk, raccoon, red fox, coyote, bobcat, beaver, western terrestrial garter snake, smooth green snake, Woodhouse's toad, northern leopard frog, several species of bats, 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 also 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 2020). Burrowing owls may be present and nesting in prairie dog burrows during the period of March 15 through October 31 (CPW 2020). Golden eagles nest between December 15 and July 15, and bald eagles nest between October 15 and July 31 (CPW 2020). The entire Proposed Action Area lies within CPW-mapped bald eagle winter foraging range (CPW 2022). A nesting raptor survey conducted for the Proposed Action Area during Spring of 2020 identified three red-tailed hawk nests within 1/3 mile of the construction areas.

Wildlife in the Proposed Action Area experiences a baseline level of disturbance from farming and ranching activities, rural residential activities, domestic dogs, and people and vehicles traveling on public and private roads. Agriculture, including farming and livestock grazing, are the primary land uses in the Proposed Action Area. The ditch laterals are near fairly busy public roads in a mix of residential and agricultural settings. The Habitat Replacement Area is in the forested riparian corridor of the Smith Fork River.

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. Salt and selenium loading from the area would continue to affect aquatic dependent species.

*Proposed Action:* Construction would create incremental activity and ground disturbance in the Proposed Action Area, resulting in minor temporary impacts to mule deer and elk that may be present. There would be a short-term loss of vegetative cover in big game severe winter habitat until the areas are revegetated. However, the construction footprint of the Proposed Action represents less than approximately 0.1 percent of the total amount of elk and mule deer critical winter habitat in Game Management Unit 53, and this temporary loss of vegetative cover would result in negligible effects to big game critical winter habitat. Additionally, given the existing level of human disturbance and development (winter livestock feeding, other agricultural activities, residential activities, and highway traffic) in the Proposed Action Area, big game would be somewhat habituated to the Proposed Action disturbances. Furthermore, severe winter conditions (e.g., snow cover, extreme

cold temperatures, excessively muddy conditions) would preclude construction activities during times when game is most vulnerable.

Construction impacts to small animals, especially burrowing amphibians, reptiles, and small mammals, could include direct mortality and displacement during construction activities. However, these species and habitats are relatively common throughout the area. The species would continue to propagate and population-level significant impacts would not occur.

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 shrubs and trees along the ditch would be grubbed and removed outside the period of April 1 through July 15). Vegetation grubbing timing restrictions would be clearly noted on the Project construction drawings.

There would be no effect to the three red tailed hawk nests identified near the Proposed Action Area as they would be avoided with sensitive area buffers and construction timing restrictions per CPW recommendations (CPW 2020). Construction activities would not occur within 1/3 mile of an active red-tailed hawk nest from February 15 through July 15, with the following exception: pipeline construction within 1/3 mile of a nest could begin prior to February 15, so long as the construction activities were initiated prior to February 15, and operated on a daily basis until completion (it is assumed that red-tailed hawks that initiate nesting during ongoing construction activities are tolerant to such activities). These timing restrictions and sensitive areas would be noted on Project construction drawings (see CHAPTER 4). If a new active raptor nest is discovered within 1/3 mile of the Proposed Action during construction, construction would cease until Reclamation could complete evaluations and consultations with FWS and CPW.

Bird, bat, reptile, and amphibian species dependent on wetland and riparian habitats for some or all of their life cycles would experience a long-term (greater than five years) loss of habitat due to the Proposed Action. These species would continue to propagate in the area and population-level significant impacts would not occur. The habitat value associated with the lost wetland and riparian habitat would be fully maintained with the conservation of the Habitat Replacement Site. Because the value of these species' habitat would be fully maintained, there would not be a significant impact to bird, bat, reptile, and amphibian species resulting from the loss of the ditch-induced wetland and riparian habitat.

To further reduce the potential for effects to wildlife, pipeline trenches left open overnight during construction would be kept to a minimum and covered to reduce potential for entrainment of deer, elk, and other wildlife. 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.

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

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

### 3.2.10 – Threatened & Endangered Species

The 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: bonytail chub (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), the humpback chub (*Gila cypha*), and the razorback sucker (*Xyrauchen texanus*).

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 total average historic depletion rate from CCDC's system operations is estimated as 5,776 acre-feet per year.

The Upper Colorado River Endangered Fish Recovery Program, a partnership of public and private organizations working to recover the four species while allowing continued and future water development, was established in 1988. Recovery strategies include conducting research, improving river habitat, providing adequate stream flows, managing non-native fish, and raising endangered fish in hatcheries for stocking. The 2009 Gunnison River Basin Programmatic Biological Opinion (2009 PBO) issued by FWS found that the Recovery Program is the reasonable and prudent alternative to avoid jeopardy to the endangered Colorado River fishes and avoid adverse modification of designated critical habitat. In 2022, the FWS determined that the Recovery Program had made “sufficient progress to be the reasonable and prudent alternative to avoid the likelihood of jeopardy to the endangered fishes, and to avoid destruction or adverse modification of their critical habitat” for “existing depletions” (FWS 2022).

The Gunnison Basin Selenium Management Program is a private/public partnership of concerned parties working together to identify and implement solutions to reduce selenium concentrations in the Gunnison and Colorado rivers. The goal of the Gunnison Basin Selenium Management Program is to reduce adverse effects of selenium on the four endangered fish species in the Gunnison and Colorado rivers.

*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:* No change to the CCDC's historic annual consumptive use rate or historic water depletions from operations of their systems within the Colorado River Basin would occur as a result of the Proposed Action. Based on previously issued biological opinions that all depletions within the Upper Colorado River Basin may adversely affect these fish species and their critical habitat, it is determined that the Proposed Action may adversely affect the bonytail chub, Colorado pikeminnow, humpback chub, and razorback sucker and their critical habitat. However, the Recovery Program ensures impacts to endangered fishes or adverse modification of their designated critical habitat resulting from projects covered under the 2009 PBO would not result in jeopardy to the species. Reclamation previously consulted with FWS on CCDC's annual depletion rate in 2016 (File ES/JG-6-CO-09-F-001-GP029 TAILS 06E24100-2016-F-0022). To ensure CCDC's depletions are covered under the 2009 PBO, CCDC executed a Recovery Agreement with FWS (Appendix B). Because CCDC's depletions are covered under the 2009 PBO, the Proposed Action would not result in

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

While the Proposed Action would adversely affect the listed Colorado river fishes due to CCDC's historic depletion rates, the Recovery Program ensures cumulative effects to the fishes and their designated critical habitat do not occur due to projects covered under the 2009 PBO. The reduction in selenium loading to the Colorado River and Gunnison River basins as a result of the Proposed Action would contribute to the cumulative beneficial effects of the Gunnison Basin Selenium Management Program in improving water quality within designated critical habitat for the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail throughout the Colorado River and lower Gunnison River basins.

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

### **3.2.11 – Cultural Resources**

Cultural resources are defined as physical or other expressions of human activity or occupation. Such resources include culturally significant landscapes, prehistoric and historic archaeological sites, isolated artifacts or features, traditional cultural properties, Native American and other sacred places, and artifacts and documents of cultural and historical significance.

Alpine Archaeological Consultants conducted Class III cultural resource inventories of the Proposed Action Area. All ditch reaches involved with the Proposed Action were inventoried, as well as access routes, borrow areas, and staging areas. The inventories resulted in the documentation of several sites within the Proposed Action Area are eligible for listing in the National Register of Historic Places (NRHP).

There is an ongoing trend of piping 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.

*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 several ditch elements involved with the Proposed Action, which are resources eligible for listing in the NRHP. A nearby sensitive historical structure (an old homestead structure) lies within 25 feet of the construction right-of-way. A Memorandum of Agreement (MOA) has been executed between Reclamation and the Colorado SHPO, with CCDC participating as an invited party, regarding the management of cultural resources related to the Proposed Action. The MOA outlines stipulations designed to conserve the value of the eligible cultural resources (Appendix C). Conserving the value of the eligible cultural resources would ensure that piping the canal would not result in the loss of knowledge of early irrigation systems, their design, or reduce the ability to gain knowledge of early irrigation systems into the future. The nearby sensitive historical structure would be protected from construction activities by placement of a barricade between the construction zone and the sensitive structure. The required location for the barricade would be clearly marked on the Project construction drawings. Because the value of the cultural resources related to the Proposed Action

would be conserved, there would be no significant impacts to cultural resources as a result of implementing the Proposed Action.

The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources which is occurring as a result of irrigation piping projects. However, the value of the eligible cultural resources in the area which have been or may be affected due to federally funded irrigation piping projects have been and would continue to be maintained due to the project stipulations developed with the Colorado SHPO, and therefore the adverse cumulative effect of the piping projects on cultural resources would not rise to the level of significant.

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

### **3.2.12 – 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 clay loams that have Mancos shale parent material and 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).

Several soils in the Proposed Action Area are agriculturally significant since they are classified by NRCS as “prime farmland if irrigated,” “farmland of unique importance,” or “farmland of statewide importance” under the Farmland Protection Policy Act.

Soils in the area are also highly prone to erosion, especially where irrigation ditches contour through Mancos shale-derived soils and along slope faces.

*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 the ditches related to the Proposed Action would continue as it has in the past.

*Proposed Action:* Under the Proposed Action Alternative, installation of the buried pipelines would temporarily disturb soils in or near the previously-disturbed ditch prisms. Staging activities would take place on existing irrigated pastures or existing disturbed areas. Project activities would cause temporary disturbance to soils that are either not in irrigated agricultural production, or soils directly adjacent to irrigated agricultural lands, or irrigated lands. Some currently farmed agriculturally significant soils would be temporarily directly disturbed by the Proposed Action, but would be put back into production prior to the following irrigation season. 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. Therefore, there would be no significant impact to soils, farmlands, or agricultural production as a result of implementing the proposed action.

The ditches involved with the Proposed Action also convey irrigation water to agriculturally significant soils downstream of the Proposed Action Area; however, no change to or effect on the configuration of irrigated lands would occur because of the Proposed Action. No part of the irrigation season would be lost during implementation of the Proposed Action.

Soil erosion from irrigation water conveyances would be substantially reduced where ditch reaches are proposed for replacement with buried pipe. Therefore, no adverse effects on soil erosion would occur due to implementation of the Proposed Action.

Due to the temporary nature of impacts to soils, and due to the lack of adverse effects on farmlands and agricultural production, the Proposed Action would not contribute to cumulative effects on those resources. The Proposed Action contributes to the growing amount of piped irrigation conveyances in the region, which are collectively having a beneficial cumulative effect on the reduction of soil erosion on a larger scale.

No significant impacts to Soils & Farmlands of Agricultural Significance would occur as a result of the Proposed Action.

### 3.3 – Summary

Table 5 provides a summary of environmental impacts for the resources evaluated in this EA. Resource impacts are outlined for both the No Action and the Proposed Action Alternatives. As described throughout Chapter 3, environmental impacts of the Action Alternative were not determined to be significant.

Table 5. 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	CCDC would have the ability to better manage irrigation water with efficiencies gained from eliminating seepage by improving the system. Winter stock water would be unavailable for each shareholder for part of one winter season. 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.



Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
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 2,614 tons per year to the Colorado River Basin will result from implementation of the Proposed Action. The Proposed Action would reduce selenium loading into the Gunnison River (the amount has not been quantified). Improved water quality would benefit downstream aquatic species by reducing salt and selenium loading in the Gunnison and Colorado rivers. The beneficial effects of improved water quality resulting from the Proposed Action would contribute to the regional efforts underway to reduce salinity and selenium in the lower Gunnison and Colorado River watersheds. The Proposed Action would affect waters under the jurisdiction of CWA Section 404 (the ditches themselves) and disturb irrigation-induced wetland and riparian vegetation associated with the ditches.
Air Quality	No Effect	Exhaust and dust from construction activities would have a minor, 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 or less in magnitude to those currently occurring for the existing ditch. If other construction projects occur concurrently with the Proposed Action, the cumulative impact on air quality in the area would be temporary and the area would remain in attainment for any criteria pollutants in Delta County.
Public Access, Transportation & Safety	No Effect	Some short-term disruption of traffic at the involved public roads is expected to occur when equipment and materials are hauled into the Project location, and when pipe crossings are constructed across public roads. If relocation or raising of utilities is necessary during construction, a brief interruption of utility services would occur. No cumulative effects.
Noise	No Effect	Proposed Action construction activities would generate a temporary source of noise audible to residents near the Proposed Action. If other construction projects occur concurrently with the Proposed Action, the cumulative impact on noise in the area would be short term would not raise the noise level of the area above the moderate noise baseline.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
Visual Resources	No Effect	Machinery would be operating on the landscape and highly visible from public roads in certain locations on a spatially incremental basis during construction. Following construction in the pipeline alignment and decommissioned ditch reaches, the disturbance footprint would be a linear area of bare ground, rather than an open earthen ditch. Within a few growing seasons, revegetation would help the disturbed ground blend with the surroundings. Overall, the long-term level of change to the visual characteristics of the landscape in and around the Proposed Action Area during and following construction would be minor and not out of character with the surrounding landforms or with the rural and agricultural character of the vicinity. No cumulative effects.
Vegetation	No Effect	Construction of the pipeline would result in a minor impact to upland native vegetation located within the construction corridor. The impact would be evident in the project area for a period of several years. The Proposed Action would result in the permanent loss of approximately 4.2 acres of riparian and wetland vegetation associated with the unlined ditches. The value of the habitat loss which would occur due to the Proposed Action is 14.1 habitat units (ERO 2020). The Habitat Replacement Site to be placed under a conservation easement for the Proposed Action would generate 31.1 habitat units to fully maintain the value of the fish and wildlife values to be lost as a result of the Proposed Action. No cumulative effects.
Noxious Weeds	No Effect	The Proposed Action would remove segments of open water, a key element of invasive seed transport. Finishing the ground surface with subsurface soil would help eliminate the weed seed bank in the construction area. Certain segments of the ditch would no longer require regular maintenance, lowering the potential for the continued spread and establishment of weeds. Downgradient herbaceous and woody noxious weeds which rely on ditch seepage would no longer be supported. Noxious weeds would continue to be present throughout the Project Area. Piping the ditch laterals involved with the Proposed Action, along with other salinity control projects in the region, would cumulatively remove an important vector of weed seed transport in the vicinity—open water. Seeps from the earthen ditches that currently support herbaceous and woody noxious weeds would be dried and the cumulative ability of the environment to support these weeds would be diminished.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
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	Construction would create incremental activity and ground disturbance throughout the Project area, resulting in minor temporary impacts to mule deer and elk within the Proposed Action area. There would be a short-term loss of vegetative cover in big game critical winter habitat until the areas are revegetated. Construction impacts to small animals, especially burrowing amphibians, reptiles, and small mammals, would include direct mortality and displacement during construction activities, both in the existing ditch alignment and new pipe alignments. Bird, bat, reptile, and amphibian species dependent on wetland and riparian habitats would experience a long-term (greater than five years) loss of habitat due to the Proposed Action. However, the habitat value associated with the lost wetland and riparian habitat would be fully maintained with the conservation of the Habitat Replacement Site. The Proposed Action would contribute to a regional trend resulting in the relocation of artificially-created riparian and wetland values from earthen irrigation conveyances to habitat replacement sites.
Threatened & Endangered Species	No effect on listed plants and birds; historic depletions and 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.	The Proposed Action may adversely affect the bonytail chub, Colorado pikeminnow, humpback chub, and razorback sucker and their critical habitat. However, CCDC's historic depletions are covered under the 2009 PBO following the execution of a Recovery Agreement between CCDC and FWS (Appendix B). The Recovery Program ensures impacts to endangered fishes or adverse modification of their designated critical habitat resulting from projects covered under the 2009 PBO would not result in jeopardy to the species. The reduction in selenium loading to the Colorado River and Gunnison River basins as a result of the Proposed Action would contribute to the cumulative beneficial effects of the Gunnison Basin Selenium Management Program in improving water quality within designated critical habitat for the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail throughout the Colorado River and lower Gunnison River basins.

Resource	Impacts: No Action Alternative	Impacts: Proposed Action Alternative
Cultural Resources	No Effect	The Proposed Action would have an adverse effect on NRHP eligible cultural resources. An MOA (Appendix C) between Reclamation, and the Colorado SHPO, with CCDC participating as an invited party, outlines stipulations designed to conserve the value of the eligible cultural resources. The Proposed Action would contribute to an area-wide adverse effect on NRHP eligible cultural resources. The value of the eligible cultural resources in the area which have been or may be affected due to federally funded irrigation piping projects have been and would continue to be maintained due to the project stipulations developed with the Colorado SHPO, and therefore the adverse cumulative effect of the piping projects on cultural resources would not rise to the level of significant.
Soils & Farmlands of Agricultural Significance	No Effect	The installation of the buried pipelines would temporarily disturb soils in or near the previously-disturbed ditch prisms. Project activities would cause temporary disturbance to soils that are either not in irrigated agricultural production, or soils directly adjacent to irrigated agricultural lands, or irrigated lands. Some currently farmed agriculturally significant soils would be temporarily directly disturbed by the Proposed Action, but would be put back into production prior to the following irrigation season. 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. Soil erosion from irrigation water conveyances would be substantially reduced where ditch reaches are proposed for replacement with buried pipe. The Proposed Action contributes to the growing amount of piped irrigation conveyances in the region, which are collectively having a beneficial cumulative effect on the reduction of soil erosion on a larger scale.

## CHAPTER 4 – ENVIRONMENTAL COMMITMENTS

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

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

Table 6. Environmental Commitments

Type	Environmental Commitment	Affected Resource	Authority
Construction Contractor Plan or Certification Requirement	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
Construction Contractor Plan or Certification Requirement	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
Construction Contractor Plan or Certification Requirement	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
Construction Contractor Plan or Certification Requirement	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
Construction Contractor Plan or Certification Requirement	Any construction, access, or use permits required by the Delta County Planning Department, County Engineering and County Road & Bridge District #3, shall be obtained in advance of road crossings.	Access, Transportation & Safety	County Ordinances and Regulations

Type	Environmental Commitment	Affected Resource	Authority
General NEPA Compliance	To satisfy the requirements of RGP-5, submit the following package to the Army Corps at least 30 days in advance of construction: (1) documentation for compliance with the Endangered Species Act and National Historic Preservation Act and/or the lead Federal Agency NEPA document containing the same, (2) a project description, (3) project plans, and (4) a location map.”	Wetlands	RGP-5, Section 404, Clean Water Act of 1972 as amended
General BMP	Construction limits shall be clearly flagged or marked onsite to avoid unnecessary plant loss or ground disturbance. No grading or blading shall occur inside the project ROW other than that necessary within the actual construction footprint.	Vegetation, Weeds, Habitat, Wildlife	Delta County Weed Management Plan (Delta County 2020)
General BMP	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 (Delta County 2020)
General BMP	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 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 (Delta County 2020)
General BMP	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 (Delta County 2020)

Type	Environmental Commitment	Affected Resource	Authority
General NEPA Requirement	Tree grubbing and vegetation removal in all project areas 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
General BMP and Design Feature	Topsoil, or top material, shall be stockpiled and then redistributed as top dressing after completion of construction activities.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (Delta County 2020)
General BMP	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	Clean Water Act of 1972 as amended
General BMP	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
General BMP	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
General BMP	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

Type	Environmental Commitment	Affected Resource	Authority
General BMP	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
General BMP	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
General NEPA Compliance	A barricade shall be placed between the construction zone and a sensitive historical structure identified during a cultural resources survey for the Proposed Action. The location of the sensitive historical structure shall be clearly marked on the construction drawings.	Cultural Resources	National Historic Preservation Act of 1966
General NEPA Compliance	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 MOA (see Appendix C of the EA). 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



Type	Environmental Commitment	Affected Resource	Authority
General NEPA Compliance	In the event that previously undocumented threatened or endangered species are encountered during construction, the contractor 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.	Threatened & Endangered Species	Endangered Species Act of 1973 as amended
General NEPA Compliance	Construction activities shall take place only in accordance with the schedule restrictions outlined in the EA.	Wildlife	Migratory Bird Treaty Act of 1918; Bald and Golden Eagle Protection Act of 1940
General NEPA Compliance	<p>To avoid disturbance to nesting raptors, construction activities within species-specific CPW-recommended (CPW 2020) buffer distances are time-restricted as follows:</p> <p>Red-tailed hawk: no construction activity within 1/3 mile of a nest February 15 through July 15, with the following exceptions: 1) pipeline construction within 1/3 mile of a nest could begin prior to February 15, so long as the construction activities were initiated prior to February 15, and operated on a daily basis until completion (it is assumed that red-tailed hawks that initiate nesting during ongoing construction activities are tolerant to such activities), or 2) a Reclamation-approved biologist determines that the nest is not active that year.</p> <p>These timing restrictions and sensitive areas shall be noted on Project construction drawings.</p>	Wildlife	<p>Migratory Bird Treaty Act of 1918</p> <p>Bald and Golden Eagle Protection Act of 1940</p>

Type	Environmental Commitment	Affected Resource	Authority
General NEPA Compliance	If a previously unknown active raptor nest is discovered within 1/2 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
General NEPA Compliance	The raptor nest survey shall be repeated in Spring 2023 for construction work anticipated to continue past October 15, 2023, and on a three-year cycle thereafter. The survey must only be repeated for the remaining construction areas, within the required buffer distances explained in CPW 2020.	Wildlife	Migratory Bird Treaty Act of 1918
General BMP	Following construction, except where other finishing techniques indicated on the construction drawings, 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
Design Feature	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
General BMP	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 (Delta County 2020)
General BMP	Re-seeding in areas surrounded by native vegetation shall occur following construction at appropriate times and with appropriate methods, using a drought tolerant, weed-free seed list approved by Reclamation (see Appendix A of the EA). CCDC shall coordinate with private landowners to reseed any disturbances to irrigated areas.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (Delta County 2020)

Type	Environmental Commitment	Affected Resource	Authority
General BMP	Weed control shall be implemented by CCDC or its contractor in accordance with the most current Delta County weed control standards.	Soil, Vegetation, Weeds, Habitat	Delta County Weed Management Plan (Delta County 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 E. The publicly-available electronic version of the Draft EA will meet the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the document can be accessed by people with disabilities using accessibility software tools.

## CHAPTER 6 – PREPARERS

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

Table 7. List of Preparers

Name	Agency	Title	Areas of Responsibility
Jennifer Ward	Reclamation	Environmental Protection Specialist	EA review, general authorship, cultural resources
Dawn Reeder	Rare Earth Science (Consultant to the Ditch Companies)	Principal Biologist	General authorship, mapping

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## CHAPTER 8 – ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Definition
BLM	U.S. Bureau of Land Management
BMP	Best management practice
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	cubic feet per second
CPW	Colorado Parks and Wildlife
C.R.S.	Colorado Revised Statute
CRSP	Colorado River Storage Project
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
E.O.	Executive Order
EPA	Environmental Protection Agency
ESA	U.S. Endangered Species Act
FOA	Funding Opportunity Announcement
FONSI	Finding of No Significant Impact
FWS	U.S. Fish & Wildlife Service
HDPE	High-density polyethylene
Interior	U.S. Department of the Interior

Abbreviation or Acronym	Definition
mi	mile
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NCA	National Conservation Area
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NRHP	National Register of Historic Places
PBO	Programmatic Biological Opinion
PM	Principal meridian
PVC	Polyvinylchloride
RCPP	Regional Conservation Partnership Program
Reclamation	U.S. Bureau of Reclamation (also USBR)
ROW	Right-of-way
SHPO	State Historic Preservation Officer
SMPW	Selenium Management Program Workgroup
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
U.S.C.	United States Code
USDA	U.S. Department of Agriculture



# **APPENDIX A – SEED LIST**

Reserved for a Reclamation-approved seed list for natural areas.

## **APPENDIX B – ESA COMPLIANCE DOCUMENTATION**

## GUNNISON RIVER RECOVERY AGREEMENT

This RECOVERY AGREEMENT is entered into this 8<sup>th</sup> 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:

I. 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.

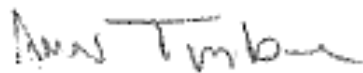
6. Water User may withdraw from this Recovery Agreement upon written notice to the Service. If Water User withdraws, the Service may request reinitiation of consultation on Water Project without reinitiating other consultations as would otherwise be required by the Reinitiation Notice section of the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



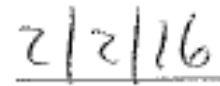
Crawford Clipper Ditch Company  
Water User Representative



Date



Western Colorado Supervisor  
U.S. Fish and Wildlife Service



Date

## **APPENDIX C – CULTURAL RESOURCE COMPLIANCE DOCUMENTATION**

**MEMORANDUM OF AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION WESTERN COLORADO AREA OFFICE,  
THE CRAWFORD CLIPPER DITCH COMPANY,  
AND THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING THE  
UPPER WEST LATERAL PIPING PROJECT AND THE  
WEST HAMILTON, HAMILTON, AND CENTER LATERALS PIPING PROJECT,  
COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,  
LOCATED IN DELTA COUNTY, COLORADO**

**WHEREAS**, the Bureau of Reclamation (Reclamation) and the Crawford Clipper Ditch Company (CCDC) plan to pipe 0.46 miles of the Upper West Lateral (Project No. 1) and 15 miles of the West Hamilton, Hamilton, and Center Laterals (Project No. 2); and

**WHEREAS**, Project No. 2's name is also known as the Crawford Clipper Ditch Company's Jerdon, Hamilton, and West Laterals Pipeline Project; and

**WHEREAS**, Reclamation plans to partially fund CCDC to pipe the lateral waterways, as authorized by the Basinwide Program under the Colorado River Basin Salinity Control Program, thereby making the Project a federal undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. § 306108, and its implementing regulations, 36 CFR Part 800; and

**WHEREAS**, Reclamation has defined in consultation with the Colorado State Historic Preservation Officer (SHPO) that Project No. 1's Area of Potential Effects (APE) as contained within a 200-foot-wide corridor centered on 0.46 mile of existing lateral and totaling 11.14 acres on private lands, as well as a previously surveyed staging area and access road, as depicted in Attachment A.

**WHEREAS**, Reclamation has defined in consultation with SHPO that Project No. 2's APE as contained within a 200-foot-wide corridor centered on approximately 15 miles of existing laterals, proposed pipelines, and access roads, and a 100-foot-wide buffer around six staging areas totaling 297.8 acres on private lands and 0.6 acres on lands managed by the Bureau of Land Management (BLM), as depicted in Attachment B; and

**WHEREAS**, the BLM has determined they do not have a federal action associated with the Project No. 2, and do not wish to participate in the Section 106 consultation; and

**WHEREAS**, Reclamation as the lead Federal agency has determined, in consultation with the SHPO, that the West Hamilton Lateral of the Crawford Clipper Ditch (5DT1811.10, 5DT1811.11 and 5DT1811.12), the Spurlin Mesa Lateral of the Crawford Clipper Ditch (5DT1811.13), the Hamilton Lateral of the Crawford Clipper Ditch (5DT1811.14), and the Center Lateral of the Crawford Clipper Ditch (5DT1811.15 and 5DT1811.16) are eligible for inclusion on the National Register of Historic Places (NRHP) under Criterion A and that the Project will result in adverse effects to those historic properties; and

**WHEREAS**, the CCDC, as the sponsor of the Project, has been invited to participate in this Agreement as an invited signatory, and has chosen to participate in the consultation; and

**WHEREAS**, Reclamation consulted with the Southern Ute Indian Tribe, the Ute Indian Tribe of the Uintah and Ouray Reservation, and the Ute Mountain Ute Tribe via a December 16, 2020, letter (Project No. 1) and a February 23, 2022 letter (Project No. 2) inviting the tribes to participate in consultation on the proposed undertakings as concurring parties. The Southern Ute Indian Tribe responded that Project No. 1 would have no adverse effect to identified properties of cultural and religious significance. The Ute Mountain Ute Tribe and the Ute Indian Tribe of the Uintah and Ouray Reservation have not responded regarding Project No. 1 as of the signing of this Agreement. The Southern Ute Indian Tribe requested additional information on Project No. 2 on March 18, 2022. Additional information was provided on March 29, 2022. The Southern Ute Indian Tribe did not respond after receiving additional information. The Ute Mountain Ute Tribe, and the Ute Indian Tribe of the Uintah and Ouray Reservation have not responded regarding Project No. 2 as of the signing of this Agreement; and

**WHEREAS**, Reclamation consulted with the Delta County Commissioners, the Delta County Historic Landmarks Board, and the Hotchkiss Crawford Historical Museum via a December 16, 2020 letter (Project No. 1) and a February 22, 2022 letter (Project No. 2) to invite the local governments and other potentially interested entities to participate in consultation on the proposed undertakings as concurring parties. The Delta County Commissioners, the Delta County Historic Landmarks Board, and the Hotchkiss Crawford Historical Museum have not responded as of the signing of this Agreement; and

**WHEREAS**, in accordance with 36 CFR § 800.6(a)(1), Reclamation has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

**NOW, THEREFORE**, pursuant to Section 106 of the NHPA, Reclamation and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect on historic properties.

## **STIPULATIONS**

Reclamation shall ensure that the following measures are carried out:

### **I. MITIGATION**

- A. The CCDC will develop an interactive website (Storymap) on a platform such as ArcGIS Storymap that presents a visual narrative about the history of the CCDC system, its canals, and the role of irrigation in the development of the Crawford area. The Storymap will be available on the internet free of charge to the public.



- a. The Storymap will include photographs—which can be either historical or contemporary—and interactive maps that allow the viewer to explore common features along the laterals, learn about each laterals’ history and development, the significance of the laterals, the contributions of the laterals to the development of the local communities and economies, and view historical maps. The entirety of each of the laterals included in Project No. 1 and Project No. 2 will be presented on the platform and include a brief history and description of each lateral, along with representative photographs, historic records, historic maps, videos, and/or scaled drawings to provide the user with sufficient information to understand the importance of the laterals and how they served and continue to serve the people of the Crawford area.
- b. Prior to any modification of the West Hamilton Lateral of the Crawford Clipper Ditch Segments (5DT1811.10, 5DT1811.11, and 5DT1811.12), the Spurlin Mesa Lateral of the Crawford Clipper Ditch Segment (5DT1811.13), the Hamilton Lateral of the Crawford Clipper Ditch Segment (5DT1811.14), and the Center Lateral of the Crawford Clipper Ditch Segments (5DT1811.15 and 5DT1811.16), Reclamation shall ensure that necessary information for the development of the Storymap is collected, including but not limited to additional research and scanning of images and documents held at CCDC’s office.
- c. Reclamation will submit a draft outline and text of the Storymap to all signatories to this Agreement within two (2) years of the execution of this agreement. The signatories shall review and provide comments, if they have any, within thirty (30) calendar days of receipt of the draft. Reclamation shall consider signatory comments and revise the draft accordingly. Once a draft is agreed to by the signatories, Reclamation will finalize the Storymap for public use.
- d. A link to the Storymap will be uploaded to the history webpage on CCDC’s website as well as Reclamation’s cultural resources webpage (webpage). The Storymap and the associated links will be appropriately maintained and remain on both web pages for a period of no less than five (5) years following the final publication of the Storymap.
- e. Within six (6) months of the publication of the final Storymap website, CCDC will prepare a report version of the final Storymap in hard print of archival quality and electronic format (PDF file). The PDF version will be prepared and submitted to SHPO. The following organizations within the Crawford area will receive an archival copy free of charge: Delta County Historic Landmarks Board, the Hotchkiss Crawford Historical Museum, Colorado Mesa University Hutchins Water Center, Delta Public Library

## II. GENERAL REQUIREMENTS AND STANDARDS

- A. Reclamation will provide a link to the final Storymap and PDF file via email or CD as appropriate to all signatory parties within three (3) years of the execution of this Agreement. A letter containing a link to the Storymap will also be sent to the Delta

County Commissioners, the Delta County Historic Landmarks Board, the Hotchkiss Crawford Historical Museum, Colorado Mesa University Hutchins Water Center, Delta Public Library, Colorado Archaeological Society, and the Colorado Council of Professional Archaeologists.

- B. The activities prescribed by the stipulations of this Agreement shall be carried out by or under the direct supervision of a person or persons meeting, at minimum, the *Secretary of the Interior's Historic Preservation Professional Qualification Standards* (48 FR 44716, September 29, 1983, and 62 FR 33708, June 20, 1997) (PQS) in the appropriate discipline. This does not preclude the use of properly supervised persons who do not meet the PQS.

### **III. DURATION**

This Agreement shall expire if its terms are not carried out within three (3) years from the date of its execution. Prior to such time, Reclamation may consult with the other signatories to reconsider the terms of the Agreement and amend it in accordance with Stipulation VII below.

### **IV. POST-REVIEW DISCOVERIES**

If potential historic properties are discovered or unanticipated effects on historic properties found, the CCDC on behalf of Reclamation shall implement the discovery plan included as Attachment B of this Agreement.

### **V. MONITORING AND REPORTING**

No later than December 31<sup>st</sup> of each calendar year following the execution of this Agreement until its stipulations are carried out, it expires, or is terminated, CCDC on behalf of Reclamation shall provide all parties to this Agreement a summary report detailing work carried out during the previous calendar year pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in CCDC's efforts to carry out the terms of this Agreement.

The signatories may monitor activities pursuant to this Agreement, and the ACHP will review such activities if so, requested by a party to this Agreement. Reclamation will cooperate with the signatories in carrying out their review and monitoring responsibilities.

### **VI. DISPUTE RESOLUTION**

Should any signatory or concurring party to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, Reclamation shall consult with such party to resolve the objection. If Reclamation determines that such objection cannot be resolved, Reclamation will:

- A. Forward all documentation relevant to this dispute, including Reclamation's proposed resolution, to the ACHP. The ACHP shall provide Reclamation with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Reclamation shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. Reclamation will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, Reclamation may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Reclamation shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the Agreement and provide them and the ACHP with a copy of such written response.
- C. Reclamation's ability to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remains unchanged.

## **VII. AMENDMENTS**

This Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

## **VIII. TERMINATION**

If any signatory to this Agreement determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation VII, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate this Agreement upon written notification to the other signatories.

Once the Agreement is terminated, and prior to work continuing on the undertaking, Reclamation must either (a) execute an Agreement pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. Reclamation shall notify the signatories as to the course of action it will pursue.

**Execution** of this Agreement by CCDC, Reclamation, and SHPO and implementation of its terms evidence that Reclamation has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

## **LIST OF ATTACHMENTS**

Attachment A: Area of Potential Effects – Project No. 1  
 Attachment B: Area of Potential Effects – Project No. 2  
 Attachment C: Unanticipated Discovery Plan

**SIGNATORIES:**

Colorado State Historic Preservation Office  
Bureau of Reclamation, Western Colorado Area Office

**INVITED SIGNATORIES:** Crawford Clipper Ditch Company

SIGNATORY PAGE

MEMORANDUM OF AGREEMENT  
AMONG

THE BUREAU OF RECLAMATION WESTERN COLORADO AREA OFFICE,  
THE CRAWFORD CLIPPER DITCH COMPANY,  
AND THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING THE  
UPPER WEST LATERAL PIPING PROJECT AND THE  
WEST HAMILTON, HAMILTON, AND CENTER LATERALS PIPING PROJECT,  
COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,  
LOCATED IN DELTA COUNTY, COLORADO

Colorado State Historic Preservation Office


By: Dr. Holly Kathryn Norton Digitally signed by Dr. Holly Kathryn Norton  
Date: 2022.06.06 15:39:31 -06'00' Date: \_\_\_\_\_  
Dawn DiPrince, State Historic Preservation Officer

SIGNATORY PAGE

MEMORANDUM OF AGREEMENT  
AMONG

THE BUREAU OF RECLAMATION WESTERN COLORADO AREA OFFICE,  
THE CRAWFORD CLIPPER DITCH COMPANY,  
AND THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING THE  
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WEST HAMILTON, HAMILTON, AND CENTER LATERALS PIPING PROJECT,  
COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,  
LOCATED IN DELTA COUNTY, COLORADO

Bureau of Reclamation, Western Colorado Area Office

By:  LOUIS WARNER  
2022.05.06 09:05:43 -06'00' Date: \_\_\_\_\_  
Ed Warner, Area Manager

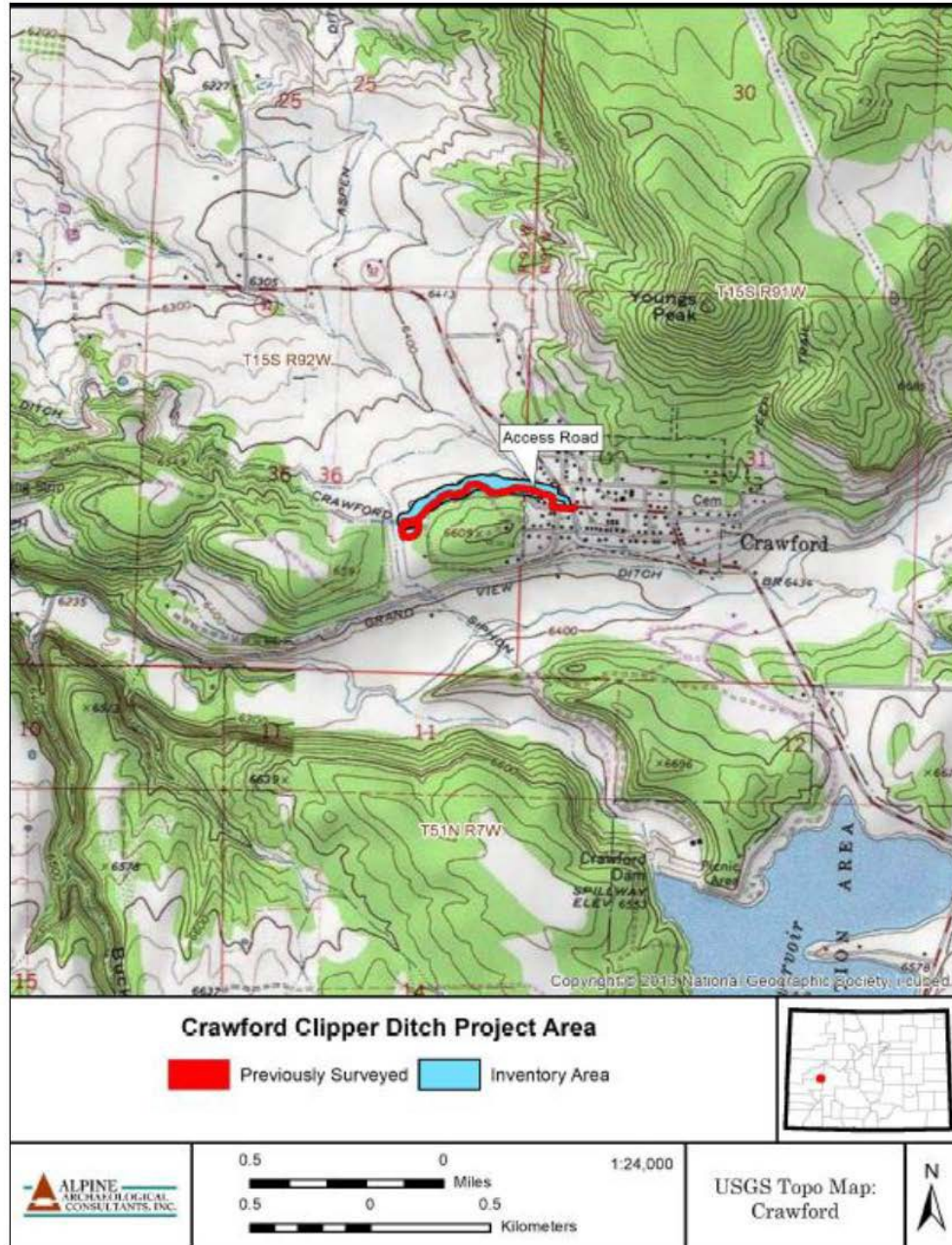
SIGNATORY PAGE

MEMORANDUM OF AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION WESTERN COLORADO AREA OFFICE,  
THE CRAWFORD CLIPPER DITCH COMPANY,  
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COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,  
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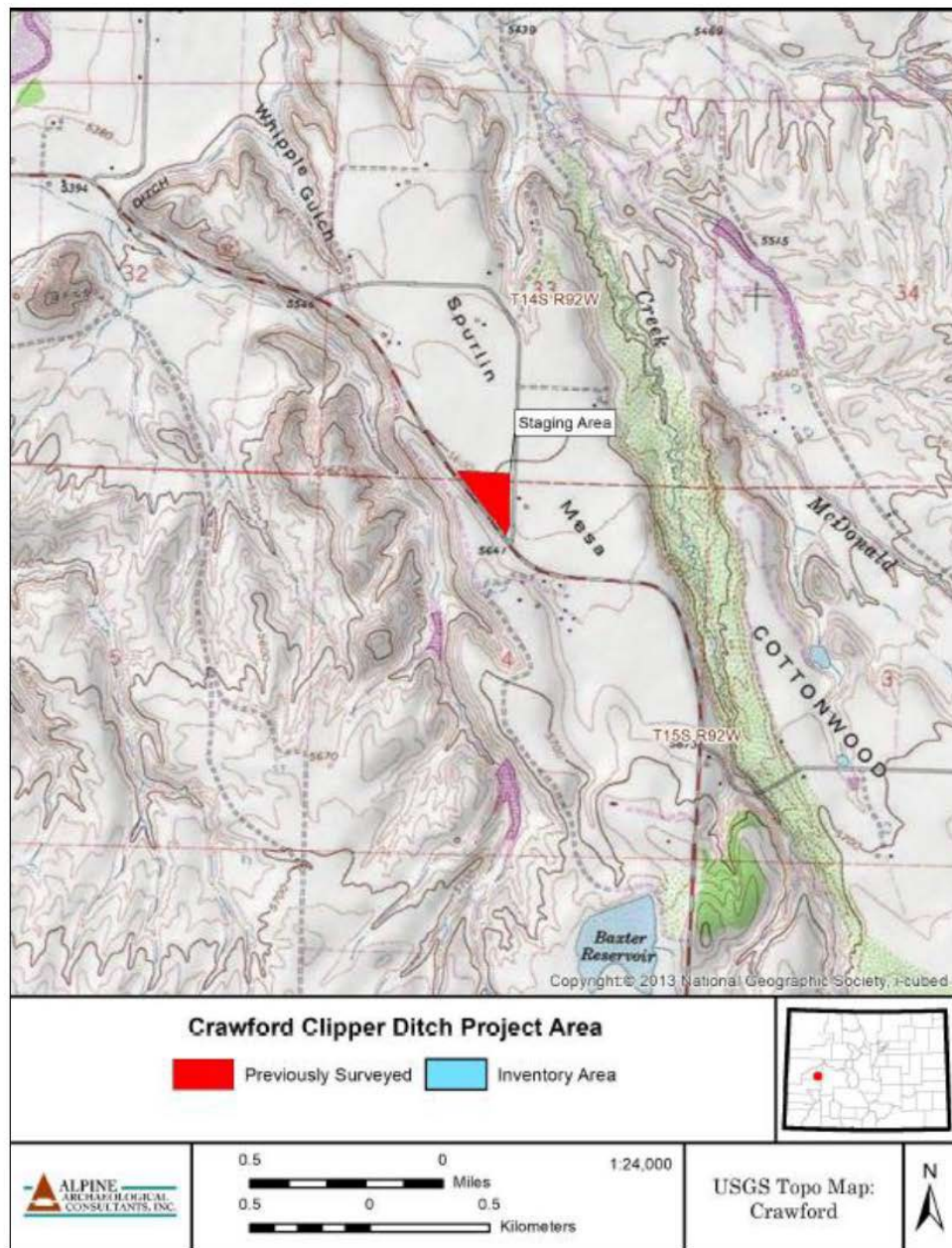
The Crawford Clipper Ditch Company

By: Mark LeValley Date: 5-4-22  
Mark LeValley, President

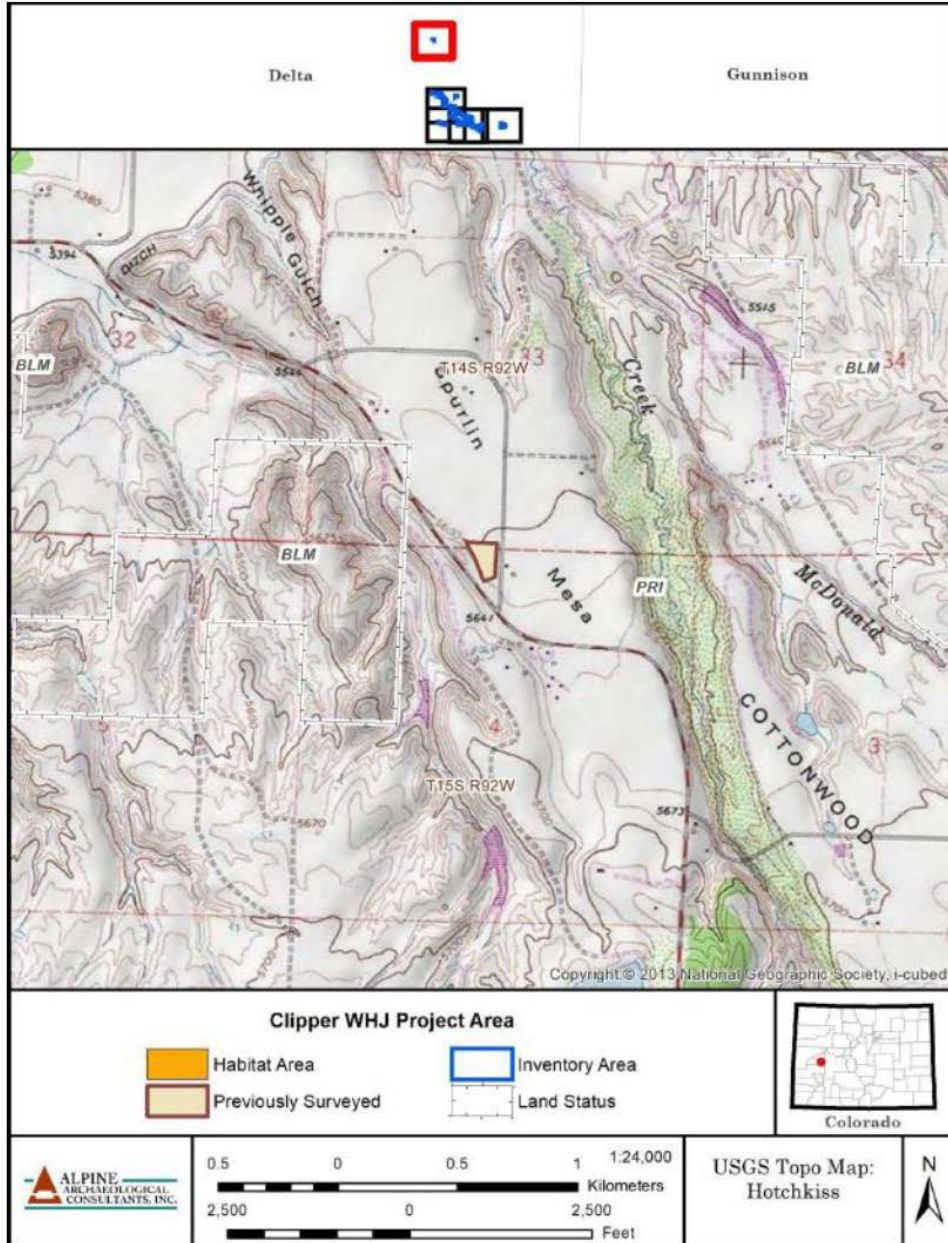
ATTACHMENT A – AREA OF POTENTIAL EFFECTS FOR PROJECT NO. 1



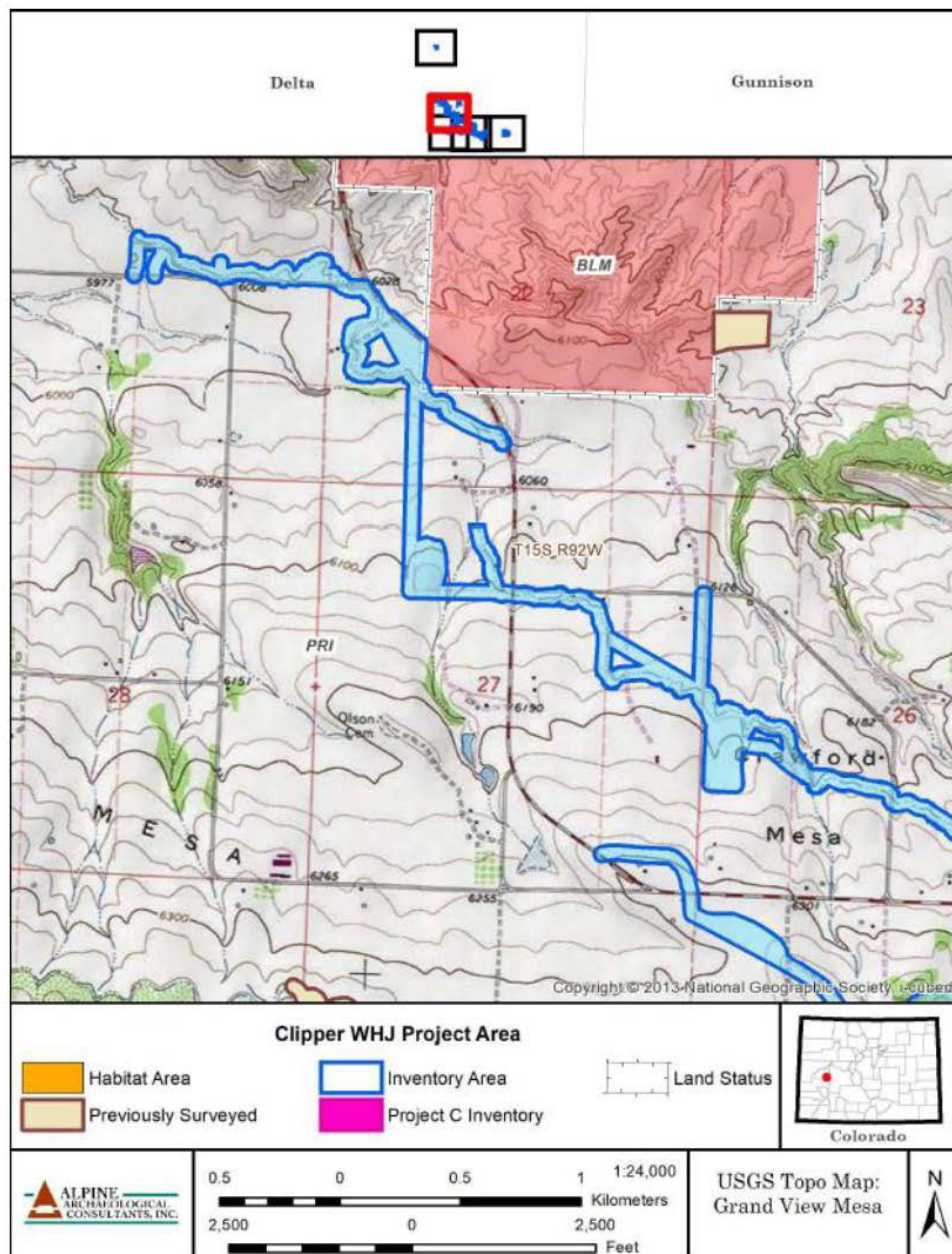


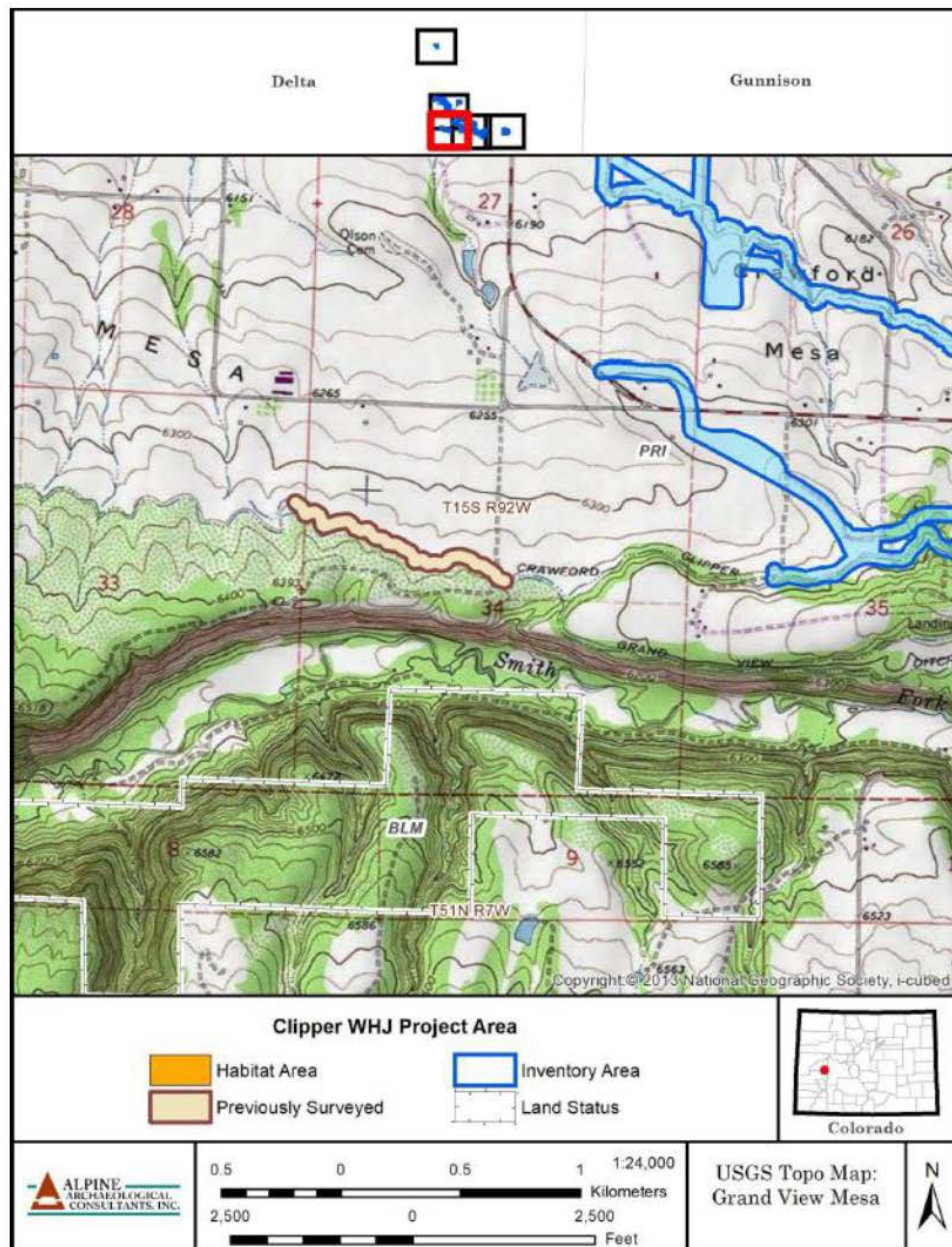


ATTACHMENT B – AREA OF POTENTIAL EFFECTS FOR PROJECT NO. 2

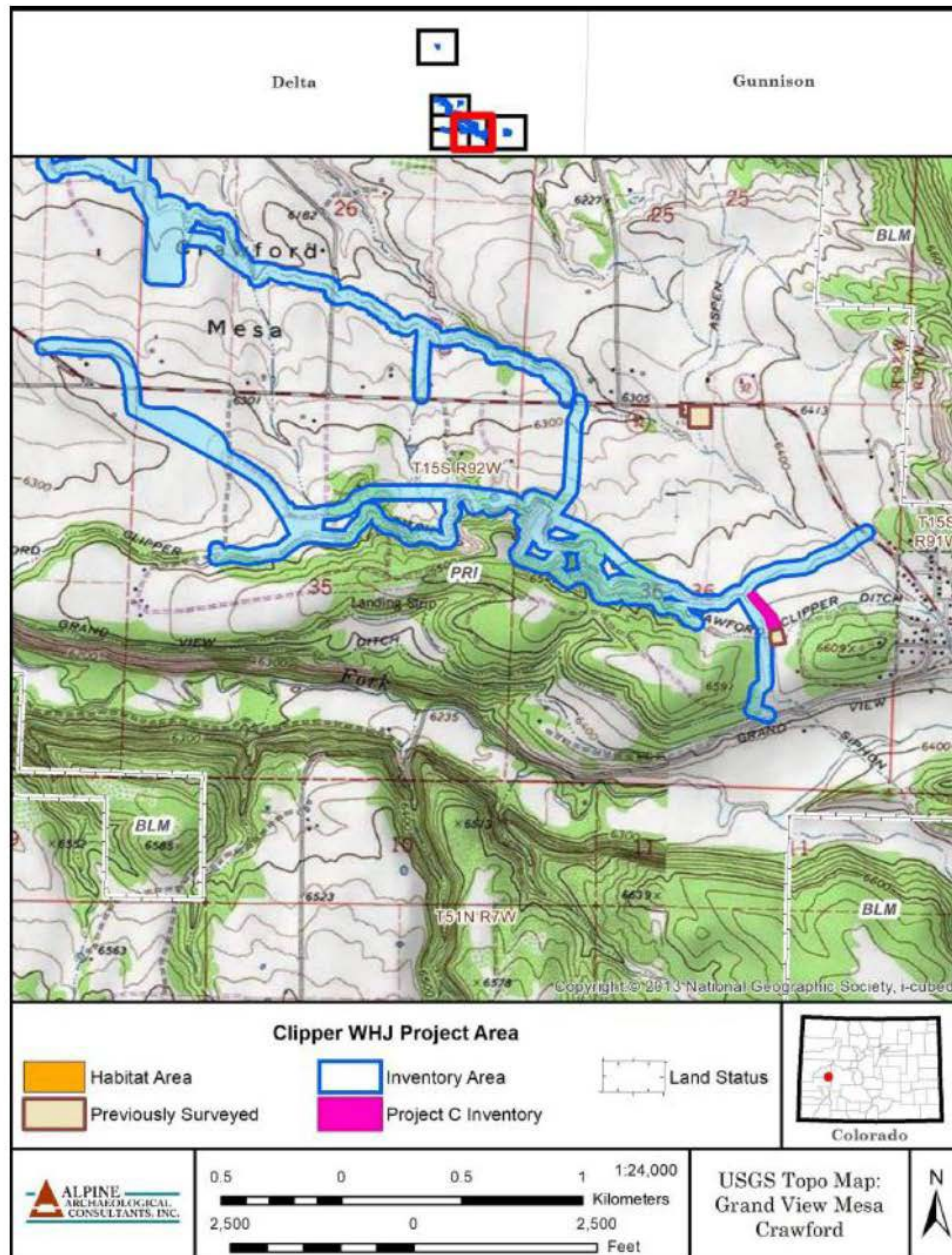


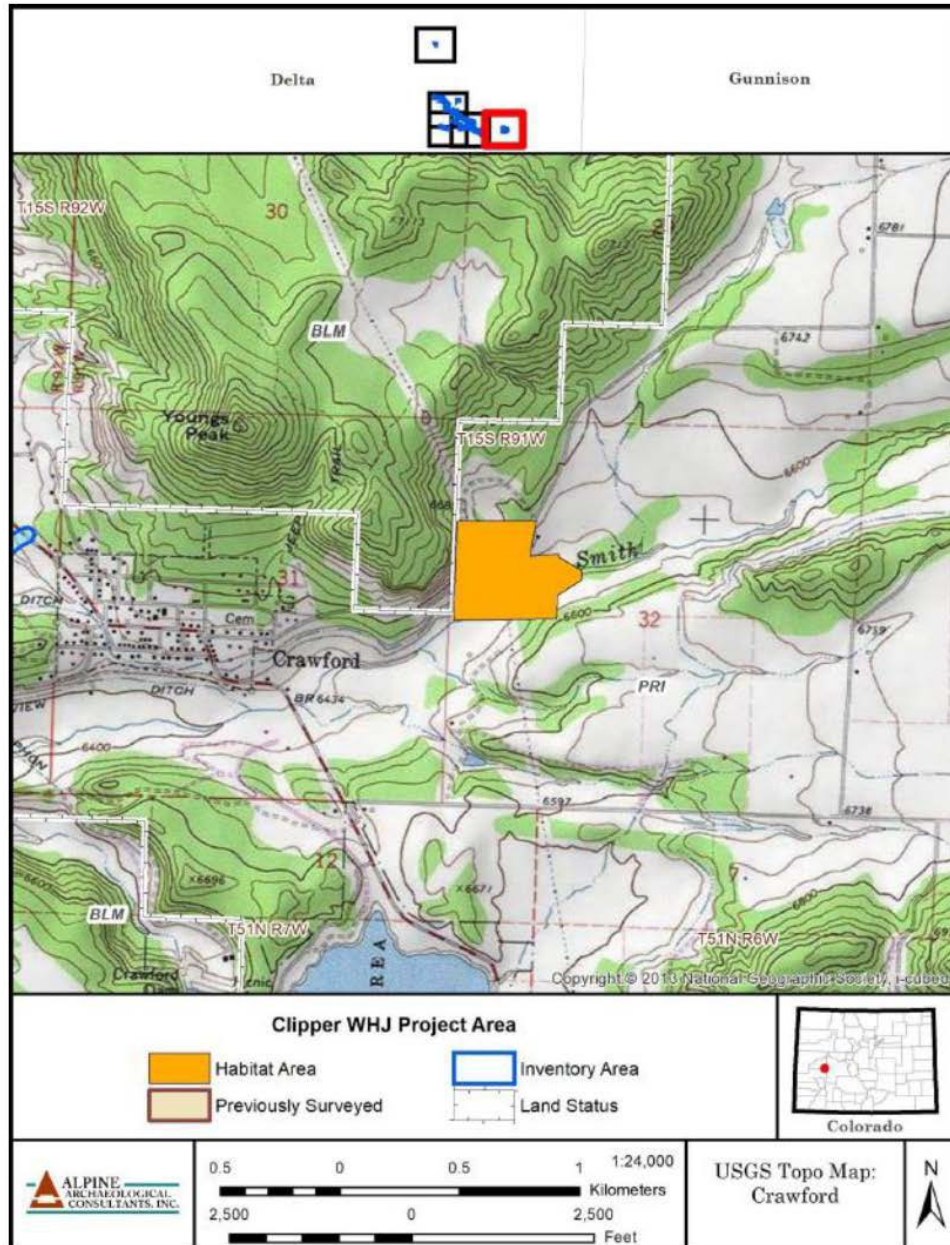












ATTACHMENT C – UNANTICIPATED DISCOVERY PLAN  
PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF  
CULTURAL RESOURCES

THE CRAWFORD CLIPPER DITCH COMPANY  
UPPER WEST LATERAL PIPING PROJECT AND THE  
WEST HAMILTON, HAMILTON, AND CENTER LATERALS PIPING PROJECT,  
COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,  
LOCATED IN DELTA COUNTY, COLORADO

### 1. INTRODUCTION

The Crawford Clipper Ditch Company (CCDC) plans to pipe 15.46 miles of laterals associated with the Crawford Clipper ditch system. The purpose of the projects is to reduce the salt load in the Colorado River Basin. The following Unanticipated Discovery Plan outlines procedures to follow, in accordance with state and federal laws, if archaeological materials are discovered.

### 2. RECOGNIZING CULTURAL RESOURCES

A cultural resource discovery could be prehistoric or historic. Examples include, but are not limited to:

- An accumulation of shell, burned rocks, or other food related materials
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Abandoned mining structures and features (i.e. mine shafts or adits, head frames, processing mills, or tailings and waste rock piles),
- Buried railroad tracks, decking, or other industrial materials.

When in doubt, assume the material is a cultural resource.

### 3. ON-SITE RESPONSIBILITIES

STEP 1: STOP WORK. If any CCDC employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work adjacent to the discovery must immediately stop. The discovery location should be secured at all times.

**STEP 2: NOTIFY BUREAU OF RECLAMATION.** Contact the Reclamation Cultural Resources Manager (CR Manager) at the Bureau of Reclamation immediately upon becoming aware of the discovery:

**Project Manager:**  
Mark LeValley  
970-210-1000  
[board@clipperditch.com](mailto:board@clipperditch.com)

**CR Manager:**  
Kristin Bowen  
970-385-6540  
[kbowen@usbr.gov](mailto:kbowen@usbr.gov)

The CR Manager will make all other calls and notifications.

If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call 911 or speak with the media. The CR Manager will contact the county coroner and sheriff. Do not take, or allow anyone to take, any photographs of human remains at any time.

#### **4. FURTHER CONTACTS AND CONSULTATION**

##### **A. Project Manager's Responsibilities:**

- **Protect Find:** The CCDC Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.
- **Contact CR Manager:** If the CR Program Manager at the Bureau of Reclamation has not yet been contacted, the Project Manager will do so.

##### **B. CR Manager's Responsibilities**

- **Notify SHPO:** The CR Manager will notify the Colorado State Historic Preservation Office (SHPO) within 48 hours of the discovery.

**Colorado State Historic Preservation Office:**  
Dr. Holly Norton  
Deputy State Historic Preservation  
Officer and State Archaeologist  
History Colorado  
1200 Broadway  
Denver CO, 80203  
(303) 866-2736



- Direct Construction Elsewhere On-site: The CR Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.
- Identify Find: The CR Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological.
  - If a qualified archaeologist determines that the discovery is not archaeological, work may proceed with no further delay.
  - If a qualified archaeologist determines the discovery to be archaeological, the CR Manager will continue with notification.
  - If the discovery may represent human skeletal remains or associated funerary objects, the CR Manager will immediately notify the county coroner and the sheriff or police chief. If the county coroner and local law enforcement determine that the skeletal remains are human remains, the procedure described in Section 5 will be followed.

#### C. Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

### **5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL**

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect.

The project is located on both federal and private lands, and the requirements under the Native American Graves Protection and Repatriation Act (NAGPRA) apply (43 CFR Part 10). For all discoveries, the kinds of objects considered and referred to as NAGPRA items as defined in 43 CFR 10.2 (d) include: human remains, funerary objects, sacred objects, and objects of cultural patrimony. The requirements under State Law Colorado Revised Statute (CRS) 24-80 part 13 also apply. The Unmarked Human Graves Colorado Statute (CRS 24-80-1301-1305) applies if the human remains are on private lands.

In the event possible human skeletal remains are discovered, work in that portion of the project shall stop immediately. The remains shall be covered and/or protected in place in such a way that minimizes further exposure of and damage to the remains, and Reclamation shall immediately notify the Delta and Montrose County Coroners and the Delta and Montrose County Sheriffs. If the remains are found to have no forensic value and are located on private land, the coroner shall notify the state archaeologist, in accordance with CRS 24-80-1302. A plan of action shall be developed by the state archaeologist in consultation with the appropriate Indian tribes, the Colorado Commission of Indian Affairs and the landowner following the Process for Consultation, Transfer, and Reburial of Culturally Unidentifiable Native American Human Remains and Associated Funerary Objects Originating from

Inadvertent Discoveries on Colorado State and Private Lands. If the remains are not Native American, and are otherwise unclaimed, the appropriate local authority shall be consulted to determine final disposition of the remains.

Avoidance and preservation in place are the preferred option for treating human remains.

CCDC and the CR Manager will comply with the procedures outlined, and will coordinate with the following contacts:

CR Manager  
Kristin Bowen  
(970) 385-6540

Delta County Coroner  
(970) 874-5918

Delta County Sheriff  
(970) 874-2000

Colorado Deputy State Historic Preservation Officer and State Archaeologist  
Holly Norton  
(303) 866-2736

A. Further Activities:

When consultation and documentation activities are complete, construction in the discovery area may resume as described in Section 7.

## **6. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS**

Archaeological deposits discovered during construction will be assumed eligible for inclusion in the National Register of Historic Places under Criterion D until a formal Determination of Eligibility is made.

The CR Manager will ensure the proper documentation and assessment of any discovered cultural resources in consultation with Reclamation, SHPO, affiliated tribes, and a contracted consultant (if any). All prehistoric and historic cultural material discovered during project construction will be recorded by a professional archaeologist in accordance with all state and federal laws and Stipulation II B. above.

## **7. PROCEEDING WITH CONSTRUCTION**

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A professional archaeologist must determine the boundaries of the discovery location. In consultation with SHPO and affiliated tribes, the CR Manager will determine the appropriate level of documentation and treatment of the resource.

Construction may continue at the discovery location only after the process outlined in this plan is followed and CCDC, Reclamation, and SHPO determine that compliance with state and federal laws is complete.

## **APPENDIX D – DISTRIBUTION LIST**

All landowners adjacent to the Proposed Action  
Black Hills Energy  
Citizens for a Healthy Community  
Colorado Department of Transportation  
Colorado Office of Archaeology and Historic Preservation  
Colorado Parks and Wildlife  
Colorado River Water Conservation District  
Colorado Water Conservation Board  
Crawford Mesa Water Association  
Delta Montrose Electric Association  
Delta County Commissioners  
Delta County Road & Bridge Department  
Delta County Planning & Community Development Department  
Delta County Independent  
TDS Telecom  
Southern Ute Indian Tribe  
Trout Unlimited  
U.S. Army Corps of Engineers  
U.S. Bureau of Land Management, Uncompahgre Field Office  
U.S. Department of Agriculture Natural Resources Conservation Service  
U.S. Fish and Wildlife Service  
Ute Indian Tribe – Uintah and Ouray Reservation  
Ute Mountain Ute Tribe  
Western Slope Conservation Center